NFERENCE PROCEEDINGS 18

ransportation Issues
n Large U.S. Cities

oceedings of a Conference
troit, Michigan
ne 28–30, 1998

onsored by
leral Highway Administration
leral Transit Administration

TRANSPORTATION
RESEARCH
BOARD

NATIONAL
RESEARCH
COUNCIL

CONFERENCE PROCEEDINGS 18

Transportation Issues in Large U.S. Cities

Proceedings of a Conference
Detroit, Michigan
June 28-30, 1998

Sponsored by
Federal Highway Administration
Federal Transit Administration

NATIONAL ACADEMY PRESS
WASHINGTON, D.C. 1999

TRANSPORTATION RESEARCH BOARD

NATIONAL RESEARCH COUNCIL

GENERAL OVERVIEW

Introduction

In June 1998 in Detroit, Michigan, transportation officials from the 12 largest cities in the United States, the U.S. Department of Transportation (DOT), several state departments of transportation, metropolitan planning organizations, transit properties, and other concerned organizations came together to participate in the Conference on Transportation Issues in Large U.S. Cities to begin to develop a better understanding of the issues and to improve transportation in large U.S. cities.

The conference was noteworthy for several reasons. It was the first time the federal government brought together the key institutional stakeholders at the federal, state, and local levels to identify the critical transportation issues facing America's largest central cities. It reinforced the point that these locales face unique issues because of their density, complexity, social and economic composition, political and institutional structures and processes, and other characteristics. The conference provided the opportunity to begin to build important partnerships among national transportation organizations concerned with large city issues, including the National Association of City Transportation Officials (NACTO), the newly created organization of the 10 largest U.S. cities; the American Association of State Highway and Transportation Officials (AASHTO); PTI; the Institute of Transportation Engineers (ITE); and the American Public Transit Association (APTA). Most important, the conference established a set of research and policy issues and needs that, as they are acted on by the various stakeholders and interested parties, should improve mobility in the large urban centers of America.

For a variety of reasons, the issues of large U.S. cities have not been at the forefront of the American transportation agenda. This is not unique to the field of transportation. Nonetheless, the importance of the transportation systems in these cities to the overall health of American life in terms of our economy, environment, and social equity cannot be overstated. If we are not able to ensure the mobility of people and goods in an efficient and environmentally friendly manner in large U.S. cities, it is hard to see how the United States will maintain its competitiveness in the global economy of the 21st century.

The construction of the Interstate highway system had major effects on regional economies, demographics, the environment, and political and institutional structures and

processes. Some of these were positive and anticipated, and some were not. A major point of the conference was not to dwell on the past, but rather, in the spirit of the Intermodal Surface Transportation Efficiency Act of 1991 and the Transportation Equity Act for the 21st Century, to work together as stakeholders at the local, state, and federal levels to make long overdue progress in improving mobility in large urban centers in America.

Another major point of the conference was to emphasize the multimodal nature of the problems facing the large cities. Transit has historically been the transportation mode most closely associated with the cities. Yet, even in New York City, the most heavily transit-dependent city in the United States, only 50 percent of all trips are carried by transit. Whereas improving transit is crucial to the future of these cities, and there is a clear recognition that they will not survive or flourish without such improvement, all the other modes and systems must be addressed and integrated successfully. The conference proceedings were as relevant to highways, local roads, intercity rail, bicycle and pedestrian, aviation, and ports as they were to transit.

Indeed, as the preparations for the conference began, two key facts emerged: *(a)* a consensus on the key issues facing the central cities did not exist heretofore and *(b)* there has been a lack of research on these issues, particularly as they relate to the highway and road infrastructure and to the unique institutional characteristics of large cities. The white papers produced for the conference by Regina Armstrong, Peter Drier, Henry Peyrebrune, Joe Giglio, Dave Schulz, and Elizabeth Deakin represent an important beginning in terms of research on transportation issues in large cities.

The conference identified nine key areas for future research and policy analysis:

- Financing for central city transportation systems,
- How to make the metropolitan planning process work for central cities,
- How to improve maintenance and operations practices in central cities,
- How to alleviate congestion in central business districts,
- How to improve relationships between the central cities and the states and between the central cities and the federal government,
- Lack of data for central city transportation systems,
- Institutional fragmentation in central city transportation management,
- How to make central cities more livable by integrating environmental and social benefits, and
- Opportunities for development or redevelopment projects to avoid mistakes of the past.

All these areas represent critical and virtually unexplored territory that must be better understood if policy makers are to effectively manage the transportation systems in these cities. DOT, the Transportation Research Board, NACTO, AASHTO, and the other institutional participants in the conference expressed a strong commitment to begin a research and policy agenda that begins to address these subjects. The issues that are involved are complex, challenging, and multidimensional. They will not be easily resolved. Nonetheless, a theme from the conference is that the time has come to address them.

An important background theme throughout the conference was the central role large cities play in the economic and social health of the country. There was a recognition of their other attributes and functions: their unique physical beauty, their role as a gate of entry, and their role in American cultural life. Clearly, the transportation community must do its part to ensure the continued success of large cities.

As we know, some of the most difficult challenges facing the transportation community are political and institutional rather than technological. This is especially relevant to the large cities, though it is clear that intelligent transportation systems and other technological advances represent tremendous opportunities for the cities. The conference represented a start in bringing together the various institutional players who must work together at the local, regional, state, and federal levels if significant progress is to be made on these issues.

One of the first successes of NACTO was to encourage DOT to create joint Federal Transit Administration–Federal Highway Administration working groups in many of the

large cities, to strengthen DOT's focus on and understanding of the issues. In discussing the value of this arrangement, Rodney Slater, Secretary of the U.S. Department of Transportation, noted that in these cities all the various modal administrations of DOT can come together. The potential of cities to play a unifying role for DOT, in some ways echoing the unique role cities play in unifying large metropolitan areas or geographic regions, underscores the importance of the large city effort.

Much interesting work is being done in the large cities. The conference participants described more than 100 "best practices" that they wanted to share with other cities. These practices have been posted on the NACTO Web site, http://www.nacto.org. Significant progress can be made as large cities begin to establish working relationships between themselves, assisted by such organizations as DOT, NACTO, the Transportation Research Board, AASHTO, ITE, ITS America, and others.

Developing a research and policy agenda for the large cities and mustering the support to advance it are not small tasks. Perhaps Frank Francois, Executive Director of AASHTO, said it best in his concluding remarks for the conference: "So let me wind up and say that I think this conference has been a great beginning, but beginning is exactly what it is. Its true value depends on what happens next. And the work that lies ahead will not be easy, but I think it's very important for the American people, and if we work long enough and hard enough, everything's going to be better than it is. And that's why we're all here."

Conference Overview

Elliot G. Sander, *Center for Transportation Policy and Management, New York University*

The need for a Conference on Transportation Issues in Large U.S. Cities was identified by practicing transportation professionals and officials who found that an organization that could focus solely on transportation issues of large cities was needed. They created the National Association of City Transportation Officials (NACTO), a group that represents 10 cities and is dedicated to open exchange of information, the solving of common problems, and the sharing of best practices.

Support for the conference also came from officials in the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) who believe that the concerns of central cities are critical to the national and global economy and that traditional federal relationships do not necessarily provide an opportunity for optimum communication with city officials. (For highways, the primary relationship is between FHWA and the states; for public transportation, the relationship is between FTA and transit service providers.) Whereas the establishment of several metropolitan U.S. Department of Transportation (DOT) offices has helped improve communications, the concept of a focus on large city issues was welcomed by both agencies, which provided funding for the conference.

Additional conference support came from leaders of the Transportation Research Board (TRB), which believed that a large city focus was missing from its current structure and agenda. TRB agreed to host the conference and provided staff support to organize and manage it.

Since the conference would deal with the issues of transportation in central cities, location in the business district of a central city was desired. Detroit was chosen as host city, and a downtown location was selected. This allowed the participants to view current day central city transportation systems and concerns and to hear from local officials directly on issues and trends. The city of Detroit provided outstanding facilities and logistical support.

A Steering Committee was established to guide the direction and preparation of the conference. Members were selected from central cities, states, academia, and national organizations; transit operators and consultants as well as liaison members from federal agencies were included. A membership list is included in these proceedings.

The Steering Committee established the three key conference objectives:

- Identify common problems, issues, and emerging opportunities.
- Facilitate information exchange on strategies that integrate social, economic, and environmental benefits for addressing the problems, issues, and emerging opportunities.
- Identify and advance a research agenda and an action agenda that include specific activities to develop, demonstrate, and continue information exchange to improve the state of the art in planning, finance, implementation, operation, and maintenance of the nation's largest metropolitan areas.

The primary focus of the conference was to be on the transportation issues of the 14 central cities in the 12 largest metropolitan areas in the United States: New York; Los Angeles; Chicago; San Francisco; Philadelphia; Detroit; Boston; Washington, D.C.; Baltimore; Dallas; Fort Worth; Houston; Miami; and Atlanta. Officials from other large cities were also invited.

The Steering Committee also recommended that the conference develop information on at least three themes:

- Identify the costs of bringing the physical infrastructure to a state of good repair. Discuss the implications of repairing facilities versus building new facilities.
- In the rebuilding of old facilities, the mistakes of the past should not be repeated. What are the opportunities for redevelopment?
- Operations and maintenance costs and activities are becoming more critical since we cannot build many new facilities. What are the operations and maintenance issues? How can cities respond to this challenge?

Six resource papers were commissioned to address specific topics of central cities. They were made available to conference participants before the conference and are included in these proceedings. The authors and titles of the papers are as follows:

- Peter Dreier, "Trends, Characteristics, and Patterns in Urban America";
- Regina Armstrong, "Economic and Social Relevance of Central Cities in the Nation's 12 Largest Urban Regions";
- Henry Peyrebrune, "Institutional and Governance Issues for Large Cities in Transportation";
- Joseph Giglio, "Financing";
- David Schulz, "Urban Transportation System Characteristics, Condition, and Performance"; and
- Elizabeth Deakin, "Transportation and Central Cities: Environment and Quality-of-Life Issues."

The conference was held June 28–30, 1998, with 92 registrants providing an excellent balance of representation among central cities, states, metropolitan planning organizations (MPOs), and transit providers. This balance allowed the six workshop groups to have multiple representation from each type of organization, thereby facilitating the exchange of ideas. Additional representation at the conference came from academia, national organizations, consultants, and federal agencies. A copy of the conference agenda and list of registrants is included in these proceedings.

The conference was organized on the basis of the areas that the Steering Committee recommended be examined. Following the keynote address by Detroit Mayor Dennis Archer, the first session provided background information on

- The current situation in large cities;
- The importance of large cities in the local, national, and global economy; and
- Current transportation issues.

The remainder of the conference included workshop sessions dealing with the three objectives. Before each workshop session, a reporter presented a summary of the resource

papers as the papers related to the particular objective. At the end of each of the three workshop sessions, a plenary session was held at which the workshop chairpersons presented the results of the workshop discussions.

This overview presents the highlights of the conference. Whereas the conference proceeded through three steps that corresponded to the conference objectives, this overview combines the sequential process into the major issues raised during the conference. For each major issue, the challenges and opportunities raised by the participants are presented. The strategies or actions developed for each issue are included.

Checklists, which cities can review and accomplish either individually or in cooperation with other agencies, are identified. Finally, research needs are presented for a number of issues. Research needs are created for review by the federal agencies, TRB, the American Association of State Highway and Transportation Officials (AASHTO), NACTO, the Association of Metropolitan Planning Organizations (AMPO), the American Public Transit Association (APTA), the Institute of Transportation Engineers (ITE), and other national organizations.

The conference leaders requested that participants develop action and research agendas for seven specific issues. Action and research agendas are also presented for a number of other issues that were raised during the conference.

Setting the Stage: Challenges and Opportunities for Central Cities

The conference was opened by introductory remarks from

- Gloria Jeff of the Federal Highway Administration;
- Michael Winter of the Federal Transit Administration; and
- Elliot Sander, conference chairman.

Five presentations set the stage for the discussion of transportation issues in large central cities. The opening session presentations were followed by a panel discussion of city transportation officials, who transitioned from general stage-setting to the specific transportation issues to be discussed in the following 2 days.

The five stage-setting presentations were by

- Dennis Archer, Mayor of Detroit and keynote speaker;
- Peter Dreier, Occidental University;
- Regina Armstrong, Urbanomics;
- Roy Roberts, General Motors; and
- Gloria Jeff, Federal Highway Administration.

All the presentations examined both challenges and opportunities for central cities. Mr. Dreier summarized the situation, stating, "There are contradictory trends in America's large cities, both different cities, some on the upswing, some on the downswing, and within cities themselves and in the metropolitan areas, both optimistic and pessimistic trends. The problems facing American cities are basically a mirror image in geographic terms of the larger trends facing the nation, a widening disparity of income, persistent racial segregation, and increasing concentration of poverty."

Challenges for Central Cities

The challenges for central cities are well documented in the first two resource papers. Among them are the following:

- Central city per-capita income as a percentage of suburban per-capita income fell in the past decade.

• The poverty rate in central cities and inner suburbs went up even during a time of economic prosperity.

• The increasing concentrations of poverty lead to social, criminal, and behavioral issues.

• Increasing geographic segregation of the poor is intertwined with increasing racial integration.

• We have seen increasing economic disparities between regions and metropolitan areas of the United States during the past decade.

• Political isolation of the cities in terms of voter representation and congressional representation has increased.

Opportunities for Central Cities

Many examples of central city revitalization have been reported in the national media and attributed to new political leadership, partnerships with private industry, and regional cooperation. For example, Detroit is undergoing a renaissance described by Mayor Archer and emphasized by Mr. Roberts with the commitment of General Motors to relocate its world headquarters to downtown Detroit. We are seeing the emergence of community development organizations operating in partnership with private industry.

The economic importance of the 12 urban regions and the 14 central cities is indicated by the following:

• The 12 urban areas comprise 3 percent of the land, contain about one-third of the jobs, and produce 45 percent of the gross domestic product, testifying to the productivity advantages of urban regions.

• In central cities, the demand for employment has outstripped the supply of resident workers, leading to an increase in commutation from 1990 to 1996.

• There is a transfer of about $160 billion in earnings of suburban workers in the 14 central cities, representing 18 percent of the labor payments and about 15 percent of the income of suburbanites.

• Central cities serve as command posts for multinational businesses, managers of global financial markets, and providers of advance corporate services.

• Central cities are centers of culture, art, fashion, and entertainment with a strong tourism draw. They serve as world-class office centers and centers of world government. (See Ms. Armstrong's paper for details.)

Mayor Archer commented:

> Our challenges are great. Every major city faces financing, infrastructure, employment and training, and political issues inherent in the management of transportation systems that involve numerous cities and towns. The difficulties of large cities are rooted in our constant challenge to maintain our tax bases and also grow in the face of social trends and government policy that seem to benefit the suburbs more than the city. . . .
>
> We're proving in Detroit that the futurists underestimated the resiliency and appeal of big cities. They also missed the call on the potential for an alliance between major cities, older suburbs, and the rural areas on the issue of urban sprawl. . . . In addition the futurists have underestimated forces such as the global economy, which requires us to think of ourselves as part of a region rather than an individual community. . . . Thoughtful leaders now recognize that the economic destinies of both cities and suburbs are completely interdependent. . . . Because Detroit is the center of the region, investment in Detroit translates directly into more prosperity for the region.

Gloria Jeff discussed the opportunities for central cities under the recently passed Transportation Equity Act for the 21st Century (TEA-21) legislation. She commented on how the conference was being held at an opportune time because DOT was beginning to

gather comments on how to implement TEA-21 programs and that this conference could serve as one of the communications to DOT. The focus in Washington, according to Ms. Jeff, will be on a one-DOT concept rather than a number of independent holding companies, and this move should be positive for central cities.

Ms. Jeff emphasized that FHWA and FTA recognize the importance of central cities to the national and global economy and they understand the challenges and opportunities discussed at the conference. "We are focusing on outcomes rather than processes as we look toward solutions," she said. "And as we look toward the 21st century and the road ahead, central cities will be the engines of tomorrow. They were the engines of the past and of today. We need . . . to recognize that we have to continue the renaissance that we are experiencing from an economic standpoint and continue to make transportation a vital element of it."

Following the presentations, there was a panel discussion with Francis Banerjee, Los Angeles Department of Transportation; Al Martin, Detroit Department of Transportation; Tom Walker, Chicago Department of Transportation; and Mr. Dreier and Ms. Armstrong. The discussion brought out issues relating to both challenges and opportunities for transportation to deal with the broader social, economic, and political issues raised in the papers. Among the key points were the following:

- There is a need to look at intermodal and multimodal opportunities relating to freight, tourism, and the global economy. Airports and ports must be part of the equation.
- We must develop and bring to a state of good repair the existing infrastructure in our central cities, not at the expense of our suburban areas but in conjunction with planned development.
- Transportation can strengthen the inherent economic advantages of central cities by improving the linkages to the suburbs, the public transportation systems within cities, the connectivity between major urban regions using high-speed rail systems, direct public transportation access to airports, and the transportation services that make the central city a 24-hour-a-day operation.
- Transportation officials should work cooperatively with local media representatives to help improve the public image of cities and draw attention to major public policy issues, such as the condition of the infrastructure and the economic consequences of a dysfunctional transportation system.
- Transportation resources in central cities are scarce; most of the money is going toward maintenance and operation. We need to build a constituency for more funding, which will allow an expansion of the infrastructure. The efficiency, environmental, and equity arguments presented previously for central cities can also be used for transportation to help build the case for funding.

From these presentations and the ensuing discussions, a number of precepts can be stated to guide the discussion on transportation:

1. Cities do not exist in isolation; they provide important linkages to the inner and outer suburbs and to state, multistate, national, and global economies.
2. Opportunities for regional governments are limited, but models for regional cooperation should be pursued—including creating a linkage between community development organizations and regional forums.
3. Cities are very different from one another. They have different economies, strengths, and weaknesses, and one-size solutions do not fit all.
4. Cities are natural competitors for economic development, but they can cooperate in their mutual interest through national and regional organizations.
5. Problems of central cities are not primarily economic or social, but political. The increasing political isolation of central cities should be a major focus of local political and business leaders.
6. There is a growing recognition that the fate of suburbs is tied to the fate of the central city, and this reality can be used to level the playing field at the federal level and to deal with

the issue of political isolation. There are efficiency, environmental, and equity arguments for increased regional cooperation.

7. The transportation infrastructure is a major competitive advantage of central cities.

8. The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and TEA-21 are outstanding examples of federal programs that foster regional cooperation.

Summary of Resource Papers

Before each workshop session, summary presentations were made on how the resource papers deal with specific objectives of the conference. Three reporters were selected from the Steering Committee to make the presentations, and their remarks are summarized in this section. (Their complete presentations are published later in these proceedings.)

Problems, Issues, and Emerging Opportunities

Michael Meyer of Georgia Tech University presented a summary of the problems, issues, and emerging opportunities examined in the six resource papers. The papers start from a common point: central cities remain the key to regional and national productivity, growth, and competitiveness; they anchor the attractiveness of the urban region.

Mr. Meyer stated a number of challenges from the resource papers, many arising from changing demographics. Among the challenges were the widening gap in income and wealth, the different economic health of different regions and cities, labor force and job location issues, different fiscal abilities of central cities and increased geographic segregation, the political isolation of cities, the fragmentation of transportation institutions, the condition of the infrastructure (including congestion), the connectivity of transportation to global and national economic markets, and financing issues (including backlogged capital investment in transit).

Mr. Meyer also noted a number of opportunities that were cited in the resource papers, including the competitive advantage of cities, the community-building efforts under way in some cities, the diversity of the population, increasing corporate citizenship, the recently passed TEA-21 legislation, innovative financing techniques, and the renewed interest in regional cooperation.

Strategies and Best Practices

Doug Wiersig of Houston Transtar, the city of Houston, presented a summary of the resource papers on strategies and best practices. He commented that the papers generally did not present specific strategies, since that was the purpose of the conference. The papers show that there is no one strategy that fits all cities. In developing strategies, there is a need to consider the interrelationship between the social, economic, and environmental issues as well as the competition between the cities. Strategies must factor in the trade-off between capital funding and funding for operations and maintenance, and the need to be intermodal and multimodal in scope.

Finally, strategies should be outcome-based, so that the decision makers and the public know what they are getting. Mr. Wiersig discussed trade-offs of social issues and economic and environmental factors when developing strategies, using traffic-calming strategy as an example. He also discussed the Houston Transtar program, which has a multiagency center to manage all transportation operations and is an example of a successful effort to deal with all these trade-offs.

In the final analysis, the successful strategy must have political support, and the agency implementing the strategy must have the management capability to achieve the objectives of the strategy.

Research Agendas

The third summary presentation was by Brigid Hynes-Cherin, BHC Transportation, concerning action and research agendas. Again, the presenter noted that the resource papers were more for background and raising issues rather than proposing specific actions or research ideas. A number of action and research ideas, however, were identified.

Many of today's problems in central cities, for example, are the result of federal programs. Actions to address these problems and create a level playing field include the following:

- Promoting metropolitan cooperation and strengthening the ties between regional development and community-building,
- Undoing the antiurban bias of existing policies,
- Strengthening the capacity of metropolitan areas to address their own problems,
- Reducing inequality and deconcentrating poverty,
- Improving physical and social conditions in urban and inner suburban neighborhoods, and
- Reducing political isolation of cities and urban constituencies.

Ms. Hynes-Cherin indicated that cities need to become more skilled in such actions as using innovative financing strategies; developing alliances with suburban communities; administering federal housing, workforce development, welfare reform, and land use planning programs at the metropolitan level; administering continual investment in the transportation infrastructure; and collecting data that differentiate the central city from other jurisdictions.

Research ideas contained in the resource papers include evaluating the interrelationships between the different transportation strategies (for example, the interrelationship between traffic calming and sustainable development) and the effect of different institutional arrangements on the performance of the transportation system.

Results of Conference: Challenges, Opportunities, Action, and Research Agendas for the Major Issues

Financing for Central City Transportation Systems

Within central cities there is a continual struggle to finance transportation projects and programs. Cities rely on a number of funding sources, including federal and state programs and, in some cases, regional and local financing programs. In addition, some cities have been successful in obtaining increased funding by using innovative financing methods and nontraditional funding sources and techniques.

Challenges

A number of challenges were identified: lack of total resources for transportation, equitable allocation of current federal and state resources to central cities, funding programs that are inconsistent with central city priorities because of modal or programmatic restrictions or legislative earmarking of projects, fragmentation of funding sources, declining capacity of central cities to raise their own funding, deteriorating infrastructure due to lack of funding, the high cost of maintaining and reconstructing existing facilities and providing mobility improvements to the central city transportation infrastructure (current funding levels are probably insufficient), inequity of funding allocations in federal and state programs between rural and urban areas, lack of operating and maintenance funding for transit systems, and proper funding of operations and maintenance to avoid higher costs in the future.

Infrastructure conditions and costs in older suburbs may compete with central city needs since suburban construction was generally to lower standards than original city infrastructure construction and will need replacement more rapidly.

Central city transit systems are deteriorating while funding for transit is going to expanding suburban systems.

Because of the political isolation of central cities and the increase of congressionally earmarked funding, cities are not getting their fair share of federally earmarked funds.

Rebuilding the infrastructure in central cities is very expensive, given the urban environment with utility relocation, maintenance of traffic programs, and amenities tied to mitigating project effects.

Opportunities

Different methods and techniques are available for financing transportation, including commuter taxes, impact fees, parking fees, event fees, roadway pricing, and preferential tax increment financing. Other opportunities include higher funding levels in TEA-21 and new programs such as job access programs and innovative financing provisions; use of performance arguments instead of political arguments to increase funding levels; use of intermodal, multimodal, and regional benefits of viable central cities and global economy arguments that are evident in central cities to expand and restructure funding programs; and use of nontraditional, nontransportation programs to fund transportation projects and programs (i.e., social service programs).

Checklist

- Evaluate the potential of value pricing, impact fees, event fees, tax increment financing, tax abatements, benefit assessment districts, value capture, and other methods of developer-financed improvements to increase the total transportation funding pot.
- Develop procedures for pooling funds and/or combining fund sources among several agencies to advance regional and city projects.
- Review the relative advantages of sales, property, and gasoline taxes for transportation and develop a public education program on the benefits and uses of these sources for transportation.
- Develop fare policies that reduce administrative costs and increase use.
- Pursue Congestion Mitigation and Air Quality (CMAQ) and enhancement funding to meet local goals.
- Look at programs from the Department of Labor and the Department of Health and Human Services for transportation funding.
- Review the way that states finance transportation projects, including any restrictions in state laws that limit state flexibility to participate in or match funds for city projects; also review the potential for using state toll revenues for city projects.
- Begin planning for the next transportation reauthorization bill to broaden the flexibility for funding use; consider transportation funding versus highway and transit funding, and leveling the playing field between highways and transit concerning income tax rebates.
- Evaluate the potential for collecting tolls from single-occupant vehicles in high-occupancy vehicle lanes, the so-called HOT lanes.

Research Agenda

- Prepare a summary of stories of central cities that have been successful in revitalizing their economic and social situation. Describe the role of transportation in this revitalization

and how transportation was financed. Pittsburgh, Cleveland, and Detroit were mentioned as starting points for the effort.

• Prepare a compendium of available financial techniques for financing transportation in central cities and document both successes and failures.

How To Make the MPO Process Work for Central Cities

There are many different MPO structures in the country and many different ways in which cities participate in the various MPOs. The conference participants felt that the role of the central city in the regional and local planning efforts was a critical issue. TEA-21 continues the emphasis from ISTEA on the expanded role of the MPO, and the participants felt that the central city should play an important role in the MPO—not only to meet federal requirements but to address regional and local planning issues.

Challenges

• Lack of cooperation and coordination at the regional level for improving the infrastructure; dealing with sprawl and with the integration of systems, including coordination of land use and transportation planning.

• Lack of an accepted vision of the future central city in the planning process.

• Limited ability to add new capacity and facilities.

• Deteriorating city public transit services.

• Inability to handle increasing volumes of truck travel.

• Including all factors—social, economic, and environmental—in the transportation planning process.

• Need to look at issues on an intermodal or multimodal basis.

• Redefining the role of facilities, especially highways in central cities. Is maximum throughput still the proper objective? Or do quality-of-life issues—different travel patterns and purposes and livable cities concerns—dictate a different approach to highway planning and design?

• A lack of data across the board that relate directly to the central city and that differentiate the central city from other jurisdictions in the region.

• Decisions based on local concerns, not necessarily regional concerns in some MPOs.

• Transportation performance measures that need to be expanded to include issues important to central cities, such as economic development, community livability, and emergency response.

• Limited financial resources for MPOs to do all that is desired.

• The weakness and ineffectuality of some MPOs.

Opportunities

• Use life-cycle cost benefit analysis when planning new facilities.

• Include consideration of pedestrians and bicyclists in the planning and design of transportation facilities and services to improve the quality of life, reinforce neighborhood structure and connections, and reduce the pressure on other transportation systems.

• Share best practices and success stories among cities.

• The new generation of transportation professionals have a broader understanding of the need to integrate transportation into the community-based landscape.

Other opportunities include the development and integration of new technologies such as intelligent transportation systems (ITS); new transportation practices such as management systems, performance-based programs, and preventive maintenance programs that have pos-

itive future implications for transportation systems; needs-based versus equity or fair-share funding analyses within the MPO process; new performance measures that are customer- or user-based as opposed to facility-based; new roles for the metropolitan offices of the federal transportation agencies; and restructuring of fragmented transportation bureaucracies and increasing communication and cooperation.

Checklist

- MPOs should have a commonly accepted vision for the future of the central city incorporated into the planning process, and programs and funding should be geared to achieving that vision.
- Emphasize transit-oriented designs when planning new developments or redevelopment projects.
- Build coalitions with older suburbs to emphasize infrastructure renewal and maintenance of existing facilities before expanding the infrastructure to outer suburbs.
- Strengthen the role of the MPO by involving the transit operators in the process and by having the MPO set priorities for critical issues through a negotiated annual work program.
- Review the current MPO structure to ensure adequate city representation. If the MPO operates on a consensus, city voting membership may be sufficient. If the MPO uses majority voting, proportional membership should be explored.
- Consider the management and reuse of the existing transportation assets before pursuing new developments that need new transportation infrastructure.
- Create a linkage between planners, developers, housing specialists, social service specialists, waste managers, police, and other groups affected by transportation projects to encourage the connection between transportation planning and land use planning.
- Use geographic information systems (GIS) at the parcel map level as a tool for planning.
- Develop performance measures tied to user concerns with outcome parameters that can be understood by users and decision makers.
- Conduct ongoing customer satisfaction surveys and benchmark performance.
- Reevaluate the planning time frames to emphasize more short-term activities related to customer and stakeholder needs to increase customer and user interest in the planning process.
- Initiate proactive programs to seek out the needs of businesses to develop a cooperative process toward project development.
- Consider "life-support" systems such as day care, health care, and senior care in the transportation project process in central cities.
- Develop partnerships with community groups, environmental groups, social agencies, and public safety groups.
- Meet with neighborhood organizations and communicate with neighborhood newspapers on issues involving the neighborhood.
- MPOs should build up staff capability in financial analysis techniques and knowledge of the various financial methods so that they can be effective brokers.
- MPOs should document the economic importance of central cities within the region and the state, then develop methods to convey this information to leaders in the region.

Research Needs

- Conduct research on the various MPO structures currently in existence and the various relationships and roles for the central city within the MPO. Review MPOs that have undergone structural changes in the past few years and assess what has worked and what has not, especially from the central city standpoint. Contrast MPOs that have undergone recent change with some of the more stable MPOs; again, assess the situation from a central city standpoint. The review should include best practices for dealing with voting practices, pro-

grams to increase participation in the planning process, methods of suballocation of funding, the use of broad-based committees to address issues, the incorporation of freight planning issues, combining land use and transportation planning within the same agency, special outreach techniques for minority and ethnic groups, and methods to handle issues in multistate urban areas.

- Conduct research on the benefits of coordinated land use and transportation planning.
- Develop tools for evaluating nontransportation effects and measures on a project-by-project basis, including the concerns of the various stakeholder groups in central cities.
- Develop new methods to relate the economic benefits of projects to the customers and stakeholders, especially at the neighborhood level.
- Identify the tools and institutional capabilities needed to provide MPOs with greater ability to leverage development and transportation connections.
- Evaluate metropolitan areas such as Dallas that have a consortium of government and nongovernment groups beyond the MPO. Do these groups deal with central city issues more effectively? What are the best practices in these types of organizations?

How To Improve Maintenance and Operations Practices in Central Cities

Maintenance and operations programs are especially critical to central cities for a number of reasons: many cities have older facilities requiring increased maintenance, there are limited opportunities and funding for building new facilities within central cities, research is proving that preventive maintenance programs are very cost-effective, and the availability of new technology can increase the effectiveness of operations and maintenance programs.

Challenges

- Lack of dedicated funding for maintenance and operations programs.
- Funding insufficient to prevent deterioration.
- Lack of operating and maintenance funding for transit operations.
- Inability to handle growing volumes of truck travel.
- Lack of pavement and bridge management systems at the local level.
- Backlog of facilities not in a state of good repair and not receiving preventive maintenance.
- Fragmentation of responsibility for maintenance and operation, and lack of agreement between the various jurisdictions.

Opportunities

- Increased flexibility in TEA-21.
- Development and integration of new technologies, such as ITS, toll collection systems, and fare collection systems.
- New transportation practices, such as pavement and bridge management systems, performance-based programs, and preventive maintenance programs.
- New approaches to funding infrastructure maintenance, such as sinking funds and dedicated sources.

Checklist

- Focus public attention on the importance of maintenance and preservation by such means as sponsoring public events highlighting maintenance achievements (e.g., ribbon-cutting ceremonies).

• Integrate capital and operating funds so that real trade-offs can be made on a cost-effectiveness basis.
• Develop performance measures and standards to help prioritize preservation and maintenance activities.
• Investigate the feasibility of dedicated revenue sources for maintenance.
• Create partnerships or cooperative agreements or consolidate responsibilities between jurisdictions for maintenance, traffic management, and competitive contracting.
• Include nontraditional groups in maintenance activities, such as adopt-a-highway programs.

Research Needs

• Continue current research on maintenance practices, including problem solving, better materials, and maintenance methods.
• Develop information on the benefits of proper maintenance and operations and examine how the benefits can be portrayed to political leaders and the public.
• Research the benefits of ITS in central cities; examine the positive and negative effects.
• Develop a report on best practices for managing utility cuts and integrating utility cut programs with transportation infrastructure programs.
• Conduct research on how traveler information influences travel behavior and examine the benefits to nontransportation agencies, such as police and emergency services.

How To Deal with Congestion in the Central Business District

A subset of the preceding issue that is unique to large central cities is how to deal with congestion in the central business districts (CBDs). Congestion in CBDs is viewed as both a positive factor (if the CBD were not viable, there would not be congestion) and a negative factor (people and businesses will avoid CBDs because of the congestion).

Challenges

Many of the previously listed challenges of fragmentation, funding, maintenance, infrastructure deterioration, and operation are evident in dealing with CBD problems. The statement, "We cannot build our way out of congestion" is especially relevant in CBDs. Other challenges include coordination of CBD transportation programs with other city programs, involvement of the private sector in the redevelopment of the CBD, the location of existing freeways, and lack of an agreed-upon definition of congestion and methods to measure all dimensions of congestion.

Opportunities

Again, many of the opportunities previously cited are available for programs within the CBD. They include

• Considerations for pedestrians and bicyclists in the planning and design of transportation facilities and services to improve the quality of life, reinforce neighborhood structure and connections, and reduce the pressure on other transportation systems;
• The integration of housing programs with CBD redevelopment; and
• The resurgence of central cities for such efforts as niche housing, cultural centers, and global economic centers.

Checklist

- Investigate implementation of traffic-calming plans in CBDs.
- Develop real-time information systems for travelers using information from ITS, not only for public transit systems but also for automobile and truck drivers to reroute travel around congestion areas.
- Develop a program to regulate the use of curb space to achieve transportation goals.
- Design major activity centers to be more accessible to pedestrians and transit systems.
- Promote intermodalism and intermodal solutions that include seamless transfers.
- Investigate tax incentives to guide redevelopment and include transportation amenities.

Research Needs

Prepare a "toolbox" or best practices document that presents the various traffic demand management (TDM) and traffic system management (TSM) strategies that are being used or have been tried in CBDs. What is the benefit-cost relationship of the various TDM and TSM strategies? What are the institutional, technical skills, or other barriers that inhibit the implementation of beneficial strategies? Items studied should include but not be limited to bus storage facilities, use of buses in nonpeak periods, bus priority streets and signals, effect of fare policies, effectiveness of enforcement strategies, real-time congestion measurement, and freight delivery strategies. Best practices should include the Seattle bus tunnel, the Boston Red Line park-and-ride, and the Fort Wayne Mixmaster reconstruction.

Other elements of the research agenda included the following:

- Conduct research on the relationship between CBD density and vehicle miles traveled. What level of congestion is tolerable in a viable CBD? How can cities manage congestion and a viable CBD through land use and transportation programs?
- Do transportation management associations in CBDs work? What are the best practices?
- How can congestion pricing help central cities address congestion and raise revenues? What are the equity issues and how can they be handled?
- How can curb space be regulated or controlled to help manage CBD congestion? What is the effect on the demand for curb space by goods movement vehicles, delivery vehicles, buses, sanitation trucks, private vehicles, and pedestrians? How effective are the various parking programs and strategies?
- Study the economic effects of automobile restraint policies on CBDs.
- What would be the effect of equalizing the transit commute tax benefits with the parking tax benefits?
- Conduct research on the effects of programs and initiatives by local governments on location decisions by the private sector. How can these programs be integrated with transportation programs?

How Can Relationships Between Central Cities and States and Between Central Cities and the Federal Government Be Improved?

The central city depends on funding and support from both the state government and the federal government. The ability of central city transportation officials to participate in state and federal planning and policy decisions varies among cities, and there is a desire among city transportation officials to have greater consistency and more cooperative actions. In addition, there is a desire on the part of city officials to have a closer working relationship with state and federal officials.

Challenges

• The relationships between the central city and state governments vary greatly among states in terms of funding programs, jurisdiction, extent of state facilities in central cities, and sharing of information and responsibilities.

• There are limited opportunities for city transportation officials to participate in national transportation issues because of budget restrictions, lack of knowledge of opportunities, and time pressures.

• Some states have a tendency to micromanage projects in central cities.

• The political environment also creates challenges.

Opportunities

• TEA-21 provides new opportunities for central city participation.

• Cooperative arrangements, such as NACTO, also provide new opportunities for participation.

• Existing organizations such as TRB, AASHTO, and ITE have expressed interest in aiding central city transportation officials.

• FHWA and FTA have supported efforts for better coordination by creating metropolitan offices for transportation.

Checklist

• Support and strengthen a unified national voice for cities (NACTO).

• Ensure adequate representation of cities on MPO boards.

• Encourage central city participation in the congressionally mandated TEA-21 studies, including the study of the effectiveness of the participation of local elected officials in transportation planning and programming.

• Cities should examine their internal institutional and governance structures to ensure coordination on transportation issues.

• Identify a "transportation champion" for the city.

• DOT should reexamine its metropolitan offices to establish a clear role, mission, and need for the offices and strengthen the offices wherever possible.

• Develop joint AASHTO-NACTO technical activities.

• TRB should establish a committee on transportation issues of central cities.

Research Agenda

Document the various relationships between state departments of transportation, MPOs, and central cities, and identify some best practices. How do other levels of government and state DOTs work together? What is the relationship between the governors and state DOTs? What are some of the recent changes in state DOTs and what are the implications of these changes for central cities? Which relationships are working and what makes them work—organizational factors, attitudinal factors, or something else? What is the effect of factors concerning proportional voting, consensus voting, rational prioritization processes for selecting projects, negotiated suballocations for central cities, broad-based MPO policy committees, combination of land use and transportation decision making in the same agency, collaborative problem-solving, and programs to reach out to minority and ethnic groups in central cities? The study should present an "ideal construct" for a structure to meet the needs of central cities.

Study ways and best practices to streamline state reviews of city projects. Evaluate the linkages of other federal programs that have transportation effects—such as Housing and

Urban Development and Health and Human Services programs—and develop relationships with these programs.

Lack of Good Data on Central City Transportation

The authors of the resource papers and the participants concluded that there was a lack of differentiation between data on central cities and data on regions and states. This lack inhibits the analysis of some issues. Is the transportation infrastructure in central cities in better or worse condition than the infrastructure in other parts of the region, state, and country? How do cities compare concerning the performance of the transportation system?

Challenges

- Existing national transportation databases are not set up to separate central cities' statistics from regional, state, and national summaries.
- There is some resistance to making this level of comparison.
- Regional and state databases vary in their ability to extract city-specific data.

Opportunities

- New technology in data collection, including GIS, make the differentiation of city data more cost-effective and feasible.
- The existence of the Bureau of Transportation Statistics in DOT has greatly expanded the availability and quality of transportation data.

Checklist

- Create a database on the extent, characteristics, and physical condition of the transportation infrastructure within the region, including the ability to differentiate systems in the central city as opposed to other political jurisdictions.
- Develop good information on central city freight movements to facilitate freight and intermodal planning.
- Use the Internet and GIS as resources for sharing information.

Research Needs

- What are the current best practices concerning central city databases at the city, regional or MPO, and state levels?
- What is the federal responsibility for integrating these data into the national transportation database?
- What is the institutional capacity of central cities to collect and maintain this data inventory?
- Prepare a digest of existing software available for collection and analysis of data.
- Develop definitions and standards for data on transportation in central cities that include consumer-based performance indicators and measures of the "livability" of central cities, including person-travel measures as well as vehicle measures.
- Research which data items and measures are useful for political and program decision makers in central cities.

Is Fragmentation of Transportation Responsibilities Among Different Agencies in Central Cities a Problem? How Can Coordination Be Accomplished?

The resource paper documents the different institutional and governance arrangements in eight central cities. In most cases the responsibility for transportation is spread among several agencies. Each city has a different mechanism for coordinating transportation decisions.

Challenges

- Most cities studied have different institutional and governance structures.
- Information on city transportation institutional and governance structures is limited.
- Transportation responsibilities are fragmented in most cities.

Opportunities

- Institutional and governance issues are becoming recognized as critical in the transportation profession.
- TRB is proposing research on institutional and governance issues.
- There are new models of cooperative decision making and operations in many areas.

Checklist

- Investigate establishing a central city transportation office or department in cities where fragmentation is viewed as a problem.
- Review and take appropriate steps to improve coordination between the following functions: traffic management, police and fire, parking (public and private), transit, sidewalks, taxis, emergency management systems, street maintenance, utilities, snow removal, suburban design and land use, parks, railroads, ports, airports, bridges and tunnels, special events, and community interests.

Research Needs

- Conduct research on the various models of organizations for transportation in central cities. Evaluate best practices for coordination and program delivery. What is the role of a "transportation champion"?
- What functions within city government need to be coordinated with transportation? Is there a relationship between organizational structure and system performance?
- What skills are needed by city transportation employees today and in the future? What programs are needed to provide these skills to current and future employees?

How Can the Central City Be Made More "Livable"? Can Transportation Programs with Environmental, Social, and Sustainable Development Benefits Be Integrated in Central Cities?

There is a recent trend to emphasize programs that make the central city more livable. The programs include concerns for pedestrians, bicyclists, transit, and traffic calming. Such programs are consistent with concerns for creating a sustainable environment, meeting current environmental objectives, and minimizing some of the social problems described in the stage-

setting portion of the conference. The conference participants were concerned with integrating these various programs and raising the visibility of transportation and "livable cities" on the national, state, and local political agenda.

Challenges

- Transportation is not at the top of the priority list for our political leaders, and we have not done an adequate job of making the case for the benefits of the transportation system.
- There is a lack of leadership and common vision for the future of central cities and the desired role of transportation in that vision.
- How should the concerns of stakeholders in central cities be defined and mobilized?
- How can the political isolation of central cities be overcome?
- The quest for tax dollars from new development and redevelopment tends to outweigh the concerns over the transportation effects and required mitigation.
- Development decisions are often made on the basis of "least resistance" without regard for transportation effects.

Other challenges include changing leadership and agendas, lack of adequate representation and presentation of central city issues, decisions on nontransportation programs with significant effects on transportation that were not intended or analyzed, and gated communities that increase safety and security but isolate neighborhoods.

Opportunities

When properly planned, transportation investments can attract economic investments. Central city freight facility improvements, for example, can create a competitive advantage for attracting economic investment. Transportation can be a means of reducing inner-city poverty.

Other opportunities include

- Making the cities attractive and providing services for the aging population;
- Capitalizing on the environmental quality, energy efficiency, and sustainability arguments for the need for viable central cities;
- Focusing on the existing value of the transportation infrastructure in central cities; and
- Creating a vision for the future of the central city that has the support of the business community and the public and developing a defined role for transportation to achieve that vision.

Other considerations include performance measurement programs relating to the interests and needs of the political leadership; programs in TEA-21, including enhancements, CMAQ, pedestrian, and biking; and increased flexibility in the use of federal funding.

Checklist

- Promote the benefits of central cities in terms of sustainable environment and meeting existing environmental and social programs as an economic development tool.
- Provide better pedestrian traveler information, including maps for pedestrian travel, at key intersection and activity centers.
- In project planning and development certification, use amenities—such as bus stops, landscaping, aesthetics, and pedestrian and biking facilities—for community and consensus building.
- Develop safe and attractive walking plans from neighborhoods to major activity centers.
- In northern climates, ensure that removal of snow from sidewalks is a priority.

- Accommodate bicycles on transit systems.
- In traffic-calming plans, ensure that pedestrian and biking concerns are addressed.
- Consider noise abatement programs other than noise walls.
- Include concerns for an aging population in neighborhood and transit designs.
- Support the Clean Cities program.
- Consider such issues as race, poverty, crime, safety, education, and health when examining transportation investments in central cities.
- Develop and use a broadly supported vision for the future of the city and use transportation projects to support that vision; the vision should address long-term needs as well as short-term programs.
- Build community amenities into the reconstruction of facilities.
- Conduct a study of the "livable cities strategies," including adequacy of pedestrian and biking facilities, reclaiming streets, transit enhancements, and intermodal coordination.
- Since transportation has a low political priority, package transportation projects with other, higher-priority programs such as police, safety, emergency services, and environmental, social, and economic development programs.

Research Needs

- Develop tools and techniques for environmental justice analysis.
- Improve the coordination between DOT and the Environmental Protection Agency on regulations concerning transportation.
- Examine which pedestrian environment programs have the best chance of success in central cities.
- Examine the relationship between pedestrian and vehicle management strategies.

What Are the Opportunities for Development or Redevelopment Projects To Avoid the Mistakes of the Past? How Can Construction Be Expedited?

One of the three conference themes was to examine the processes for development or redevelopment of projects in central cities and discuss whether there were opportunities to avoid some of the mistakes of the past. The conference participants were concerned about the effect of commercial and residential developments on transportation facilities as well as the processes for the construction or reconstruction of transportation projects.

Challenges

- Balance the rehabilitation of existing facilities against the construction of new or different facilities with different objectives in the same corridor.
- Address the trend toward "big box developments" and the effects on the central city, that is, loss of pedestrian and transit access.
- Brownfields provide opportunities for redevelopment, but the issue of "who pays for what" needs to be resolved.
- Federally funded projects take 3 to 5 years of processing before construction is started, which is incompatible with the short political life of public officials.
- Use of federal standards in developed cities is often difficult and expensive.

Opportunities

- Tie redevelopment projects to intermodal system links.
- Use TEA-21 process streamlining initiatives to shorten project schedules.

- Have concurrent reviews as opposed to the current linear review process.

Other opportunities include

- Professional capacity to support redevelopment of central cities;
- New project development techniques, such as design-build-operate-maintain, and variations of these techniques to increase efficiency and productivity;
- Tax incentives to encourage transit-oriented development or development to promote the livable cities agenda;
- Active involvement of the private sector as partners in the revitalization of central cities;
- Ability of cities to reclaim and reuse lands and integrate the transportation infrastructure in the redevelopment; and
- The need for new housing in the city and the opportunity to integrate development of new housing with the transportation system.

Checklist

- Use existing rights-of-way, such as freight rights-of-way, to cut costs.
- Use life-cycle costing to determine total infrastructure costs.
- Use incentives, such as development rights, to target developments that meet specific city objectives.
- Consider using design-build-operate-maintain contracts or a variation of these four steps as a way to cut project costs and time.
- Streamline the project development process, including conducting concurrent reviews rather than linear reviews, and participate in TEA-21 efforts to reduce the time and cost of project development.
- To speed project implementation, develop methods of dispute resolution among the various agencies involved in transportation projects.
- Look for opportunities to reduce costs of services, including adopt-a-station, adopt-a-bus stop, and adopt-a-highway programs.
- When retrofitting or reconstructing an existing freeway, evaluate incorporating instrumentation that could support high-occupancy vehicle lanes, tolling, or congestion pricing.

Research Needs

- NACTO, AASHTO, and FHWA should review existing highway design standards and adopt urban standards for densely populated areas, when appropriate.
- NACTO and AASHTO should review methods to streamline state reviews of city projects exploiting the best practices currently used in some states.

There Is a Need To Develop Education Systems To Train Transportation and City Officials in the New Skills Required To Meet the Challenges of the Future

Dealing with many of the issues and actions discussed at the conference will require a new set of skills for urban officials. The conference participants discussed this issue and recommended some areas that need to be emphasized in the education system.

Checklist

- Universities should expand their interdisciplinary education programs to include courses on planning, political and business decision-making practices, the interrelationship

between transportation and land use development, and the interrelationship between transportation and the economic vitality of cities.

• Universities should develop partnerships with governments, associations, and private developers to upgrade the transportation curriculum and create additional opportunities for co-op programs.

• Cities should use existing National Highway Institute and National Transit Institute programs to educate city transportation employees.

How Can Transportation Programs Support the Welfare-to-Work Program?

There is a need to close the gap between where people work and live, especially as it relates to the welfare-to-work initiative. The resource papers and the keynote address framed the issue of poverty levels and the concentration of unemployed persons in central cities. The participants suggested several different approaches to this issue:

• Explore reversing the current approach by bringing jobs to where people live, including analyzing job skills of central city residents and marketing the information to the private sector.

• Expand transit service to 24 h/day to accommodate 24-h/day businesses.

• Develop brownfield and empowerment zone areas to locate jobs where people live.

Best Practices

Throughout the conference, participants stressed the importance of gathering and sharing information on the best practices for dealing with many of the issues raised at the conference. NACTO has started the development of a Web site where its 10 member cities can share information on best practices. The current content and operation of the site was demonstrated at the conference. Many examples of best practices were also cited during the workshop sessions.

To start cataloging the various best practices, the participants were asked to write down the best practices that, to their knowledge, related to issues discussed at the conference. More than 100 suggestions were submitted, which are described in these proceedings. The Center for Transportation Policy and Management at New York University currently provides staff support to NACTO. As part of that support, many of the best practices submitted at the conference will be added to the NACTO Web site: http://www.nacto.org.

Conference Summary

The final session consisted of summary comments by Frank Francois, Executive Director of AASHTO; Tom Walker, Commissioner, Chicago Department of Transportation and NACTO Chairman; Arthur Gazzetti of the American Public Transit Association; and Gloria Jeff, Deputy Highway Administrator, FHWA.

Summary Comments by Frank Francois

It has been a privilege for me to be a part of this conference for a lot of reasons, as I will explain. I certainly congratulate Elliot Sander and the Steering Committee for putting together what I regard as a very meaningful event, and the role of the National Association of City Transportation Officials is the key to a lot of this. I think the resource papers here were right on target, and I think collectively they present a host of very valuable information.

Most important, I think the mixture of attendees was really unique for a discussion of large-city transportation—city transportation professionals, some state department of transportation people, people from MPOs, academia, and federal officials—and overall I think it has been a very good mix.

For me it is a special treat. I spent 18 years in local government as an elected official of a large urban area, worrying about planning and zoning issues and regional planning, and helping to create the Washington Metro system and a few other things, and then the last 18 years as executive director of AASHTO, which is composed of the 52 state departments of transportation with the U.S. Department of Transportation as a member also. AASHTO is unique in that we do represent all five modes—aviation, highways, public transportation, rail, and water—and work in all of them, although predominantly we work in highways.

Let me first offer some observations on what I have heard and what I think is important, a little bit of some issues I see that lie ahead, and then I have my own six-point agenda that I will discuss.

My first observation is that large cities are important for the United States. I think we know that, that they are at the center of regions, and those regions are the economic engines that drive everything that happens in this country. But I do emphasize that the large cities are at the center of regions, and we need to understand that.

My second observation is that transportation in all modes is important for our large cities for them to function efficiently internally, but perhaps more important or equally important, to connect them throughout their region and with the rest of the state and with other large cities.

A third observation is that no two large cities are the same. There are differences in geography, climate, the population mix, and in the capabilities and the age groupings and the economic status, skills, and education of the people. All of that means that the cities are all a little bit different. So there is no one size that fits everything. And they all have somewhat different goals.

Another observation is that large cities do not exist in isolation. As I listened to a few of the conversations here, one would get that feeling, but it simply is not true. The suburbs are important, and we have to somehow work with that. Competition, yes, I sense that, I understand that. But the region is ultimately the real group that we are working with.

We need to remember that the big cities are part of states. Often, unfortunately or fortunately, they are part of more than one state. And we do not talk enough about that. New York, St. Louis, Kansas City, Cincinnati, and Washington, D.C., just to name a few, are multistate metropolitan areas. And if you do not have enough problems with an in-state area, then try a multistate area. It's just a lot more fun to get involved with things.

Cities are also established under state constitutions and laws. All of them are. There is no federal chartering of a city, Washington, D.C., being a possible exception to that. But the others are all creatures of states, which means that what your governor thinks and what your state legislators think are very important, and you have to keep it in mind.

Now generally as I listen around here the large cities do not have too high a regard for the MPO process or for long-range planning as it fits into their transportation program. They also question the role of states, quite obviously, and we know that, and there is reason for that.

What is in the future? I think that state transportation agencies must come to better understand the role of big cities. Too often our state departments of transportation concentrate primarily on the rural portions of the state, the wide-open spaces connecting cities to each other, but more or less ignore what really happens inside the city and the municipal issues that you folks wrestle with every day.

The role of metropolitan regions as an economic engine is not understood well enough by the states. We have been doing a lot of research lately into the linkage of transportation and the economy, and we understand better than we ever have how important that linkage is. We need to extend that research into the cities.

Just last week we released a monograph in this area, Transportation and the Economy, that draws on some new information that the Bureau of Transportation Statistics and others

have helped pull together, and some work that AASHTO has been doing and some prior work that FHWA has done, all of which gives the overall picture. We need to translate that into what the big city does and its role in all of this and the importance of that.

The governors and state legislatures and other state agencies need to learn to look at big cities as major assets, not burdens. That is going to take a long educational process, which all of us, I think, have to be a part of. Big cities, on their part, must recognize that they are part of a region, as I said.

What does a city on a hill look like for the 21st century? If you could cure all the problems, what would be of most value there? Well, the big city on a hill in the 21st century will have a diverse, well-educated population, a flexible workforce that can move from one field to another in a dynamic economy that changes almost every day. It can be a centerpiece of providing the kind of help, the kind of work that we need for manufacturing, yes, maybe, but for services and for a variety of other activities.

It will bring together a well-capitalized and well-maintained infrastructure. The elements are there, but we must take care of them. We must improve them—streets, sewers, parks, libraries, all those things that are only found in central cities and that are necessary for most of the economic activities of a region and state.

We need to have leadership in this big city that recognizes that change is constant and that there is no returning to a period of time; you must always work with today and tomorrow and be ready to redevelop to meet whatever the changes are and the new demands that are placed on it.

What else is the city, the ideal city? It is the place to be, the center of activity, cultural activity, universities, sports, architectural leadership—all of that will be found only in big cities, because it takes big cities to put it together.

Now if we recognize all that, then I think we have something that we can build on. Coming to that, there are six action items that I will mention. On the part of cities, I think the first step is to develop your vision of what your city wants to be. If you do not have that vision, then you don't know where you are going. And if you don't know where you're going, you're not going to get there. So vision, vision, vision. And it's a vision that has to be supported by many people—political leadership, obviously, but well beyond that.

You also need the buy-in of the funders. Who are the funders? They're the people, they're the states, they're the federal government. They're also the private sector—General Motors Corporation in this city, other organizations like that in other cities. And I would say to you that if you have that vision, if everybody has bought into it, you will find the mechanisms to make it happen. If you don't have that vision, you will never make it happen, because you really won't know where you're headed.

AASHTO and the states. What is it that we need to be doing? Well, as I said, we need to listen better, to understand our urban areas, and to recognize their value, and our state departments of transportation should be concerned with the whole state's transportation system, not just the state highway system or the transit systems that we become involved with or the specific rail issues that we deal with. All of those are important. But the whole system is important, and that is a state responsibility. I think we tip our hats to that, but we don't really get involved in it as much as we should. We need to find ways to work with big-city transportation professionals like yourselves on an ongoing basis.

Now AASHTO does its work through committees, and we have already worked with NACTO in getting you involved in at least one of those committees. I think we can do more in others. But we need to know where you want to be involved and how we can function.

We have some new projects that we are working with right now. One of those flows out of a conference that was held at the University of Maryland a month or so ago called "Thinking Beyond the Pavement: Aesthetic Design Issues." We will be picking that up within our Subcommittee on Design over the next couple of years. There will be changes. There will be objections. There will be fights. I know there will. But we also need to do it, because it's the way the people are heading, it's the way a lot of other places want to go. You should be involved in that. We need to explore to see how we can get you involved in it.

We talk about ITS. AASHTO's ITS activities are basically concentrated within the Subcommittee on Advanced Transportation Systems. About 35 states are very active in that subcommittee. These are the things that you're talking about here, ITS tools that can be important for cities. As we work with those in AASHTO, we need to understand what your thoughts and ideas are and see where we go with some of them.

We are one of the standard-setting organizations, together with ITE and some other organizations. So we will be getting involved in those arenas. Brad Mallory, the Secretary of Transportation of Pennsylvania, is the current chairman of our Standing Committee on Planning, which is where much of the activity that we're talking about here centers. I know he cares about cities. How can we structure ourselves to talk more about the big-city issues as we work within AASHTO?

My third action item is that we need to work together to improve the MPO process. It has come a long way. It is working pretty well in some parts of the country. It is not working as well as it could. But it's really up to us working with each other to make sure it works the way we want it to work.

We need to work together to develop better funding tools, a kit of funding tools, Joe Giglio calls it, and he's right. There is much that we can do working with each other to make things mutually available and to better understand how we do things.

The states have moved beyond the gasoline tax—way beyond. And indeed all of us will have to before too much longer. When you hear General Motors talk about an 80-mile-per-gallon vehicle, that means you're going to collect one-fourth of the fuel tax you do now. The fuel tax has a limited life. Where do we go next? And does that involve cities and counties? Probably, as we move our way through.

The fifth item is to sponsor a research agenda that is mutually agreed upon. You have research that you want and we have research that we want. There are mutual issues, and we just heard a list here. Then we need to decide how we're going to fund that research.

Unfortunately, this is one of the places where TEA-21 went the other direction. TEA-21, through cutting research funding in the highway arena and through earmarking it, has effectively destroyed a central research program. How we put it back together is going to be a major question. By working with each other, we can probably do some things. AASHTO will get more money available because of a growth in the National Cooperative Highway Research Program funding sources. There are probably some ways we can pool funds and do things there so that we can work some of these things out.

Finally, we need to develop a joint approach to our federal partners. The Federal Transit Administration, the Federal Railroad Administration, the National Highway Traffic Safety Administration, the Federal Aviation Administration, the Bureau of Transportation Statistics, and so on are all there to help state and local governments. They don't deliver services; they're supposed to help us deliver them. We need to talk to them jointly in areas where we have mutual interests.

And we need to get some other players at the table. If we are going to talk about transportation policy-setting in big cities and in states, then we need to involve the U.S. Conference of Mayors, the National League of Cities, the National Association of Counties (at least the county executives group within that), the National Governors Association, and the National Conference of State Legislators. Those are the people who write the laws that we complain about. If we have a problem, we need to get them involved.

Beyond these groups are the American Public Works Association, AMPO, the Urban Land Institute, the U.S. Chamber of Commerce, the American Trucking Associations, and the Association of American Railroads. All of them are involved in the kinds of problems that we are working with, and we need to reach out to them.

So let me wind up and say that I think this conference has been a great beginning, but beginning is exactly what it is. Its true value depends on what happens next. And the work that lies ahead will not be easy, but I think it's very important for the American people, and if we work long enough and hard enough, everything's going to be better than it is. And that's why we're all here.

Thank you.

Summary Comments by Tom Walker

Those were very good comments, Frank, and I would like to start my comments where you left off, and that is by talking about this as a good start, and just a beginning. Elliot started us off with a little bit of history of the reasons why NACTO came into being. This event is, I think, the first big step in moving in the direction that we would like to see things go in, and that is really refocusing and reprioritizing how we approach setting standards and policies, which gets into all levels of funding and policies and all other things, recognizing, as Frank says, the importance of large cities to our national economy. We believe that it's even more important in light of where we are in terms of a global economy that we do that and focus on that.

This is not to say, however, that we have any fear of this global competition, and it's also not to say that we should fear competition among cities. That is why, I believe, one of the things that underlies all of what we have been talking about here is the sharing of information. None of us needs to fear that sort of competition. We believe that it's going to be a healthy competition that is going to benefit the various regions of our nation and that will benefit our nation in terms of this global competition. And in fact we are going on to another conference in Philadelphia as we leave here to share information with other cities from around the world.

So we believe that we have lots to learn from each other, and that we are far from perfecting the system by which we provide transportation, mobility, access, and opportunities on an equitable basis to our people around the globe.

So I believe that it really is just a beginning, although all of these various agencies, all of us who are involved in providing transportation, have been at it for a long time. I think we are only now beginning to perfect the process. It is demanded of us that we become much better at managing the systems. In fact, I believe that in Chicago our major challenge is how we manage our transportation system. That includes, of course, a lot of things.

Frank, one of things you talked about was the lack of planning or strategic analysis of things. What we are trying to do in Chicago is to base our entire efforts at budgeting for transportation on a strategic plan, so that we talk about who are the stakeholders in terms of the transportation system, who are the people who would be most affected by it, who are the decision makers, who must be on board, and who must be the major supporters of our programs for them to be successful and garner the resources that are going to be necessary for us. We need to do that on a much broader scale. It certainly needs to include all of the entities that Frank talked about in terms of major stakeholders.

What that means for us, and we talked in our workshop in terms of the public relations aspects of promoting a transportation plan, is that we must do that locally. We have mayors and other public officials who really do not understand what we're talking about when we talk about our transportation plans. And when we advance ideas on the types of programs that need to be funded, I don't think we've done a very good job of explaining these things to them and pointing out how important it is to fund these kinds of things.

So we must be promoters in some sense, and we must be clearer about making the case and sending the message in a format that can be understood by political leadership and by the customers we have to serve so that they understand the importance of supporting financially the initiatives that we're talking about.

I have been very impressed in terms of the participation level of all of you who have come to this conference, and I want to extend my thanks and appreciation for that participation, because I can see the benefit to Chicago of your input.

NACTO as a group will benefit tremendously by the input. I believe, Frank, that a conscious decision was made to broaden and keep open the attendance, because we need to hear back from all elements of the transportation community so that we can get a better focus on our role and how we can participate and what sort of allies we will need to advance the causes that we think are important for cities to take their rightful place in the transportation arena. We need to interact with each other, and we need to approach this without fear, understanding that there are turf issues and jurisdictional issues and so forth, but I do not believe we need to fear discussing those things.

When President Clinton can go to China and disagree about our approach to almost everything—civilization, economics, politics, and so forth—we can, within this community, not fear those differences, but talk about it understanding that we all have as a goal our systems and our national transportation functioning at the highest possible level. That means accepting the fact that we will have different perspectives; we will have different values and different views that all have to be taken into consideration for us to come out with the best possible system in the end.

I would like to close by again thanking Elliot, TRB, DOT, and all those who personally spent the time and effort that it took to put together what has been a very good conference. I am looking forward to a continuation of this. We are also looking forward to your participation in helping NACTO in its efforts to disseminate best practices, to ensure that we continue the dialogue and that we can come together to do the things that are most important so that our systems perform as well as they can.

Thank you.

Summary Comments by Arthur Gazzetti

Frank gave a very outstanding global view, strategic emphasis on stakeholders. Tom picked up on that, talking about beginnings and next steps. I'm going to stick with what I know best—legislative agenda. We have talked a lot about the research agenda, which feeds other things we want to do. At the beginning of the session on Sunday we talked about the weakened political base for cities. That was the emphasis in many ways of Peter Dreier's paper. However, that does not mean that if we work hard and pull together that we can't do well.

I believe that TEA-21 is an example of that. In my view it is the best bill yet for urban transportation. Further, FTA and FHWA have already begun their outreach, and I am convinced that they want to implement that bill in the best way and make it work for cities, regions, and states.

The conference we have just been through together has been nothing short of superb, from the inspiration of Detroit Mayor Dennis Archer and Roy Roberts of General Motors to the insight of Gloria Jeff. Papers prepared for this conference have provided background and food for thought that will be valuable on an ongoing basis far beyond this conference.

At APTA, we try to build on the research of other people. We provide a number of reports ourselves. Some are for reference. Often they are for advocacy purposes. But they usually build on research products that are done through TRB and elsewhere. I want to mention a few recent reports that were effective as advocacy tools during ISTEA. Conservative commentator Paul Weyrich did a report, "Conservatives and Mass Transit: Time for a New Look," which was very effective in dealing with the Republican majority. Another report, "Dollars and Sense: The Economic Case for Public Transportation in America," was also very useful in advocacy during ISTEA.

I want to mention another report by an APTA task force, "Mobility for the 21st Century," chaired by Shirley DeLibro of New Jersey Transit. Members of the task force looked into their crystal ball with the help of a futurist and came up with four scenarios in this report: Scenario 1, boundless sprawl; Scenario 2, dying cities; Scenario 3, community-oriented growth; and Scenario 4, reinventing the city.

The jury is out on which way we go. However, the group engaged in a long series of discussion and exercises to create a vision of the preferred future, and I think it would be useful for those who are not familiar with this report if I follow up after this conference and get it to everyone.

Here are some of the things APTA has been doing. We have had a series of transit-oriented development workshops. We focused a lot on the new urbanism, the Portland experience, and tried to play on those ideas.

Let me spend just a few minutes talking about TEA-21 and other opportunities in the federal legislative agenda. It has been interesting how bills have evolved over the years. In 1982, the Surface Transportation Efficiency Act, STEA, was the first time transportation trust fund

resources were made available for public transit. A mass transit account was created and supported by a half cent of the federal gasoline tax. In 1987 legislation cemented the linkage between highways and transit and the federal surface transportation program. In 1991 the landmark ISTEA legislation broke new ground for local decision making, community involvement, intermodalism, and a host of other beneficial concepts for cities.

The 1998 legislation, TEA-21, builds on ISTEA and provides significant increases for transportation investment. As an example, ISTEA, a very favorable bill, provided $24 billion for transit. In addition a good amount of flexible funds has been provided. TEA-21 will provide $36 billion over a comparable 6-year period. That is a 50 percent increase. And those are guaranteed funds. I will not go into that concept now, but it is a significant one that will help us in planning for the future. That is congressional parlance, "guaranteed funds." That is not a word I'm using; I'm just picking up on what they're using. But it's backed by what started as a half cent for transit out of the federal gasoline tax and is now 2.85 cents.

There are new funding programs. There is a welfare-to-work access to jobs initiative on top of $3 billion—billion with a "b"—provided through the Department of Labor, through significant TANA funds available from Health and Human Services. There is an alternative fuels program, new grant programs available to cities. I would advise getting your grants persons ready to go after these funds.

I want to mention two other bills to keep our eyes on, because I think they are important in terms of funding for cities. First, airport legislation is under consideration. It has been a struggle, but some urban transportation needs have been able to be funded through certain airport programs. The passenger facilities charges (PFCs), $3 a ticket, can go to airport access and transportation needs. In New York they are building a link to the airport through those funds. There is another—an airport improvement program. In San Francisco, they are looking at that to do some good things. As the legislation comes along, we need to weigh in. The airlines would like to wipe these things out. They would like to see money used for airline-related needs rather than transit-related needs.

Finally, as we focus on the legislative agenda and as we build new rail systems in our urban areas, it behooves us to use existing corridors rather than condemn urban neighborhoods to build lines. It makes sense where capacity exists to use freight lines.

However, the rules are such that freight railroads do not always have to cooperate on that, or even consider the public interest. If they want, they can say we're fine without you, no thanks. In other urban development projects and transit projects, eminent domain powers typically are available, but that does not apply to railroads that come under the interstate authority of the federal government, what is now called the Surface Transportation Board. Amtrak has a statutory right to use the freight corridors. I say it's good for urban transportation too, and there will be legislation pending in the coming year to consider that.

Thanks. My comments were a little less global than those of the two previous speakers, but that is what my mind is on. We have a research agenda. We have an urban agenda. We have an urban legislative agenda, and APTA wants to be a partner with you in that. Thanks.

Summary Comments by Gloria Jeff

Well, we were supposed to be focusing on big cities, and I just left a meeting with a big city about its transportation issues. Rather than try and leap into this dialogue, what I would like to do is revisit where we started on Sunday and look at what I have seen between Sunday at 2:00 o'clock and today at about noon.

We started out with a fundamental charge, which was to identify issues facing our central cities with respect to transportation, exchange information on success stories, on pitfalls to avoid. We agreed that we would come up with recommendations for areas of policy deliberations and research recommendations. And we have done all of that.

Within the workshop groups there has been a tremendous exchange of ideas about what are the issues. We seem to be focusing on three categories of issues.

First, how to get your house in order as a city, as a central city entity dealing with transportation, be it parking, be it planning, whatever the case may be, coming together and doing that.

Second, working out your role with respect to your involvement and participation as an entity in the metropolitan planning organization. Establishing your relationships with state departments of transportation and then wrestling with one DOT and its various component elements and how you come together to focus on those. And those seem to be the issues. In dealing with those roles and responsibilities you exchanged some success stories and best practices. I understand that more than 100 were presented that are going to be put on the Web site, and I think they speak for themselves.

In the final area of providing recommendations for policy deliberations, I believe you have done that job. You have talked about how the federal Department of Transportation needs to step up and provide leadership, in many instances through the division offices of the Federal Highway Administration, in working with relationships among the various partners at the metropolitan area and at the regional level.

You have talked about how we need to be more proactive in funding research and in being involved in data collection and analysis and information-sharing. And, in terms of the information-sharing and providing some assistance in the area of research, we stand ready within the resources we have available.

I understand that we have had a number of research recommendations. The first couple of white papers that were presented provided a fairly clear indication of where the needs resided in terms of things we just did not know. We don't know what the conditions in the performance of central city transport elements are, be it their highways, roads, and streets, or their public transit systems, their airports, their water ports, their port authorities, or whatever the case may be.

We also saw a recommendation that we continue the kind of dialogue that took place today. I understand that the Transportation Research Board has indicated a willingness to explore the creation of a committee to focus on the issues of big cities as part of its technical committees, and I think that is a major step forward, because it keeps the cast of characters working together.

I have also heard that AASHTO has very graciously indicated a willingness to provide some of its fiscal resources to assist in the area of research. We heard Roy Roberts say very passionately on Sunday that General Motors, and hopefully not only General Motors but also other elements of the private sector, will step forward as well in looking at what we must do to keep the critical economic engines of this nation functioning in our central cities.

We accomplished a lot for a first effort. There is a lot of territory yet to be covered. We are indeed exploring a new world. But what we do know, we will be exchanging information on. Momentum need not end here. The involvement of the state departments of transportation has been critical, as has been that of the metropolitan planning organizations. I think the dialogue between them and the central cities is unique, and we need to begin to focus on how we make those happen and where we make those happen.

I would like to thank all of you for working so hard. To Lee Sander, Lee, thank you for you and Henry Peyrebrune, catching me up in a corner in Buffalo, New York—I was trying to remember if it was on the outskirts, in one of the dark alleys somewhere—but catching me up and saying that we haven't really focused on the issues of the central city; we haven't really focused on what is needed to make these central cities work. We've talked about urban regions; we've talked about states; but if we ignore our cities, we ignore that which keeps us successful. So well done to both of you in bringing this issue to the fore, and for the rest of us, I challenge us to take up their mantle and move ourselves forward in making this indeed a first step in the 21st century resurrection of our central cities.

What Was Accomplished and Where Do We Go from Here?

The conference was viewed by its sponsors and the Steering Committee as a beginning, not an end, to dialogue dealing with issues of transportation in large cities. As such, it met the

expectations of its sponsors and the Steering Committee and in several instances exceeded those expectations.

The conference produced 2 days of dialogue and sharing of ideas between nearly 100 transportation experts from all parts of the country representing federal, state, and city governments; metropolitan planning organizations; transit operators; academia; consultants; and national organizations. It produced a number of products that can be used both by those participating and by those not participating in the conference:

- Six resource papers on issues of large cities.
- Potential action items related to 11 major issues for city officials to consider.
- Proposed research items for TRB, FHWA, FTA, AASHTO, ITE, APTA, AMPO, and NACTO for the major issues. These research items will be converted into research statements by a subcommittee of the Steering Committee.
- A catalog of best practices, which will be expanded and added to the NACTO Web site.
- This conference proceedings, which documents the highlights of the conference and incorporates the major presentations from the conference.
- A detailed transcript of the plenary sessions, which is also available from TRB.

Some immediate actions coming out of the conference are as follows:

1. Establishment of a TRB committee on transportation issues in large cities. It is anticipated that the first meeting of this committee will occur at TRB's 1999 Annual Meeting.
2. Development of a program session at TRB's 1999 Annual Meeting to present the results of this conference to a larger audience and establish linkages to other TRB committees looking at the major issues from a programmatic perspective.
3. Presentation of the conference findings at the 1998 annual AASHTO meeting to follow up on opportunities for joint NACTO-AASHTO activities.
4. Preparation of research proposals by the Steering Committee members for submission to the appropriate TRB committees, FHWA, FTA, and other organizations.

Presentations

Dennis Archer, *Mayor, City of Detroit*
Peter Dreier, *Occidental College*
Regina Armstrong, *Urbanomics*
Gloria Jeff, *Federal Highway Administration*
Michael Meyer, *Georgia Institute of Technology*
Roy Roberts, *General Motors*
Brigid Hynes-Cherin, *BHC Trans*

Dennis Archer

We are delighted to have all of you here, and I can't begin to tell you how proud we are to be able to welcome you to the city of Detroit, and I thank you for the opportunity to address your association.

It is appropriate, I think, that your association is meeting here on Sunday, because all of you are doing the Lord's work. You are also doing the demanding job of providing the best possible public transportation to the residents of America's cities. The focus of your conference, as I understand it, is properly on transportation in America's largest cities.

Our challenges are great. Every major city faces financing, infrastructure, employment and training, and political issues inherent in the management of regional transit systems that involve numerous cities and towns.

The difficulties of large cities are rooted in our constant challenge to maintain our tax bases and grow in the face of social trends and government policy that seem to benefit the suburbs more than the city. Like other major cities, Detroit has been adversely affected by the growth of the suburbs, the expansion of highways and malls, and the loss of manufacturing jobs, retail stores, and housing units.

Some cities such as New York, Chicago, Boston, and San Francisco have been able to retain a business presence substantial enough to provide a sufficient tax base for important city services. Others, like Detroit, have struggled. We were hit with a loss, for example, of 61,000 housing units and 180,000 citizens between 1980 and 1990. The metropolitan area as a whole lost 108,000 jobs between 1973 and 1982, and this produced a situation where, by 1990, 32.2 percent of Detroit's population, or 328,000 of our people, lived below the federal poverty level, 46.6 percent of our children lived in poverty, and, despite Detroit's historic status as the automotive capital, 35 percent of our citizens could not afford to own a car.

Yet the opportunities for us to be successful in the revitalization of Detroit and the other major cities are unlimited. Since 1994, we have experienced a turnaround here in Detroit in improved attitudes toward our city, an improved image of our city, and the real increase of investment in the city. We have attracted at least $7 billion in new economic development commitments since January 1, 1994. I hope that you heard about the new stadium we are building downtown for the Detroit Tigers and the Detroit Lions, and I hope that you also heard about the General Motors purchase of the Renaissance Center complex. General Motors will invest $500 million to make improvements to the complex and to our riverfront.

By the way, let me back up on the stadium issue for just a moment. Unlike other cities that have been faced with demands by team owners that you build or expand or renovate or we leave, that was never the case here. The Detroit Tigers, for example, put in $145 million; the Detroit Lions invested $70 million; the corporate community invested $50 million; the state of Michigan, $55 million; Wayne County, $100 million; and the city of Detroit, $85 million, on a total investment of $505 million for two stadia being built side by side. Detroit's Downtown Development Authority will be running both stadia.

Much more is on the way in our city, including housing developments for all income levels.

We do not have a downtown. You'll notice that if you ride on our people mover. But we're getting ready to take down the Hudson building. We're going to implode that. It's going to create, added to the other vacant space, a 9.2-acre downtown office and retail development space that will restore Woodward Avenue in the heart of our central business district.

Large cities are proving that they not only can survive but thrive. The renewal of big urban cities, especially Northern cities, with an industrial base—we weren't supposed to be a part of the 21st century, according to many of the experts. The future was supposed to be in small towns or suburbs, with their own central business districts, the so-called edge cities. We're proving in Detroit that the futurists underestimated the resiliency and the appeal of big cities. They also missed the call on the potential for an alliance between major cities, older suburbs, and the rural areas on the issue of urban sprawl.

The June 1998 issue of *Governing* magazine notes that, across the country, political resistance to unlimited development of farmland and wooded areas is growing. Our metropolitan areas are drawing the line on continued expansion into greenfields. The wisdom of redeveloping urban areas and industrial brownfields seems to be dawning on a growing number of our leaders.

In addition, futurists have underestimated forces such as the global economy, which requires us to think of ourselves as part of a region rather than an individual community. Thoughtful leaders now recognize that the economic destinies of both cities and suburbs are completely interdependent. We are now a country of regions, bound together within a global economy. Detroit not only competes with Chicago, Los Angeles, and Cleveland, but also with Bonn, Tokyo, and Melbourne.

Because Detroit is the center of our region, investment in Detroit translates directly into more prosperity for the region.

Gone are the days when our metropolitan regions could waste time engaging in regional frictions and constructing artificial barriers between central cities and suburbs. Gone are the days when leaders could exploit differences in race, religion, and ethnicity for local advantage. Those are the acts of the past. They have no place in our future.

Some political leaders, however, still need to be enlightened on that issue, especially when it comes to improving and expanding regional public transportation. The times will force them to face the reality of what metropolitan residents and employers demand in the way of mass transportation.

People want to travel to and from our major cities every day as conveniently as possible. Why? Well, our central cities are still the headquarters for our major medical and research institutions, our main sports and entertainment venues, and the sites of our cultural institutions.

We find that much new investment in Detroit has come from health care companies, which also run our leading hospitals and clinics. They have expanded and renovated their

facilities and added jobs. The Detroit Medical Center recently announced a $56 million expansion, including seven new outpatient clinics and the renovation of eight other health centers in the city. It is also a major tenant in the new headquarters building of the Detroit Symphony Orchestra on Woodward Avenue.

Henry Ford Health System has invested $70 million on a hospital expansion, and Wayne State University, which has an outstanding medical school, has reinvested in its urban campus to the tune of over $200 million.

We see a renewed commitment to the art institutions headquartered in Detroit. Our Center for Creative Studies Arts College will build a new campus near the central business district thanks to a $20 million gift from a private donor last year.

Another recent example of our cultural involvement was a $1.5 million initiative raised during a 9-month campaign led by Dayton Hudson Corporation. Dayton Hudson started with a $500,000 donation to our cultural and arts institution in the Detroit Cultural Center. It challenged the community to match that donation, then added another $500,000 when that goal was met.

Reinvestment in Detroit is creating jobs in the city similar to those in outlying areas. For example, Detroit has new automobile manufacturing and supplier plants coming on line. We seek, however, to add new research and development laboratories, sales offices, and divisional headquarters for foreign and domestic automobile suppliers.

I think people sometimes forget that some 700 foreign businesses employ more than 75,000 people in the Detroit metropolitan area. They come from all over the world. They are engineers, designers, and the like, and they are principally connected with the automotive manufacturing industry.

Meanwhile, Detroit's growing theater district, which, by the way, is second only to that of New York in the number of theater seats, will bring many of the immediate region's 4 million citizens back to the city for entertainment, as will the casinos that we are going to be bringing on line, three land-based developments, and our stadia, restaurants, and cafés.

The growing appeal of Detroit and other large cities will create greater demand for public transportation that is convenient, safe, and reliable. We will continue to see increased demand for excellent public transportation within our nation's cities. We will also need reliable connections between our cities and our suburbs.

To meet the transportation needs of the future, we must expand and enhance the existing infrastructure. The infrastructure in our central cities is in need of serious updating, at least it is in Detroit. To ignore existing infrastructure and allow it to fall into a state of disrepair or decay is bad public policy. For example, if you drive around the Detroit freeways now, you will see a lot of work being done on our bridges. That work, in my view, should have been done some time ago.

Why do I suggest that? I think we're the only city in Michigan—I don't know how many other cities can report this with shame—but we're the only one that I know of in the state of Michigan that has had concrete fall off our overpass bridges onto cars. That's when the state finally went into action, and that's when you started seeing Detroit's bridges being repaired.

We cannot afford to let our bridges begin to fall and crumble.

Michael Porter, an economist and professor at Harvard Business School, has studied what he called the competitive advantage of the inner city and comes to some fascinating conclusions. One is that the infrastructure for transportation is a competitive advantage for central cities. The proximity of ports, railways, major highways, and city airports gives urban businesses an edge. Each of these infrastructure components is present in Detroit and in many other large cities.

One example of transportation potential in Detroit is the development of an intermodal freight–handling facility. This privately owned facility will allow for the transfer of freight from truck to rail, and eventually international shipping via the Detroit River will be a part of its operation. The employment potential for such a reality is most beneficial.

When it comes to public transportation, similar potential exists on presently established railway lines from downtown Detroit throughout the region.

Right after I became mayor on January 1, 1994, Grand Trunk Railroad took me on a tour. I was amazed to see the railroad track that we traveled on—got in a van that had the ability to place itself on the railroad track cars and drive.

We went all around the area of Detroit, all throughout the city. All we have to do is put in less than a mile line—we could go from Metropolitan Airport to railway line already existing, and if we turn left, we could go to Ypsilanti, Ann Arbor, Jackson, all the way to Chicago, or if we turn right, we could come to downtown Detroit—if we wanted to go north, we could go to Ferndale, Royal Oak, Birmingham, Bloomfield, Pontiac, Flint, and so on, or if we wanted to continue going east, to Mount Plymouth, Port Huron, and up to Toronto.

The tracks that we have in Detroit could be used to develop the rapid mass transit system Detroit now lacks. It is very obvious that Detroit is one of the very few larger cities in the country without a rapid rail system. Indeed, Detroit is the largest metropolitan area in the United States that does not have some kind of regional mass transit system.

Rail is an efficient and effective mode of public transit. While metropolitan Detroit is behind the curve, we envision a future of rapid rail service that connects the city to major employment markets in the metropolitan area and to Detroit Metropolitan Airport, with its daily international flights.

A study is being proposed by members of the Michigan legislature on how using an existing rail could help transport, for example, GM workers from Flint, Pontiac, Lansing, Royal Oak, Detroit, and other cities to the Renaissance Center downtown and back—we're excited about the potential for enhancing public transportation in the near future. In the meantime, we remain committed to our goal of a first-class bus system for Detroit. We have been disappointed, I should mention, about the lack of an agreement between the city and our suburban municipalities. It's in terms of how to better coordinate our routes.

We will, nevertheless, I predict, achieve that goal sooner rather than later. While we're disappointed and regret the hardship that this has caused some Detroit workers, we remain enthusiastic about the improvements we have made in our own department of transportation.

Further improvement in our city bus system is on the way. Under the leadership of our director, Al Martin, with the cooperation of our unions, we've saved money by allowing our mechanics to take on rehabilitation work that used to be done in Chicago. We have hired at least 500 new drivers, added 225 new buses, reintroduced 24-hour bus service on major routes, expanded service, and increased frequency of service on major routes.

We are one of only two cities in the nation with a transit circulating system for people using the bus in our central business district. We're acquiring new buses that are powered by compressed natural gas to be used throughout our downtown area. These vehicles, obviously, will be very friendly to the environment. We have technology in place that will allow Detroit riders at bus stops to view bus schedules on computer monitors and use computers to determine the correct routes to get from one location to another.

Because the lack of child care is known to be one of the biggest barriers to maintaining employment, the city is working with child care providers to establish child care centers close to major bus routes, transfer points, and transit centers.

We are confident about the ability of Detroit and, I'm sure, other urban areas to provide the quality of service our customers demand and deserve.

We need the continued support of government on all levels to provide the assistance that every mass transportation system in the world requires. For instance, the cost of riding the bus in Detroit would be $6 a trip if we asked our passengers to pay the real cost. There is no successful public transportation system in America that runs on fare box receipts only.

Two final points.

There is a growing demand for a federally mandated paratransit service for our physically challenged. This is a result of the Americans with Disabilities Act of 1991. Within the next 6 months, the demand for this service will challenge our ability to provide the service in Detroit. We will meet that challenge, but government support is necessary.

In Michigan, as in other states, combining funds for public transit and funds for roads continues to result in outcomes favoring roads. However, the public demand for connec-

tions to and from and within the city will require a change in favor of public transportation over roads. So the debate will rage. I hope that you will join Detroit in keeping the pressure on for better public transit for our citizens and visitors to our respective cities. As we each continue to improve our service to the best of our ability, let's remain confident that our primary product will keep growing in popularity, and that product is access to our cities.

Let me just say that I'm delighted that you're here in Detroit. I wish that you might have been here last Wednesday. You could have gone out in the evening and celebrated with over 1 million people on our side, a couple hundred thousand people on the other side of the water, which is Windsor, and you could have enjoyed the world's largest display of fireworks, or if you had been here a week earlier, you could have been downtown and celebrated with us as we celebrated our world champion Stanley Cup Redwings after winning the hockey game. But you're here now, and I want you to take full advantage of every opportunity that you see here.

Take a look at a city that is reinventing itself. You come from cities that have fabulous downtowns. We don't have one today. You come from great cities that take so many amenities for granted that we don't have today. But come back next year, and you will see a dramatic difference. And come back in 2 years, or better yet, come back when we celebrate our 300th anniversary on July 24, 2001. By that time, I would venture to say that, by any objective standard, Detroit will be well on its way to achieving world-class status.

To make that happen, transportation, transit, all of those kinds of things, the things that you do so well for your respective cities, counties, and municipalities, will be the key for making us great, as well.

Our Deputy Director, Sandra Bowmar Parker, who is here with Al Martin, is going to be learning a lot from you. You represent some great cities. We're going to be picking your brains.

So, when you come back and see us in the future—you have great cities now, but we're going to knock your socks off.

Thank you very much.

Peter Dreier

When Buzz Paaswell called me 5 or 6 months ago to ask me to speak about the trends in America's large cities, I was reminded of the story about the man who goes to the doctor. The doctor says, "I have bad news and worse news." The patient says, "Tell me the bad news first." The doctor says, "You have 24 hours to live." The patient says, "Well, what's the worse news?" "I've been trying to reach you since yesterday."

On the other hand, Mayor Archer, like many mayors, spoke in optimistic terms about the future of American cities and, with some cautious optimism, suggested that the fate of America's cities is on an upswing. I agree in part with that. My paper suggests that there are contradictory trends in America's large cities, both among various cities, with some on the upswing and some on the downswing, and within cities themselves, the metropolitan areas, optimistic and pessimistic trends.

I'm not going to read my paper, obviously. The footnotes alone would take about an hour. What I would like to do is summarize the key points and make some remarks, hopefully provocative, that will lead to discussion later.

My major point in the paper is that the problems facing America's large cities are not primarily economic and they're not primarily social. They're primarily political. If you look across the river and across the border to a country that has relatively the same distribution of wealth and income as our country, Canada, and relatively the same level of poverty as our

country, about one-fifth to one-sixth of the population in poverty, you notice that their cities are in nowhere the same condition as ours.

So the forces driving Canadian and American cities are not primarily economic or social but have to do with the policies and the politics of the two countries. They help explain the differences in our cities. In the United States, the basic trends that I outlined in the paper are not news to any of you, so I needn't go into too much detail.

The problems facing American cities are basically a mirror image, in geographic terms, of the larger trends facing the nation: a widening disparity of income, persistent racial segregation, and increasing concentration of poverty.

In the 85 largest metropolitan areas, central city per-capita income as a percentage of suburban per-capita income fell in the last decade, but, probably more important, the poverty rate in cities went up. The poverty rate in the inner-ring suburbs went up, as well. Even during periods of economic prosperity, you haven't seen much change in the poverty rate in the large cities or the metropolitan area inner-ring suburbs.

Increasing concentration of poverty leads to many of the social, criminal, and behavioral issues that make the newspapers and give the public an image of our cities as cesspools of despair, a misguided image but one that much of America faces anyway.

Increasing geographic segregation of the poor is intertwined with increasing racial segregation.

We also see increasing economic disparities between regions, between metropolitan areas of the United States over the last decade. In 1989, for example, median household income varied as much as 100 percent between the 70 largest American metropolitan areas, from a low of about $24,000 in New Orleans to about $50,000 in the Bridgeport-Stamford-Norwalk-Danbury area of Connecticut.

This difference does not have to do with the skills of the people in New Orleans and in Connecticut, and it does not have to do with the job mix. It has to do with other factors, which local governments have little control over. In San Francisco, for example, secretaries earned 46 percent more than secretaries in New Orleans. That has nothing to do with skill levels or education.

Not only is there inequality among regions in terms of average wages or median income, but regions have widely differing degrees of income inequity within them.

Between 1970 and 1990, only 35 percent of the new jobs created in the Boston area paid less than $20,000 a year compared with 77 percent of the new jobs in Milwaukee and 73 percent of the new jobs in Detroit. These pay levels don't have to do with the skills of the people; they have to do with the health of the regional economy, the competitiveness of the local labor market.

We see growing disparities of income and race not only between metropolitan areas but between cities and suburbs and between inner cities and outer suburbs and inner suburbs, as well.

Another major trend—and here I might differ a bit with Mayor Archer—is that the revitalization of central business districts often does not have much effect on these poverty and income statistics. A rising tide in the downtown does not necessarily lift all boats in the neighborhoods adjacent to or outlying from the central business district. Cities that have built their skyscraper downtowns, their sports complexes, their cultural institutions, their university and hospital complexes, and other aspects of their downtown have not necessarily seen an improvement in the quality of life for those people in the bottom half of the population in terms of income.

Also, national economic recovery over the last few years has not had the effect on central cities that one would expect, another example that the rising tide doesn't lift all boats when not everybody has a boat or some people have leaky boats. So, you have to recognize that market forces alone, though they may improve the economic conditions of regions and central business districts, don't necessarily improve the conditions for the have-nots in urban areas.

So why do I call it primarily a political issue, given all these social and economic trends that would lead one to be despairing?

For reasons that probably most of us already know, the public policies of the last 50 years have had a negative impact, have done more harm than good to America's cities. I don't have to revisit the issues of transportation policies, tax policies, the homeowner deduction, labor laws encouraging companies to move outside of cities into right-to-work states, some environmental laws, housing policies, FHA policies, and so forth.

Federal policy has not been friendly to cities. Despite the public view that, since the beginning of the Depression or at least the War on Poverty in the 1960s, we've poured lots of money into cities, we've actually poured more money into promoting suburbanization and fragmentation, urban sprawl, and the decentralization of our populations and our jobs.

One of the largest myths of America that has to be dispelled by those of us concerned about the fate of our central cities has to do with this imbalance of public policy that actually has undermined the fiscal, social, and economic conditions in our central cities. But perhaps the most important fact is that the political isolation of cities has been exacerbated, and there are several ways to calculate that. In the paper I suggest at least two.

One has to do with the percentage of the urban population that represents the national electorate in presidential and congressional elections. The presidential election of 1992 was the first in which an absolute majority of the voters, not a plurality but an absolute majority, came from suburban areas compared with central cities and rural areas. That is an extremely important fact, and that trend continued in the 1996 election.

Second, and perhaps more important, is the fact that the congressional delegations representing suburbs have increased considerably while the congressional delegations representing central cities have declined significantly in the last three decades. Some of that has to do with the way we redistrict and gerrymander our congressional districts. That's a long and complicated debate that I would be happy to get into if you would like, but it basically has to do with following the demographics and how districts get carved out. Safe seats for cities create more conservative and more suburban seats in Congress that lead to more conservative and anticity policies. I think that's an important fact. I won't bore you with the statistics in my paper, but you can find them there.

This leads me to kind of a mind game that I like to play with people when I talk about this dilemma. Imagine you're the mayor of a major city facing the kinds of economic and social conditions I just outlined. There is a bill before Congress for X billions of dollars to promote job training, affordable housing, education, road repair, and transit in the central city. Your job is first to go to the city councillor of the suburb about 20 miles outside your central city and then to the congressperson who represents that suburb, whose district does not include your central city, and persuade both the suburban politician and the congressperson to vote for the bill. What would you argue? How would you make the case that a suburban congressperson with constituents like the city councillor or the planning board person or the selectman or the whatever should be voting for that urban aid bill?

If you can't answer that question, then the future of American cities is pretty dismal, because that's the dilemma facing American cities. The political isolation of cities means that, to create an urban agenda at the federal level and to promote a more even playing field for American cities, we have to persuade some significant proportion of the suburban electorate and the suburban electorate's delegation in Congress that they have a reason to support the revitalization not only of central business districts but of the residential areas of the city and the commercial strips outside the downtown business district.

There are basically three kinds of appeals that this mayor can make to these suburban people.

One is to focus on compassion, to care about the condition of the more needy, a sense of doing good and conscience. That sometimes works, but during tough economic times, it's harder to make that argument. It's even hard sometimes during good economic times, particularly if people believe, as most Americans do according to polls, that the money would be wasted anyway, because even if we had the money, the cities don't know how to save themselves with our tax dollars. So compassion would not necessarily work.

Then there's what I call riot insurance, which is fear. If you put enough fear into the hearts of suburban people, you might persuade them, at least for a short time, to add money to the

urban agenda. But the riots of the 1960s and the riots in Los Angeles in 1992 didn't persuade me or most Americans that that was a useful approach to getting suburban cooperation, because ultimately it results in more draconian than useful public policies.

Obviously, the third alternative is the notion that we're all in the same boat, that if one end of the boat is leaking, the other side of the boat eventually will sink, as well.

So we have to think about our common fate. Mayor Archer made that comment—in fact, probably every speaker you'll hear during this meeting will argue the notion of the importance of regions, metropolitan areas, cooperation, this metaphor of the boat or the common good of cities and suburbs. I agree with that, but let me try to fine-tune that view.

There are many good reasons why we need more regional cooperation that academics like myself can point to. Metropolitan government is not on the agenda in all of the major cities that you represent and probably in most major cities. There are some exceptions—for example, Portland and the Twin Cities—but for the most part, it's not likely to be a thriving way.

There are good reasons for regional cooperation, but there are many obstacles to it. Despite the fact that, over the last 5 or 6 years, people like Neil Pierce, Kurt Johnson, and David Rusk have made persuasive arguments on why regions are important—and economists, sociologists, and political scientists can argue this—there are at least three different reasons for cooperation, and they are in some ways mutually exclusive, though not entirely.

Some groups of people want regional cooperation for purposes of efficiency—sharing police departments, transportation infrastructure, or other kinds of services or having one set of building codes or a common tax rate around a region is good for business. Business leaders tend to like the notion of regional cooperation because a streamlined, one-set-of-rules approach to regional government means that investment and permits and so forth can be done more efficiently.

A second reason for cooperation is that it's more environmentally friendly. We want to have sustainable regions. The only way to promote that, to avoid sprawl, to avoid the uglification of our metropolitan regions, to avoid the taking of green space and farmland, is to promote regional planning. Environmentalists and transportation experts and planners in most cases like that approach.

The third argument is the equity argument, which is that we need regional cooperation to redress the imbalance between rich suburbs and poor cities.

Advocates of the efficiency argument don't necessarily agree with the advocates of the equity argument, who don't necessarily agree with the advocates or the reasons of the environmental argument. So, at some point, we're talking past each other when we talk about regionalism. There's a healthy new awareness of the importance of regions, but getting those three groups of people with three different motives for cooperating across metropolitan areas to talk to each other about a common purpose and a common goal is quite difficult.

All of you who are familiar with ISTEA—you're one of the success stories, to some extent, of regional cooperation. But that is not the way most of us in the urban field think when we try to bring these three groups of people together. So the arguments for regional cooperation need to find some kind of common ground among the different people who are talking different languages.

That reminds me of another story.

A man knocks on the door of a house in a wealthy suburb. A woman answers the door. The man says, "I haven't worked for a couple of weeks and I'm hungry and I need a job. I'm willing to do any chores you'd like me to do. Do you have any work for me?" The woman says, "Well, in fact, I do. Why don't you go to the back of the house and paint the porch?" The man says, "I'd be happy to." She says, "I'll pay you some money and I'll give you a meal."

About 3 hours later, the man knocks on the door again, and the woman answers the door. The man is covered with green paint, and the woman of the house says, "Well, how did it go?" The man says, "It went really well, I really enjoyed working for you, but I think you made a mistake. It's not a porch, it's a BMW."

All that simply says that we need to talk the same language when we talk about regions. These notions of equity and environmentalism and efficiency need to find some kind of common ground or talk the same language.

There is a growing interest in what's often called community-building or community development. One of the most exciting and positive things of the last 20 years in our urban areas has been the rise of groups that work at the neighborhood level, improving the community that they live in through housing developments, small business, job development, and various social services, epitomized by the growth of the institution known as the community development corporation.

There are now almost 2,500 community development corporations, or CDCs, around the country, who are doing God's work trying to improve conditions in urban and some inner suburban neighborhoods. They have the support of groups like the Ford Foundation and other foundations.

Some local governments are supportive of them. I know they are here in Detroit. I know, in most cities, there are public-private partnerships with business and government and community organizations working with these CDCs, and there is a lot of research saying that they've actually done a good job with limited resources in improving the conditions of their neighborhoods. Many of the empowerment zone cities have forged some partnerships with community development corporations and businesses.

One of the major problems facing American cities—and this is the theme of a report I did with several colleagues last year—is that the people interested in regions and the people interested in communities also never talk to each other. The people interested in regional economic development and regional economic prosperity and the people who talk at the neighborhood level about revitalizing communities rarely sit at the same table, rarely talk to each other about regional policies, areas of job growth, or public infrastructure projects. Transportation is an example of that, I'm afraid.

In Los Angeles right now—and there are people here from Los Angeles who may disagree with me—the two largest public works projects in the region, the subway and the light rail through the Regional Transportation Agency and the Alameda Corridor project, have both been designed with almost no thinking about their impact or how they can connect with the local communities doing this kind of community-building activity.

That was less true, fortunately, when I happened to be in Boston, when the state and the Regional Transportation Agency were building the subway, the red line and the orange line. There was some attention paid to its impact and its connection with community development and community-building efforts. That had to do mostly with the political clout of the community-based organizations in Massachusetts as compared with those in Los Angeles, but I think the disconnect between the people thinking regionally and the people thinking about community is an important area for research and public policy discussion.

In fact, it seems to me that one of the major goals of federal policy in the next decade or so needs to be connecting the regional thinking with the community thinking, not to bypass local governments or state governments but to recognize that the groups right now at the regional level and at the community level need to find some forum for talking to each other. Therefore, it's important for us to think broadly about where we want public policy to go and then figure out how transportation and transit policy fit into these larger goals. Since I don't pretend to be a transportation expert, I want to outline, at least very briefly—there is more detail in my paper—what I consider to be the major areas for policy and research discussion over the next period.

The most important public policy goal that needs to get on the agenda is the idea of leveling the playing field across metropolitan regions.

I was fortunate to be the deputy to Ray Flynn at a time when Boston and the Boston area were prospering. The investment of the private sector—and, to some extent, the public sector, but mostly the private sector—in the Boston metropolitan area allowed us the room for maneuver to do some interesting public policy things around housing and economic development, job creation, and neighborhood improvement.

If I were the deputy to the mayor of Camden or to the mayor of Youngstown, I probably would not have survived the decade I spent in city hall, and I probably wouldn't have looked back at it as a very existentially rewarding experience, because the regions of Youngstown, Ohio, and Camden, New Jersey, are very different.

So we need to find some way to get the federal government to level the playing field, to find some agreement that regions are important but that we need to level the playing field between the regions. That doesn't mean bringing everybody down; it means bringing everybody up. One of the issues that faces American regions is this constant bidding war between regions and states for private investment.

I'm a big fan of Mayor Archer, but when he said earlier this afternoon that he was proud of the fact that Detroit has saved money by allowing its mechanics to do rehabilitation work that used to be done in Chicago—well, if I were living in Chicago, I wouldn't feel so good about that.

It seems to me that full employment at decent wages is basically the agenda for a level playing field. I say "decent wages" because so many of our jobs being created in the last decade or so are low-wage jobs, so that the interregional dilemmas need to be faced squarely. One suggestion has to do with the way federal tax policy can encourage or discourage these bidding wars—if you change the tax status of local tax giveaways, you remove one of the incentives for these kinds of bidding wars.

So leveling the playing field is important.

A second suggestion has to do with using federal carrots and sticks to promote regional cooperation the way ISTEA does, although sometimes that cooperation is less than cooperative. It seems absolutely ridiculous, from my point of view, as someone who has spent some time in local government, that there are 3,400 local housing authorities, that there are almost an equivalent number of job-training areas and welfare or, now, welfare-to-work programs, that the idea that regions should cooperate means that we have to change the way we do business. The federal government has sticks and carrots that make that possible, but, again, it has to be done in a context of bringing the inner suburbs into the political coalition.

So promoting regional cooperation using federal incentives and disincentives is important.

Third, reducing income inequality and the concentration of poverty in the central cities is clearly important. There is an important role for transportation policy, such as reverse commuting programs and so forth. It seems to me that, as long as we have this high concentration of poverty in our central cities, our inner suburbs and older suburbs will increasingly face these dilemmas of the large cities.

Fourth, we need to improve the physical and social conditions in our inner-city and inner-suburban neighborhoods. That is where the community development movement needs to connect to the notion of regions and find common ground.

Finally, we need to find ways to improve the political condition of cities. It seems to me that, as I argue in the paper, there are a number of things that are not considered urban policy that would have a major impact in reducing the political isolation of America's cities.

Campaign finance reform is important for cities, even though it's not considered an urban policy, because it will reduce some of the pressures of the global economy to decentralize if folks with big money have less influence over public policy, and I can go into more detail. Labor law reform would have a major impact on the conditions of our large central cities, and changes in voter registration laws would have a major impact on the political isolation of our central cities.

Let me close with one other observation. The way the media report the problems of our central cities has a major impact on our politics, on urban policy, and on the policies that affect cities that aren't considered urban policy. As I said earlier, most Americans now believe that the cities have resisted being saved and wouldn't know what to do if they had the money to save themselves.

Reporting by the major broadcast and print media toward central cities is almost uniformly negative, and that has major consequences. One of the most important research tasks is to document, using academics that are expert in content analysis and interpretation of media reporting, the relentless negative views of our central cities that the media portray—not just the urban papers but also the national media, the networks, the cable networks, and the weekly magazines.

A consortium of transportation agencies, the conference of mayors, and others, with several universities, over a course of several years, documenting and monitoring and doing a

report card on a regular basis, would raise the level of consciousness of the media leaders toward how they misinterpret the cities in several ways.

I'll close on this.

In Los Angeles, you can read the *Los Angeles Times* on a daily basis and, with a few exceptions, not know that the problems of one part of the region are similar to those in another part of the region, because the people who get the paper in one part of the region read, literally, a different edition of the paper. So there's no common regional ground. There's no neighborhood reporter on the *Los Angeles Times.* There's no one whose job is to cover the inner city. There's no one who's responsible for understanding the connection between the central city and the region.

The budget of Los Angeles County is bigger than that of many states, but you wouldn't know there's a county government unless you've looked carefully on a regular basis.

I don't think the *Los Angeles Times* is unique.

Although I've raised a number of economic, social, and political issues that might provide some food for thought, one of the most specific recommendations I can make for future research is to look at the way the media miscover the problems of our central cities, our inner-city neighborhoods, and our metropolitan regions.

Regina Armstrong

It's my pleasure to talk to you today about the central cities of the 12 largest metropolitan or urban regions in the United States, which is the primary focus of the conference today. I'll be talking about the economic and social relevance of the central cities with respect to their regions and the United States as a whole.

The Washington-Baltimore urban region is now the fourth-largest in the nation, which reflects the change that has taken place since the 1990 census. In 1996 the Office of Management and Budget redefined metropolitan areas, or urban regions, in the United States to reflect changes in commutation, the longer journey-to-work trips that are now occurring, and this has caused 7 of the 12 major urban regions to become much larger than they were before, and it has caused Washington and Baltimore to merge in the Northeast Corridor. We now have a continuous corridor of urban region settlement, of course, from Boston to Washington.

The cities and the urban regions that they empower comprise the essential core of the American economy. With few exceptions, they are the major centers of product innovation and technological advancement, actually the wellspring of our competitive edge.

During the past 30 years, their economies have changed rapidly, evolving from goods-handling industrial to information-intensive service activities that required millions of square feet of office and other commercial space to be developed, much in the central business districts. During that time, inner-city factory, warehouse, and other goods-moving districts have become functionally obsolete and have been abandoned, leading to the emergence of strategically located brownfields and polluted waterfront areas.

Throughout this period of transformation, the last quarter century, roughly, the major central cities have continued their hold on an overwhelming share of headquarters functions in the nation's financial, industrial, commercial, communications, and public sectors. The cities are also at the front line of demographic change, attracting the bulk of new immigrants to the United States; evolving new lifestyles and family and household relationships; coping with a major growth in elderly population; sending the highest proportion of women to the labor force; and meeting the social, economic, and transportation needs of a disproportionate share of low-income, carless, and linguistically isolated people.

First, a word about the urban regions they anchor.

In 1996 the 12 largest urban regions in the United States contained 91 million people. That was larger than the population of Mexico and Germany. Over the 1990 to 1996 period, they grew by about 5 million people. All that growth occurred in the suburban parts of the region. Nonetheless, the urban regions continue to maintain a one-third share of the national population on only 3 percent of the U.S. land area.

The care and feeding of 91 million people require something like 41 million job opportunities.

The journey to work is handled both by public transit and automobile, of course, but the 12 largest metropolitan areas are the major source of public transportation, with 99 percent of all subway, 97 percent of all rail, 76 percent of all streetcar, and 61 percent of all bus work trips in the United States.

The significant attributes of the urban regions are essentially as follows:

- Race and ethnicity: They are the most diverse places in the United States. They have a much broader base of multiracial and multiethnic population.
- Nativity: One-third of the U.S. population lives in them but they have two-thirds of all foreign-born persons.
- Language spoken: They have more than one-half of all U.S. households that speak a language other than English as their primary language, and these non-English-speaking households represent a quarter of the households of all the urban regions.
- Educational attainment: They attract the highest proportion of well-educated Americans, with more than 43 percent of all U.S. graduates of advanced educational programs and professional degrees.
- Household formation: They have a disproportionate share of large households and non-family households.
- Labor force participation: They provide about 35 percent of the U.S. total. One of every two people residing in an urban region is a participant in the labor force.

Many of the significant differences of urban regions in the United States are attributable to the differences that characterize their central cities.

In 1996, the 14 central cities of the 12 largest urban regions had a population of 23 million. As such, they contained 8.6 percent of the U.S. total, down from about 9.1 percent in 1990. Between 1990 and 1996, of course, population did not grow in these central cities.

But while all population growth occurred in the suburbs, not all employment growth followed it to the suburbs. The central cities contain a disproportionate share of jobs, more than 11 percent, and between 1990 and 1996 the erosion in share that occurred in population did not occur as deeply in employment.

As a share of urban regions' population and employment, the 14 central cities still contain one-third of all the jobs in metropolitan areas and one-quarter of all the metropolitan residents, and this, of course, occurs on only about 3 percent of the metropolitan land area.

Their main demographic feature, of course, is a high proportion of minority population—nearly three out of every five are black non-Hispanic, Asian non-Hispanic, or Hispanic, and two out of every five residents in central cities are white non-Hispanic.

About one in every four residents of central cities is foreign-born, and this proportion is increasing. Between 1990 and 1996, when the United States received close to 5 million immigrants, the central cities of these 12 largest metropolitan regions captured 1.3 million. This occurred without a growth in population, which meant, of course, that the resident population of about 2 million people in the central cities moved out to suburbs and elsewhere, while immigrants took their place. The results have been that the households are much more multilingual and multicultural, the population has a greater proportion at dependent ages, and of those of working age in the city, a high proportion are high school dropouts. The pool of high school dropouts is about half again as large as the adults with college and graduate degrees. Cities, of course, have 20 percent of their population in poverty.

The economic relevance of the 12 largest urban regions in the United States is indicated by the fact that these areas, which comprise only about 3 percent of the U.S. land area, contain one-third of all the jobs in the United States. In 1997, that represented 41 million jobs, and that employment base has grown. While they contain one-third of all jobs, they produce about 45 percent of gross domestic product, a remarkable difference that testifies to the productivity advantages of urban regions. Over the past 20-odd years, the growth of employment in urban regions has been slow and steadily upwards, and this is likely to continue.

In 1990, when the urban regions contained about 40 million jobs, their central cities housed 13 million, or fully one-third of jobs. Blue-collar jobs were fewer, representing only 20 percent of all central city employment opportunities.

In every major central city that we're discussing today, the demand for employment outstrips the supply of resident workers living within the city, leading to the increase of commutation, which has grown over the 1990 to 1996 period. The commutation difference on high white-collar work amounts to an inflow of about 1.4 million workers. In low white-collar, clerical, and administrative support jobs, there is a net inflow of about 1 million workers.

In service and blue-collar, obviously the demand for employees from the suburbs is less, perhaps about 150,000 service workers, 250,000 high blue-collar workers, and 70,000 low blue-collar workers. The cities can pretty much fill those needs for employment.

The level of employment in the central cities contributes to but is not always the most significant factor in explaining the volume of commutation. Employment in the central cities is not always a reflection of the size of metropolitan areas. Places like Houston pop out to have quite strong employment when they are rank-ordered by size. The result, of course, is a net inflow of commuters to central cities. The Dreier work data of 1990 indicate that two places, New York and the Washington-Baltimore metropolitan area, each drew in on a net basis more than 400,000 workers from the suburbs, but there were smaller large urban regions that drew significant commuters, among them Houston, Atlanta, Boston, and Dallas. All together, the net commutation flows to central cities to meet the employment demand for labor amounted to 3 million daily one-way trips.

The benefits of economic linkages between central cities and urban regions are many. Not only are central cities the major source of commuter jobs and earnings outside of the suburban areas, but they are also a source of new business formation and relocations or spin-offs to suburban areas, they provide the resources that underpin suburban consumer markets, they provide many of the linkages of corporations that have moved to the suburbs in terms of corporate advanced services, and they are the gateways of regions to the global economy.

In the area of commuter jobs and earnings, the daily inflow, which is probably the most visible if not the most important linkage between the economies of central cities and suburbs, amounts to an income transfer of about $160 billion. That amount represents the earnings of suburban workers in the 14 central cities under study and is 18 percent of the labor payments of central cities and about 15 percent of the income of suburbanites.

Beyond their role as engines of regional economies, the central cities play a significant role in the global economy, which has been alluded to by our preceding speakers. This role has emerged as telecommunications and information processing has created a global network of production and consumption, and cities have emerged as the major nodes on this network.

Not all cities perform these global functions, but, collectively, they serve as command posts for multinational businesses, managers of global financial markets, and providers of advanced corporate services. They are centers of culture, art, fashion, and entertainment. They are world-class office centers and centers of world government.

One indicator alone, the Fortune 500 and the Global 500 corporation locations, is a telling one. The 14 central cities of the 12 largest urban regions have 140 of the Fortune 500 corporations. They direct the production of more than $2 trillion worth of goods and services. As such, they represent about 28 percent of the largest corporations in the United States and about one-third of the earnings, all of this stemming from central cities, which, as we saw before, contain only about 11 percent of U.S. population.

In addition to the Fortune 500, the cities are home to 40 percent of the American corporations that function in global markets. They have 57 of the 500 largest corporations in the world. Detroit itself, of course, is home to the largest.

Cities are also managers of domestic financial markets. Collectively, they have two-thirds of all the funds on deposit in the United States. And cities are home to foreign banks. In this regard, New York stands out much more prominently than most others.

How do cities stand with respect to the flow of federal funds? It's difficult to estimate the revenues to the federal government that derive from cities because of consolidated corporate financial statements, which don't allow us to break out what part of the business output comes from the cities, but on an expenditure basis, the cities and urban regions do quite well.

The urban regions, with one-third of the U.S. population, receive about 34 percent of all federal direct expenditures. The cities receive a slightly higher share with respect to population, but probably, if the facts were known, less than they contribute to gross national product.

I want to wind up with some of the issues about central city economies that have a bearing on transportation investment.

The economic factors will change the economies of central cities and their relationships to the regional, the national, and the global economy. Certainly, central cities will continue to develop as command posts for the global marketplace. That will require strengthening access to the global economy, particularly airport access in most cities.

Cities, as we have seen, are not well matched on a labor supply-demand basis, which results in reverse commutation of many resident workers to outlying suburban jobs, not fully counterbalancing, obviously, the in-commutation from the suburbs.

I think both of those linkages need to be strengthened.

The diversification in the economies of urban regions is leading to more and more consumption in downtowns, which indicates the need to support 24-hour environments. Cities are becoming places of entertainment and a high degree of tourism, and transportation systems need to address that. There's also an unknown challenge for transportation systems stemming from the growth of self-employment, the work-at-home tendency, and telecommuting. And finally, the cities need to be connected on an intermetropolitan basis as they grow together in megalopolitan chains of development.

Thank you.

Gloria Jeff

I did my welcome-to-Detroit spiel yesterday, and today I rise, not so much as Gloria Jeff, but as Roy Earl Slater. We in transportation are interchangeable. We don't all look alike. Although I have to admit that at one point I had a boss at Michigan Department of Transportation, where, as those of you who are from the Michigan area know, Bob Adams, my boss, and I used to change off regularly; he would have to make an appearance or I would have to. We got into a routine where his nickname made it very interesting for me to sub for him. His nickname was Whitey. It was always fun to stand up and say, "I am Whitey today." The nervous laughter can continue, it's okay. He was called Whitey because he had bleached blond hair; it was not for other, more contemporary, reasons.

Let me bring you greetings, first of all, from the Secretary. He really would have liked to have been here today. The issues of the cities are critically important to him. The members of NACTO know that, because he has provided them immediate and ready access. Those of you from Michigan and from other parts of the United States know that he has visited your communities. He has listened to the leadership from not just the state level but also from the cities and metropolitan areas, as well, to get a sense of what your issues were, what you

hoped to have accomplished, what you hope to see as your future, and how transportation can make a difference.

It is good to see you here and it is good to see the folks from the city of Detroit. They are looking forward to learning and sharing and, indeed, coming of age with all of us through this process.

The timing, as Michael Winter from the Federal Transit Administration said last night, is extraordinary for this particular conference, because we find ourselves within a very few weeks of the passage and signing of the historic TEA-21, the Transportation Equity Act for the 21st Century. This legislation, while it is a 6-year bill, is really about more than the next 6 years; it is about the next 60 years, and about how we as a nation will shape ourselves for the 21st century.

It is an opportunity for us to move ourselves from being U.S. Department of Transportation, a holding company composed of 10 individual modes, and move more realistically into a one-DOT concept in which we are integrated and coordinated in our activities. It is also a unique opportunity in terms of the timing of this conference, in that one of the elements of implementation of TEA-21 is that we are going to go out and talk to our customers. We are going to listen to you folks in terms of ideas, suggestions, things that you would like to see us put in the guidance or the regulations associated with the implementation of TEA-21. So this is an opportunity for those of us from U.S. DOT to listen to you and hear what you have to say.

In addition, it is an opportunity for you to share with us not only those ideas for implementation, but recommendations for policy deliberations and research undertakings. As we look at central cities and their continuing role, we see, indeed, an opportunity to focus not only on them but also on our urban regions and how they, too, can contribute to America's greatness.

Today we are in the midst of probably one of the most expansive bull markets in the history of the United States. Real income is rising. The stock market is reaching new heights. People are transitioning from welfare to work in a very real and tangible way, as we see the number of jobs being created reaching all-time highs. We see many of our major cities, such as Detroit, Atlanta, Houston, and Philadelphia, undergoing major renaissances. Crime is down in many of these communities and optimism is definitely up. Americans feel good about the future and are coming together, as some of our papers have pointed out, to foster dynamic and positive changes within their communities and for the future of this country.

Transportation has always been a major component of development in our cities, be it New York or Boston, where their deep draft harbors initially fostered their development. Our nation depended on that waterborne transport in its infancy and still does to this day for international commerce. All one need do is look at the fact that more than 90 percent of all the goods and materials arriving in the United States come by waterborne transport.

Cities like Chicago, Houston, Kansas City, and Dallas are major cities in part because they have benefited from the presence of railroads, roadways, or access to waterways. Many of these cities have also benefited from the construction of the Interstate highway system, which has provided them with access to new markets as well as with new jobs.

Many cities today continue to enjoy this access, but, unfortunately, in our central cities, a lot of that infrastructure is in need of repair, rehabilitation, or replacement. In focusing on the role of cities as a resource, we find ourselves needing to look at all levels of government so that we can aid in sustaining the vital engines of America's economy that the cities represent.

Our nation's cities are more than simply what the media present them to be as places where there is crime, deterioration, and congestion. They are vital, vibrant locations of America's families, corporate headquarters, places of work, places of recreation, and places to educate and improve ourselves. Big cities are also in many cases proximate to major institutions of higher education, where we send our citizenry to become educated and to improve our national lot.

When one looks at our cities, we find that they have undergone a very challenging period, during which, as papers have already indicated, federal housing policies that were intended

to encourage creation of the middle class instead resulted in a situation not only enlarging the middle class but in some cases providing them with the mobility to abandon the cities for the suburbs.

Real median income continues to increase in this nation, while in our central cities it has declined. Suburbs now contain over 75 percent more families than do our cities, which is a 25 percent increase from the 1970s. We find that for every American who moved into a city between 1970 and 1990, four individuals relocated out of a city and into a suburb.

We have seen folks flee the city, but we began to see that a renaissance is occurring. Those who have remained in the central cities and have taken advantage of their architectural treasures, their compact form and conservation of resources, have increasingly organized themselves at the neighborhood and community levels to change the perception of who they are and what they are about.

Neighborhood programs from Cleveland to Los Angeles to Chicago have been successful in turning the tide and organizing political clout on local governing structures. Neighborhood revitalization is a sign that urban residents haven't given up on their neighborhoods, haven't given up on their communities. All one needed to do is to have heard the remarks of Roy Roberts last night, about General Motors' commitment to the city of Detroit, or look around in any of our major cities and, again, see that same kind of commitment among the residents to hold onto their neighborhoods, to continue their vitality and their usability.

Many experts believe that, for economic reasons alone, we cannot write our urban areas off. We have already gone through why they are important. So while we have indeed seen a number of jobs relocate to the suburban areas, the foundations of the economic engines remain in the central cities.

Countless dollars have been spent to provide what Michael Porter describes as the competitive advantage of the central city in providing that infrastructure, at both the national and the international levels. When we look at the number of corporate headquarters located within our central cities and the amount of research that takes place in those central cities, we begin to see that cities like New York and San Francisco are indeed the engines that drive the metropolitan regions that are becoming so increasingly important. All across the nation we see that urban cores are starting to augment their role and generate new tax receipts, new tax base, and new economic excitement.

Mayor Archer already talked about some of the things going on here. I know that within the breakout groups there have been conversations about the other communities. In all candor, not only the economic vitality but also the need for central cities is indicated by the fact that we have gathered here today to focus on them.

In that regard, let me depart from my script and challenge you a little bit for the afternoon. As we have talked about the challenges facing our cities and what needs to be done, we have given a lot of attention to their role in the metropolitan context. One of the things that we talked about in developing this particular conference was not only how central cities fit into their metropolitan regions, but also how their own bureaucracies function. What relationships exist there in terms of, Is the parking department talking to the transportation department? Is the department of public works talking to the planning department? Are they all coming together in a way that makes some cohesive sense out of delivering transportation services?

Some of the cities represented here have deputy mayors for transportation, heads of their departments of transportation, but when one looks at the comprehensive picture—how they are working and how these central cities, particularly these large central cities, get their internal bureaucracies in order—this needs to be one of the challenges as you move forward to this afternoon.

In addition to the economic engine focus and the livability of our communities, when we look at the example in St. Louis, we are utilizing, interestingly enough, federal highway dollars to construct a light rail line. Indeed, we began to see some revitalization and some sustainability of communities in the St. Louis area.

Transportation design is an art. There are those who talk about the renaissance. Let me do another one of my unpaid but heartfelt commercials for the city of Detroit. Those of you

who get a chance to ride the people mover will have an opportunity to see transportation as art. In each station there has been a commissioned piece of art, and you will get an opportunity to see 10 different visions of transportation and art and how it fits into the urban forum. In terms of transportation design being art, we have looked at automobiles, bicycles, and pedestrians.

The economic engines are not only limited to what we do on the ground, but also in terms of air, water, and, of course, freight movement, as we move forward in looking at the economic contributions.

So the challenges that face our major central cities today are those of inclusion. How do we begin to wrestle with this question of including a holistic perspective within the individual community structures for central cities, as well as within the regions and within the states? I know that many of the attendees here are concerned with their own sets of issues with respect to how are they going to work with their state departments of transportation or the federal government to address some of their central city issues. The issue of equity should be included.

The 21st century transportation system needs to be inclusive in service in terms of making sure that service is available to all. I heard Al Martin talk yesterday about public transportation, as well as all transportation, not being viewed as a new form of classism, but as being available to all regardless of income.

We need to look at the question of balance in terms of capacity and maintenance. We need to look beyond how we provide new capacity, at the same time rehabilitating and reconstructing our previous investments. We also have to do a better job of ensuring that we give people more intelligent choices in terms of travel. We have to look at central cities, where we provide bus service, rail service, taxicab service, and, in the case of New York, waterborne public transportation. But we have to give choices to our businesses as well as to our residents if we are going to share this planet in an intelligent way. So part of the balancing act is not only capacity versus rehabilitation, but how we share the planet intelligently.

We need to redefine mobility and access in a way that ensures that our definition of transportation looks not just at the physical movement but telecommunications as well. All one need do is look at some of our neighbors, for example, Mexico, which has a Transportation-Telecommunications Department, because they recognize that the movement does not just include people and materials, but information. In the 21st century the telecommunications centers that we have in our central cities will become a critical part of the transportation system.

We have to look at economic focus of value, and that has received a lot of attention already. And then, finally, we must look at this whole question of system integration. While I talked about the fact that U.S. DOT has begun to move itself from being a series of holding companies toward integration, the same has to take place within our metropolitan areas and our central cities in terms of how we provide a system approach, as opposed to an individual modal approach.

The role of the U.S. DOT in this regard is not simply, "Here's the check, go have a good time," although I suspect that there are those who would love for us to say just that. It is one of moving beyond simply providing financial assistance and doing some research. It is one of being, as we now describe ourselves, a visionary and vigilant organization in providing proactive leadership by assisting in the identification of opportunities, by utilizing information and data that we collect for central cities, and by looking at what they are, what they can become, and what challenges they will have in the future.

We need to look beyond simply saying here's the money, and here's a set of regulations, and we'll tell you what to do. We need to focus on outcomes and do that by facilitating and mediating, where necessary.

Those in southeast Michigan and in other parts of the United States have come to see that the new role of U.S. DOT, particularly as delivered by the Federal Highway Administration, has not been to choose sides and declare this side right and that side wrong. We come in, and, where there is a conflict, we bring the forces together—the stakeholders, those who need to be a part of that decision-making process—and say, "Let us reason together as ratio-

nal, intelligent human beings and find solutions that work for all of us," as opposed to being the bully on the block and saying, "I have the money, you haven't." I have got the money—I have got the money—no one gets the money if we don't agree. Our role is to facilitate and mediate those kinds of activities. We provide technical assistance and create forums like this one, where there is an opportunity to exchange success stories and identify the solutions to the various challenges that remain for central cities as they enter the 21st century.

Part of our role will also be to provide publications and multimedia release of success stories, techniques that have proved successful and how we move forward to make the 21st century the best that it can be.

One thing we know is that one size does not fit all. We are not proposing in our role as the U.S. Department of Transportation to give you a cookie cutter by which you stamp out, but, rather, to help find differing solutions for differing circumstances.

We care about people. You have heard more of this in the last 5 years than I think you want. It's a mantra, but it is more than that. It really is an attitude and a mind-set, that transportation is about more than concrete, asphalt, and steel; it is about people. We have to have a sustainable future, and transportation is an essential element in creating that.

The road ahead is a challenging one. It is not quite the yellow brick road, although there are times when one goes along and says, yes, there are lions and tigers and bears, oh, my. But it is indeed a pathway, a railway, an airway in which transportation is the linchpin that holds central cities together. It is their economic vitality, their ability to move their people to the advantages of the city, in terms of employment, recreation, medical attention, and educating young people, that becomes an important element in the infrastructure and the competitive advantage.

Institutional issues include looking within city bureaucracies and pulling them together in a more intelligent way so that the transportation services and programs are delivered in a coherent fashion.

We need to look at relationships within metropolitan areas. I personally am a big advocate of the MPOs. We have to work hard to make MPOs functional and get the right cast of characters at the table and involved in the decision-making process. That includes government, the private sector, and academia, for without all of those forces coming together, we will find ourselves shortchanging the American public on this roadway ahead.

We need to look at partnership in circumstances like you see with the city of Atlanta in air quality, or General Motors and the city of Detroit. I look forward to being able to run off a laundry list of our 10 largest cities in a year or two and having that kind of private-sector partnership be there as well.

In addition, we need to deal with the institutional issues of how we at the federal level or those at the state level can better interact with central cities to recognize their economic importance, our moral responsibility and our need for involvement with them, for we cannot afford to throw any single individual in the United States away because of the contribution we as individuals can make. The same is true of our central cities; we cannot afford to throw them away either.

The benefits that TEA-21 brings to us continue to build upon the successes of ISTEA. We indeed invest in rebuilding America with record levels of dollars being made available. In addition, we are providing minimum guaranties to the states and are taking proactive steps to ensure that the sharing that takes place at suballocations below the National Highway System level and for states, indeed, passes that prosperity along to other participants in the provision and operation of transportation. The focus continues to be on flexibility, on using dollars in a manner in which they address transportation needs, and not simply on chasing after the transportation pot.

We are focusing on safety. We are working very hard. Those of you who arrived Saturday night may have had an opportunity to see some of the local news stories in which the state police have begun to look at the hot spots for entertainment and have said it is important that you have a good time, that you make a contribution to the local economy. But they are also saying, oh, by the way, if you are going to drink, don't drive, get a designated driver. Buckling up is mandatory.

Safety is an important part of TEA-21. The reality in our central cities is that we can focus on educating our young people; we can focus on creating improved conditions within our central cities by upgrading their transportation management systems and their traffic signal systems so that the roadways are safe.

We also are talking about access to opportunities. Our welfare-to-work program, the retention of the disadvantaged business enterprise program, the inclusion of training slots as part of it—all benefit central cities. We are also looking at ways to protect the economic environment, and we have talked about that at length, but, as part of TEA-21, we are also focusing on protecting the natural and social environments. As I mentioned earlier, one of the challenges is finding balance in terms of sharing the planet and giving people better choices.

We are focusing on outcomes rather than processes as we look toward solutions. As we look toward the 21st century and the road ahead, central cities will be the engines of tomorrow. They are the engines of the past and of today. We need not forget them, but we need to recognize that we have to continue the renaissance that they are experiencing from an economic standpoint and continue to make transportation a vital element of it.

Thank you.

Michael Meyer

I have the unenviable role of trying to summarize these six papers with regard to common problems, issues, and emerging opportunities. It is a challenge because in some sense the papers don't lend themselves to a summary across those three major issues. In some cases the papers were sympathetic to me and said here are the problems, issues, and emerging opportunities. In other cases the papers didn't really organize themselves in that way. What I have done in almost all the cases is, if not explicitly stated, to assume that what I am about to say was implicit in the papers. In other words, this is what you should have said, if you didn't say it.

First, all of the papers have a common point of departure: the central cites play a significant role in the metropolitan areas as well as in the nation. In his paper, Dreier says that central cities remain the key to regional and national productivity, growth, and competitiveness. In her paper, Armstrong says that the central cities anchor the attractiveness of the urban region. So all the papers begin with that premise.

Now instead of getting into a semantic argument about what is a problem and what is an issue, I came up with a term—challenge—that encompasses both of them, so what I am about to do is go through what I perceive to be the stated challenges facing the central cities in three or four major categories and then finish my summary with comments on the emerging opportunities.

Certainly, challenge is due to changing demographics. There was a lot of information in some of the papers concerning the change in population in the central cities and how that change has occurred over the last several decades. Armstrong in her paper talks about the central city population on the one hand being youthful, multicultural, educated—and given that I live in a central city I am in that category—and, on the other hand, indicates that there are disproportionate concentrations of those who are isolated linguistically, high levels of foreign-born individuals, for example, a large pool of high school dropouts, large sectors of unemployment, and fairly high levels of poverty.

Deakin in her paper suggested that this presents serious challenges or problems, if you will, to transportation in terms of getting people who aren't employed to where a lot of the jobs are.

The next set of challenges comes in many ways from the changing demographics. The term coined by Dreier was "disparities," and I liked that term because it really did high-

light some of the key issues that are being faced by central cities. These disparities occurred in these five areas that I identified in the papers, and I suspect there were many, many more.

The first disparity is the widening gap in income and wealth not only between metropolitan areas in the country but within the regions themselves.

Dreier, in one of the more interesting aspects of his paper, discussed the hypothesis that a prosperous economy in fact leads to a decline in poverty but suggested that—in terms of causality—the opposite also could be true, in fact that it was more plausible. The central city with concentrated ghetto poverty, which is his term, will hasten capital flight and will drive out essential investment in infrastructure. He suggested that that was still an important issue that has yet to be resolved, but the linkage between economic prosperity and poverty in the central city is a key issue.

In his paper on innovative financing, Giglio discussed not only population growth but also where that population is locating. He suggested that we have an increasing disparity between where the labor force is living and where the jobs are located. Dreier came back to the disparities in terms of the fiscal ability to handle some of the services and infrastructure issues, not only between central city and suburban areas but also among suburban areas themselves, especially the older, inner-ring suburbs, where there are serious disparities with regard to the ability of the suburbs and central cities as compared with some of the wealthier suburbs to provide the services and the infrastructure that are necessary.

Then, finally, are the disparities in terms of geographic segregation, and again the suggestion is that the poor and low income tend to congregate and segregate themselves in central cities or certain areas of the region.

The next series of challenges has to do with politics and institutional framework, and this links to the fact that metropolitan areas are constituted by large numbers of cities and towns, special-purpose authorities, and organizations. Political fragmentation and competition among local jurisdictions, one of which of course is the central city, were key issues when I was in Massachusetts. At the state level we dealt a lot with the metropolitan planning organization in Boston and the metropolitan region. There were 101 cities and towns in the Boston metropolitan region along with all sorts of special-purpose transportation agencies and a variety of groups, so that is often a key challenge in trying to come up with regional transportation solutions.

As Dreier points out and mentioned yesterday in his presentation, the urban electorate as a proportion of the total has declined, and thus at the national level and certainly at the state legislative level the political clout of the central city has decreased as well. That is a serious issue in allocating dollars from the federal and state governments.

In his paper on institutional issues, Peyrebrune raised some serious questions that again reflect the fact that we are talking about the institutional framework, which is somewhat complex, to put it mildly. For example, what is the appropriate decision-making structure for transportation investments, that is, what is the relationship between the central city and regional planning? What is the relationship between the central city and the MPO? Giglio also discussed the importance of having representatives of transit at the table when important decisions are being made concerning allocation of funds.

All the issues, in terms of the political fragmentation and institutional structures, link to the ability of regions to make decisions in a very complex environment and the political strength to bring resources to the region.

In his paper, Schulz discussed several areas in terms of infrastructure as it relates to central cities. The urban arterials, which he referred to as "irreplaceable transportation links," are extremely congested and face serious deterioration in many metropolitan areas and central cities. However, in his paper, which I found quite interesting, he suggested that there are no national data to conclude that the central cities' transportation infrastructure is any worse off than that of the suburban areas, and he recommended that a study be done to examine that issue.

He also discussed the backlog in capital investment in transit. Mayor Archer, in his opening remarks yesterday, talked about transit in Detroit, and I interpreted that as being kind of

a backlog investment need. Because of the congregation of major transportation facilities and services in central cities and because of the economic activity that occurs in those central cities, the transportation networks leading into the central cities tend to have high levels of congestion.

Several of the authors talked about the importance of the connectivity provided by the transportation system and the regional and global significance of central cities in terms of providing the services and economic activity that will make them prosper in the global market. The lack of connection is a serious problem. In her paper, Deakin talked about connectivity being an important issue. When there is no connectivity, to jobs for example, that becomes important to transportation officials.

Deakin also discussed how connectivity often tends to be congregated in certain areas, which often could lead to higher levels of environmental impacts because of that congregation and the use of those particular facilities.

Finally, Giglio discussed the financing issues associated with transportation infrastructure and the provision of transportation services.

As was mentioned yesterday, the central cities provide competitive advantages in a global market to a greater extent than some other parts of the metropolitan region. Many of the suggestions that came out of the papers with regard to emerging opportunities reflect this concept of competitive advantage.

In their papers, Dreier and Deakin suggested that one of the characteristics in our urban areas today is an increased willingness to participate in the development of partnerships with many different areas and groups to build the community. People at the local level are interested in trying to make their neighborhoods livable as well as, in some sense, sustainable, and that that is an emerging opportunity. The challenge, of course, is linking that with regional issues and regional planning, but that is a very important characteristic of what we see in the central city, certainly in Atlanta.

Although it was not mentioned by the authors, I would go back to diversity as a real opportunity. My sense is that, for a certain segment of the population, diversity in terms of having many different groups of individuals—racially, linguistically, agewise, education-wise—provides a very interesting place to live, not for all people, but certainly for some people, such as my family. We live in central city Atlanta primarily because of the activity and the action at all times of the day and night—good action, not bad action—and that is an environment that my wife and I wanted to raise our kids in. So, at least for some people, that diversity, the activity, the representation of what is going on in the central city, is attractive. I think many central cities could market that to their advantage.

Several of the authors talked about the emerging, although I wouldn't necessarily call it emerging because I think it's been there for some time, but the willingness of corporate America to participate in community building, to participate in regional planning and in enhancing the economic health of central cities. You heard that last night with the speaker from General Motors about what General Motors is willing to do in terms of investing in Detroit.

In Atlanta—again I will just use my own example—last week the Chamber of Commerce and several leading business CEOs and presidents of universities announced a major effort to "solve"—in quotation marks—the transportation problem. They felt that the transportation planners had had enough time to figure it out and weren't able to do it and now it's about time for the private sector to take over and figure out what they are going to do. In their own inimitable way they are going to do their plan and wait until after the November elections and then give it to the new governor because certainly he will understand the importance of implementing this, and the problems will be solved.

Naive, clearly, but I think this comes out of frustration with regard to the fragmentation of the political aspects of trying to do something in a metropolitan region like Atlanta. It indicates the willingness of corporate America at least to come to the table and say, "Look, we need to do something about this." They feel threatened, by the way, because of the air quality issues and all the possible sanctions, and that is what is causing them to come to the table, no question about it. But it is something that they are willing to do at this point in time.

A couple of the authors talked about the emerging opportunities relating to TEA-21. Some of the environmental concerns such as air quality are perhaps more strongly motivating than a willingness—let's go in and do this for the good of humanity—but we have to go in and do this because we have to. Again, several authors suggested that the TEA-21 mechanism could possibly, with emphasis on "could," provide some increasing motivation for renewed focus on what the region can do and where the central city fits in.

Giglio, in his paper, discussed innovative financing opportunities. He offered some caution with regard to what innovative financing can and cannot do, and he discussed the importance of having everyone at the table, but the point was that we have, in the last 10 years, been interested in nontraditional financing of our transportation system and services. That that will likely continue over the next several years.

Finally, Dreier, in his paper, mentioned a renewed interest in regionalism. He suggested, correctly so, that it is not a new idea in urban America but that there are really three major factors that are now driving this interest and focus on regionalism in some areas—not all areas. In some sense, he claims, it is like a legacy of the rational planning movement that occurred 40, 50, or 60 years ago, environmentalism and the understanding that now issues like air quality require us to have a regional approach. You can't do it on a jurisdiction-by-jurisdiction basis. You really need to have regional cooperation to govern metropolitan areas. Many of the services and systems, such as transportation, for example, are inherently regional, and thus you need a regional perspective and regional planning to make it work. And that is what I got out of the papers.

Roy Roberts

Good evening to everyone. I'm delighted to join you this evening.

I'm very aware, as are all of us at General Motors, of the important challenges that lie ahead in meeting the transportation needs of America's largest cities. The issues you are addressing over the next two days impact everyone who lives in, works in, or visits America's greatest cities. Having a transportation infrastructure that will be viable in the 21st century is crucial not only for the vitality of our major cities but also for sustaining the economic growth and prosperity of America itself. I believe that the right solutions are out there and that they will be forged through cooperation and partnerships with all who have a stake in the prosperity of our cities.

We need a lot of energy behind this effort, and we need a lot of people working together to make it a reality. This includes federal, state, and local governments, major corporations, big and small business enterprises, scientific and research institutes, and community and economic development foundations. The people who are going to make this happen are the individuals who can see around corners, who won't accept defeat, who function with cool heads in the face of battle, and who have the ability to find a host of alternative routes to achieve the goal.

Dick indicated that I'm on the board of a railroad. There's a story going around about a young man named Bill who applied for a job as a signalman on the railways. He was told to meet the inspector at the signal box. The inspector put this question to him: "What would you do if you realized that two trains were heading for each other on the same track?" Bill answered, "I would switch the points for one of the trains." "What if the level broke?" asked the inspector. "Then I'd dash down out of the signal box," said Bill, "and I'd use the manual lever over there."

"What if that had been struck by lightning?" asked the inspector. "Then," Bill replied, "I'd run back into the signal box and phone the next signal box." "What if the phone was busy?"

"Well, in that case," said the young man, "I'd rush down out of the box and use the public emergency phone at the level crossing."

"What if that was vandalized?" asked the inspector. "Oh, well, then I'd run into the village and get my uncle." "Your uncle?" asked the puzzled inspector. "Why would you do that?" And Bill answered, "Because he's never seen a train wreck before."

Because of partnerships between local businesses, government, and industry, I'm confident that we can avoid train wrecks on the way toward solving the unique transportation challenges of America's big cities.

A little over two weeks ago, Andrew Cuomo, Secretary of the Department of Housing and Urban Development, issued his 1998 State of the Cities Report to the U.S. Conference of Mayors. There was a lot of good news in the report. In the past 5 years, the economy has produced 16 million new jobs with record low unemployment. The number of employed workers living in central cities increased more than 10 percent, by almost 3.7 million people. There are increased job opportunities in our nation's cities. Crime rates are down significantly, particularly for violent crimes, and the cities are improving as places to live. In fact, many downtown areas and central city districts are experiencing a renaissance as centers of tourism, sports, entertainment, and the arts. Cities such as Baltimore, Cleveland, Denver, San Antonio, Seattle, and Washington, D.C., have all become new destinations for tourists and residents of the larger region. I'm proud to say that our Mayor, Dennis Archer, who talked to you this morning, and his administration are adding Detroit to this list, and I will talk more about Detroit's renaissance in a moment.

Some of you live and work in these cities, and you and people with you have played a major role in their renewal. What has happened in places like Cleveland and Baltimore is a sterling testament to what's possible when different government bodies, community foundations, and local businesses and industries all work together to improve the vitality and quality of life in the central business district.

At the same time, not all the news is as rosy. Minority youth unemployment remains high. There is a wider wage gap, and a lot of this is exacerbated by the fact that people can't get to the jobs that are being created. In many major metropolitan areas, transportation or the lack of transportation is rapidly becoming a barrier to continued growth and economic prosperity.

Businesses and industry have jobs available, good jobs, jobs that contribute to the overall economy and take people off public assistance rolls, but we have to be able to get people from where they live to the places of employment. When we can't accomplish this, it drains business growth, community development, and government resources. Every component has an equal stake in this, which is why collaboration is so vitally important if you and I are going to be successful.

General Motors has long recognized the value of partnering with government agencies, research foundations, and business consortiums to solve the challenges we face in the transportation industry. I'm sure that many of you are familiar with GM's leadership in ITS technology, or what we call intelligent transportation systems. Since the early 1990s, GM has partnered with various agencies like Caltrans, the Federal Highway Administration, the U.S. Department of Transportation, the American Automobile Association, the State of Florida, the City of Orlando, and other state and local governments to advance technology for in-vehicle navigation and automated traffic management systems.

We have to organize a national automated highway consortium to develop an automated highway prototype for the next century. Some of you probably attended the MO-97 in San Diego last August and experienced firsthand where the industry is headed with smart car and smart highway technology.

GM is also a leader in the Department of Energy's clean cities program, which is a voluntary government-industry partnership to mobilize local stakeholders to expand the use of alternative-fuel vehicles. Our experience bringing the first electric vehicle, the EV-1, to market in California has shown how vitally important it is for industry and government to work together for common purposes. We would not be as far along as we are today in marketing this clean technology without a constructive relationship with California's agencies

and utilities. We're taking baby steps now, but we will need to expand our partnerships and collaboration to develop an infrastructure that will support the next generation of electric vehicles.

On another front, GM, Ford, and Chrysler joined with the federal government to cooperatively reach for a new generation of clean vehicles by early in the next century. We're targeting a supercar that would be a family vehicle getting 80 miles per gallon and producing less than half of the CO_2 of today's vehicles without increasing price or decreasing performance of the vehicle. It's a huge challenge, it's a huge partnership, but we have to get that done. We have to get that done if we care about people, if we care about our cities.

Safety is another important area where cooperation and collaboration are paying big dividends. GM is collaborating with research consortiums and governmental agencies like the National Highway Traffic Safety Administration to push forward the development of radar sensors and specifications for automobile crash avoidance systems.

But not all of our collaborations are strictly product-oriented or future technology–driven. Last year, General Motors made a $10.6 million, 5-year commitment to National Safe Kids to help prevent automobile injuries and fatalities that result when children are unrestrained or improperly restrained in vehicles. Last August, I had the honor of joining U.S. Secretary of Transportation Rodney Slater, Dr. Edward Koop, and others in Washington, D.C., to announce GM's sponsorship of Safe Kids Buckle Up. Since then, GM dealers have partnered with the local Safe Kids coalition in their communities on over 250 seat checkup events nationwide. Obviously, child safety is something in which we can all believe very strongly, and you just can't accomplish something like this without effective partnerships between government agencies, local business, and the community.

This brings me to one of my favorite subjects, which is the outstanding partnership that exists between General Motors, the city of Detroit, and the state of Michigan, all working together to improve the health and vitality of the southeastern Michigan region. No one of us could get it done by ourselves.

As most of you know, Detroit is in the midst of a great renaissance, with an influx of new businesses and substantial plans for new residential housing, a stadium, and entertainment complexes. A renaissance is occurring at General Motors, as well, with more focused brands and vehicle development processes leading our charge into solving the transportation challenges of the 21st century.

We talk about the 21st century, the next millennium, and it sounds like the distant future, but I suggest, my friends, that it's only 520 days away and even fewer shopping days.

With GM moving its global headquarters into the Renaissance Center, the renaissance of Detroit and the renaissance of General Motors are interconnected. As an employee and officer of General Motors, nothing could make me prouder. In fact, the division of General Motors that I head, Pontiac-GMC, was the first marketing division to make the move downtown.

General Motors purchased the Renaissance Center in 1996 to be our global headquarters for the 21st century. This puts GM at the epicenter of the world's most powerful manufacturing cluster and symbolizes our commitment to global integration and continuous improvement. With over 5 million square feet, approximately five times the space in the old GM building, the Renaissance Center allows us to consolidate over 9,000 headquarters team members, key executives, and decision makers in one centrally located complex with the amenities to support all our necessary functions. The Renaissance Center allows GM to grow and to expand and move into the future.

At the same time, we want our GM global headquarters to create a highly effective business environment that helps to reinvigorate Detroit. This includes building a stronger relationship between the General Motors teams and other Detroiters to accelerate the core city's resurgence and help ensure Greater Detroit's long-term economic future and vitality. GM's vision for the Renaissance Center includes major upgrades for the hotels and retail, dining, and entertainment areas. Our plans include extensive reworking of the public access areas to make it easier and more efficient to get around.

Today, when you walk or drive along Jefferson Avenue, there are large berms in front that act as a barrier to the building. We're going to get rid of those berms and create a spectacular main entryway on Jefferson Avenue that will be a showplace, inviting visitors into the building. We're also planning a five-story winter garden atrium on the south side of the building that opens out to the Detroit River to create a direct pedestrian connection to the riverfront from the building.

We're going to invest $590 million in this, and we're going to do it because we believe in Dennis Archer and his vision for this city, and we're committed to this city. The winter garden that I talked about will house cafés and restaurants, stores, other retail establishments, and recreational amenities that can be enjoyed by all Detroiters and visitors to the Renaissance Center. We want the Renaissance Center to be a popular destination, an environment that draws people into Detroit for both business and recreation.

If we're going to be big and great, then we ought to stand for something, and this is what we want to stand for. We want to take a stand right here and make a difference.

We're working with the city, various agencies, and other property owners to create a riverfront promenade that can extend all the way from Belle Isle to the Ambassador Bridge. This would enhance the downtown riverfront area and encourage even more individuals and new businesses to make Detroit their home.

In April, GM also acquired ownership interests of the Millinery Center, which is a multiple-purpose facility directly across the street, on this side, from the Renaissance Center. We're committed to spending about $25 million there over the next several years to upgrade the hotel and the office and retail space in the Millinery Center.

Combining the hotel, retail, and parking components of the two centers will allow us to do more with each of these elements than we could have if we had continued to operate as separate developments. It expands the possibilities of what we can do in both locations.

GM has made a commitment to work with the city and other interested parties to create a comprehensive plan for riverfront development that will link the central business district to the river town area. Naturally, this entails working with the city, the county, and the state to improve traffic flow and parking access in the Renaissance Center area.

There are a lot of vibrant things happening in Detroit. I have focused only on GM, but there are many collaborative efforts between the city, the county, and other businesses and industries in the metropolitan area. Personally, I don't believe there's ever been a more exciting time to be in business or to live and work in the Detroit area. Thanks to the strides made by Mayor Dennis Archer and his administration, the good citizenship and cooperation of southeast Michigan entrepreneurs and major corporations, and the spirit of Detroiters themselves, we're experiencing a great renaissance in our business, professional, and community lives. There are more opportunities in Detroit than you can shake a stick at, and I'm pleased that General Motors has made a commitment to be a leader of change in our industry and our community.

When you look around and see what others have done, you quickly realize it is impossible to have a world-class city without cooperation and understanding between business and government. You also realize that it's impossible to have a world-class city without a transportation infrastructure that can support economic growth and development in the 21st century.

I applaud your commitment to meet these serious challenges head-on. The health and vitality of our great cities, indeed the health and vitality of our great nation itself, will depend, in large measure, on what you are, what you determine, and where you decide to go from this place when you leave here.

I sincerely hope that you will accomplish all of your conference objectives and that you will also find some time to get out and enjoy our great city.

I want to thank you for inviting me. We're going to do everything we can to be the very best corporate citizen that we can possibly be.

Thank you very much.

Brigid Hynes-Cherin

My charge was to review the resource papers for suggestions on research, development, demonstration, and additional information exchange activities to advance both the state of the art and the state of the practice in planning, financing, implementing, and operating and managing transportation in the nation's largest metropolitan areas. Now isn't that a mouthful. And you would certainly think that given that broad charge, I would be able to find a lot of things in the papers that would do that. It's also the guts of why we're here, because unless we can come up with some implementation actions, we probably have shared some information, but we're not really advancing the state of the practice. So it's a difficult thing to do.

The papers focused more on defining the problems and the issues that are faced in the central city, and they gave us some very useful and relevant information and trends that we can use. But when they got into the actual where the rubber meets the road, they were not as helpful. Any action items mentioned were often expressed in a very broad context, which doesn't make them undoable but does make them a little bit harder to get implemented, because you have to go one step further and continue to define them.

This is the same challenge, incidentally, that you're going to be facing in the breakout groups, and I think it was very helpful to narrow it down to seven items so that we can have a chance of coming out with something very concrete.

To go back to the papers, Peter Dreier contends that since a number of the problems that the cities face were created by federal policies, it's now incumbent upon the federal government to develop new national policies that will actually help the central cities. His paper looked at a number of recent success stories that are taking place at the community, the city, and the regional level, and he suggested that the federal government should look at these and develop them into national policies in six areas. I'll just read those to you, and you'll get a sense then of where he's going and where we need to be going: to promote a level playing field, to promote metropolitan cooperation and strengthen the ties between regional development and community building, to undo the antiurban bias of existing policies and strengthen the capacity of metropolitan areas to address their own problems, to reduce inequality and deconcentrate poverty, to improve physical and social conditions in urban and inner-suburban neighborhoods, and to reduce the political isolation of cities and urban constituencies. Obviously, this is not a small agenda.

The paper does provide a starting ground, though, for identifying what some of these national policies are that we should be looking at, and I'm hopeful that in the breakout sessions you will be narrowing those down to something that is very doable, because in the context as it's presented, we wouldn't be able to use that to move the agenda forward.

Joe Giglio, on the other hand, had one very concentrated action item, and that was to urge cities to become skilled practitioners of the different innovative financing techniques currently available. He had one piece of key advice—he put it in the sense of transit operators, but it certainly applies to anyone, and that was to be at the table, because if you're not there when the decisions are made, then you're going to lose out on the money.

He also said there is no cookie-cutter approach to doing innovative financing, that you need staff who are willing to be flexible and creative, to go out and learn things and develop individual financial strategies for what they are trying to address. That leads me to think that a fruitful area for research is to make the innovative financing techniques more user-friendly, to describe them a little bit better so that you don't have to be a specialist in them.

The research agendas in the papers are spelled out a little bit more specifically, but they still need better definition to be put into action. Peter Dreier suggests that central cities must find allies in the suburban communities; that these suburban communities, especially the inner-circle ones, have the same problems as the central cities; and that they should therefore be natural allies. That leads one to think that maybe a fruitful piece of research would

be to identify these similarities so that they can be documented and then used to develop these coalitions.

Dreier also suggests that new housing, workforce development, welfare reform, and land use planning programs should be administered at the metropolitan level, and he says ISTEA is a good example of this. By inference, if this is a good example, what we need to do is document that ISTEA made a difference at the regional level in the capital investments that were made in the metropolitan cities. I don't think that we have actual documentation of that fact at this time. We all have some of our own experiences that indicate that's true, but if we want to use this as a model for other programs, then we have to go out and document how ISTEA worked.

Betty Deakin provides a concise summary and voluminous references. If you remember, yesterday she was in competition for the award because she had as many pages of references as the text, but she gives some good resources. They support her hypothesis that several new initiatives are available to address central city problems. These initiatives run the gamut of those that can be applied when you use them, so in other words they can be at the planning level or at the implementation level; they can be at the narrow issue of a street in terms of traffic calming, or they can be at the broader issue of sustainable development. She gives us some good information on that. She suggests that the most meaningful research, though, is to evaluate the efficiency and the interrelationships of these initiatives—in other words, how they are working together, and especially the extent to which partnerships are successful in fostering implementation.

In general Dave Schulz reviewed the state of the system performance and was highly supportive of the need to maintain our existing highway infrastructure at all levels, the state, the arterials, and even the rural areas, and from both a freight and a passenger perspective. He was also supportive of continuing the investment in reducing bicycle barriers and ensuring that existing airports remain viable. He wasn't quite as generous to transit, and he raised the question whether transit infrastructure expansion has been detrimental to our existing service. He called for research on the extent to which transit's loss of market share is due to the decline in the condition of the infrastructure. I think that's an interesting point.

He also laments the fact that he couldn't find any credible data for comparing the central city with the suburbs of that urbanized area; most of the data are maintained at the urbanized area level. And he suggested that we need to develop some of this information, particularly before we go about developing any policies that may favor the central city over the suburbs.

Henry Peyrebrune, on the other hand, approached this issue from an institutional perspective. While he wanted this same kind of information, his focus was on whether the data could be used to show a difference between the way central cities responded to problems based on the institutional structure.

They're both coming at this issue. What this indicates is that we need to clearly define what the data are going to be used for before we do this extensive data collection, because if we don't have a good sense of that, we're just going to be creating problems.

Another subquestion would be whether we need a baseline, in other words, whether the existing data can be substratified such that we could have a baseline of previous years to future years, or whether we have to create new data, which would then mean that anything would just be starting from here on out.

So those are some of the research issues that need to be addressed.

Finally, Henry would also like to see cities better share information on existing institutional and government structure issues. As a next step he suggests that we need to see whether some of the changing conditions cited in Regina Armstrong's paper call for a change in the mission of the central cities and whether that change would then call for us to reinvent the institutional and governance structures for that new mission.

As I said at the beginning, these suggestions represent a broad range of actions and research items. We all know from our own experience that conferences like this can result in very good suggestions that never end up being implemented because they are too generally written. So your charge in the workshop is to come up with some very specific action and research items.

The key, though, is that the recommendations be specific enough, and I want to make a special offer to you. Rick Bacigalupo is here. He's the head of TRB's legal research committee, TJ05, and we'll be meeting sometime between October, when the TOPS meeting is. If any of the issues that come out of this program are related to legal aspects, we are going to try and make sure that those get on the TOPS agenda, and we can use our TJ05 money for that. So there is already a source of money. Now it's your turn to go out and develop some good recommendations for us to be able to implement.

Thank you.

RESOURCE PAPERS

Transportation and Central Cities: Environment and Quality-of-Life Issues

Elizabeth Deakin, *University of California*

Environmental protection and quality-of-life issues are an important part of the public policy agenda in the United States. Issues such as air and water pollution, exposure to toxic chemicals, and threats to endangered species have dominated the public discourse on the environment over the past several decades. Nevertheless, it has long been recognized that the urban, built environment is also critical to quality of life for most Americans, and recently, urban environmental and quality-of-life issues are beginning to command more attention.

In this paper, transportation and its relation to environmental and quality-of-life issues faced by large cities, in particular the central cities of the largest metropolitan areas of the United States, are examined. Our changing conceptions of environmental quality and its relation to human well-being are briefly examined. Environmental and quality-of-life issues that commonly arise in the central cities of large metropolitan areas are outlined. Emerging initiatives for addressing these issues in a manner that reflects the growing understanding of the interrelationships among social factors, the economy, and the environment are reviewed. Possible research initiatives and other next steps are proposed.

Changing Conceptions of Environmental Quality

Early conceptions of environmental problems typically focused on the contamination of specific media—air, water, soil—or on threats to human health, to plants and wildlife, and to sensitive lands such as coastal zones. Programs were structured accordingly, to reduce air pollution emissions, regulate discharges into waterways, control solid waste disposal, protect species, and so on.

Programs for environmental protection established in the 1970s and 1980s have accomplished a great deal. For example, new vehicle emissions have been reduced by 60 to 90 percent, significantly reducing the exposure of the American population to unhealthy air despite substantial growth in vehicle use. Far more bodies of water are swimmable, fishable, and drinkable than was the case 30 years ago. Wetlands and waterways—once routinely filled for

some transportation facilities, dredged for others—are now protected by increasingly sophisticated design processes involving the best of engineering and biology and extending to important restoration projects.

However, as our understanding of ecological processes has deepened, our characterization of environmental issues has changed. First, our list of environmental issues has expanded; in addition to the issues listed earlier, today's list would add several items and reformulate others. Figure 1 (*1*) presents one such list; a brief examination shows that it reflects an expanded view of environmental problems along several dimensions:

- Time frame: from obvious and immediate to indirect and long term;
- Scale: from local to regional; from regional to global; and
- Scope: from direct to secondary and tertiary; system effects.

We also have deepened our understanding of the interrelationships of environment, economy, and society. In earlier times, social, economic, and environmental impacts were treated as largely separate issues; environmental protection was often discussed as requiring a trade-off with economic development, and the challenge for planners was to find an acceptable balance between the two objectives (i.e., to optimize economic benefits given specified environmental and social constraints). Now we increasingly understand that social, economic, and ecological systems are linked in complex and dynamic ways and that simple trade-off analyses or optimizations largely miss the point.

Our emerging understanding of the functioning of these systems indicates the following:

- System conditions or states are not constant, and change is not gradual or continuous, but episodic.
- Spatial organization is patchy, and as a consequence, scaling up is nonlinear.
- Multiple forms of organization can coexist. Many systems have multiple equilibria.
- Movement between multiple equilibria can help maintain diversity or can result in severe disruption, depending on what is valued and how systems are managed.

These findings on systems characteristics and functions suggest that policies and programs for the management of environmental effects will do better if we move away from approaches that call for the development and implementation of a single "optimal" plan.

- Emissions of air pollutants, including NO, hydrocarbons, CO, and particulates
- Emission of ozone-depleting gases and substances
- Emission of greenhouse gases
- Acid deposition and changes in soil and water chemistry
- Permanent alteration of physical landscape by infrastructure
- Loss or displacement of wildlife and habitat at or near the site of new facility; increased incidence of road kills
- Changes in hydrology and resulting changes in fires, flood regimes, nutrient and seed flows
- Habitat fragmentation and barriers to essential movements (feeding, reproduction)
- Introduction of exotic species/pests due to releases or creation of new corridors (canals, highways, etc.)
- Sedimentation and eutrophication of streams due to runoff
- Contaminants in roadside soils and nearby drainage channels and receiving waters
- Contamination of groundwater and receiving waters over larger watershed
- Physical evidence of damage to some roadside vegetation
- Decline in sensitive aquatic species within larger watersheds or drainage basins
- Chemical releases and spills into soils and water due to accidents and leaks
- Noise
- Vibrations
- Shadowing / reduced light
- Loss of views
- Wind tunnel effects

FIGURE 1 Some environmental effects of transportation (*1*).

Instead, a flexible, adaptive, and experimental approach that can operate at different scales and respond to dynamic situations is far preferable (2).

Environmental and Quality-of-Life Issues in Central Cities

The emerging systems concept of the environment as a social-economic-ecological system helps make sense of the environmental and quality-of-life issues in central cities. Certainly, there are substantial differences in cities' and regions' natural and built environments as well as in their historical development, population characteristics, regional and local economies, growth rates, and so on. Nevertheless, the following issues face many central cities of large metropolitan regions:

- High densities of development and a substantial mix of uses—conditions that create markets for diverse services but that also concentrate adverse effects.
- Heavy presence of major transportation facilities (freeways, transit, rail yards, ports, trucking facilities, warehouses, airports)—creating high levels of connectivity but with resulting noise, congestion, and exposure to emissions and other externalities of transport operations.
- Heavy transportation and other service demands imposed by a large daytime population of employees.
- Special transportation and other service needs resulting from concentrations of poverty, non-English-speaking immigrants, elderly households, and so on.
- Special needs for transit and paratransit (taxi, shuttles, etc.) resulting from high levels of intercity and international tourist and business travel.
- Substantial dependence on transit stemming from the confluence of residents, visitors, and workers without automobiles, even in regions with very high automobile ownership and use levels.
- Parking problems: the high cost of providing parking in thriving areas; shortfalls of parking in older districts; reliance on on-street parking for both commercial and residential uses; vast surface parking lots in areas with weak land markets.
- Through traffic and nonresident parking spillover in residential neighborhoods.
- Worn out or obsolete infrastructure (roads, transit facilities, sewer, water, power systems).
- Brownfields and abandoned or obsolete industrial and commercial land uses.
- Shortage of open space and recreational facilities.
- Problems of housing affordability in some neighborhoods, need for rehabilitation in others.
- Continuing problems of housing discrimination and segregation by race, ethnicity, income, and class.
- Lack of jobs for lower-skilled city residents, necessitating training programs, reverse commuting services, and so forth.
- Land use and taxation policies that limit market-based redevelopment, provision of affordable housing, and so forth.
- Crime or fear of crime.
- Concerns about school quality, measured by physical plant, class size, course offerings, and test scores.
- Concerns about the quality and cost of urban services (garbage collection, street cleaning, graffiti removal, etc.).

These issues do not fall neatly into social, economic, and environmental categories, but instead span them, overlap, and interact with one another. Some are largely local issues, but many connect to the role of the central city in the larger region. Some could probably be solved through local action, at least if more money were available, but others would require a concerted regionwide effort to deal with underlying social and economic factors. In short,

the issues call for a multifaceted and flexible approach, accompanied by ongoing monitoring and adjustment in direction as necessary.

Strategies for Addressing Environment and Quality-of-Life Issues in Central Cities

A number of strategies for addressing the intertwined issues of transportation, land use, environmental quality, economic development, and quality of life in central cities have emerged in recent years. Five strategies that appear to have wide potential are presented briefly here, ordered from the simplest to the most complex. The five are mapping and modeling based on geographic information systems (GIS), traffic calming, livable communities and brownfields programs, community-building initiatives, and sustainable development programs.

GIS-Based Mapping and Modeling

GIS have the potential to serve as a powerful planning tool, both by organizing data in new ways and by allowing the visualization of relationships that otherwise might not have been apparent. GIS applications are increasingly used in studies of environmental equity; for example, GIS analyses have been used to investigate the relationship between toxic releases and income and racial-ethnic composition of the population at the census tract level (3, pp. 44–50). Other recent applications of GIS in environmental analysis and impact display include

- Mapping air pollution levels, congested traffic links, and noise exposures by population and employment characteristics of an area;
- Mapping prime agricultural lands and habitat for endangered and threatened species in support of analyses of regional transportation plan alternatives and their effects;
- Mapping of brownfields at the parcel level, with an analysis of their effects on adjacent property values;
- Analyses of transit service levels versus community income levels, race, and other socioeconomic characteristics; and
- Use of GIS as a platform for urban land use and location choice modeling.

The availability and quality of GIS systems currently is spotty at both the metropolitan level and among central cities. The lack of staff with the requisite skills to develop and use GIS effectively is one reason for this, but in most cases the problem really comes down to money: if funds were available, GIS could and would be set up and used. Costs could be substantial in the first year or two, to get the basic system established; after that the continued application of GIS to environmental and other planning issues would be relatively straightforward.

Traffic Calming Programs

Traffic calming refers to a set of strategies including street designs and retrofits, changes in operations, and traffic controls, designed to reduce adverse traffic effects such as speeding and excessive volumes and to improve safety and amenity (Figure 2). Traffic calming is often applied on existing streets, but the basic concepts are being incorporated into the design of new streets and the layout of new developments.

More than 350 U.S. cities and counties are reported in the literature to have tried traffic calming over the past 30 years. A 1997 survey found that the principal objective for traffic calming is improved safety, especially of children and pets in residential neighborhoods, but a substantial number of cities also use traffic calming as a crime prevention measure and have

- Stop Signs
- Speed Limit Signs and Speed Zoning
- Turn Prohibition Signs
- One-Way Street Designation
- Traffic Signals
- Access Controls
- Truck Restrictions
- Parking Controls
- Lateral Bar Pavement Markings
- Lane Reduction
- Chokers
- Traffic Circles
- Median Barriers
- Semidiverters (Half-Closures)
- Diagonal Diverters
- Cul-de-Sacs
- Pavement Undulations (Speed humps)
- Raised Intersections
- Traversable Barriers
- Complete Street Closures
- Play Streets
- Private Streets

FIGURE 2 Tools for neighborhood traffic control.

incorporated traffic calming as one element in their community policing programs. Still others use traffic calming to respond to neighborhood complaints about traffic violations and rude driver behavior [racing to catch a light, littering, doing "donuts" (spinning a car) in an intersection]. A number of respondents reported that traffic calming stemmed from a general interest on the part of the city in quality of life, neighborhood livability, and, in some cases, neighborhood empowerment (*4*).

Traffic calming strategies are effective ways to reduce cut-through traffic and speeding in residential neighborhoods and may have applications in neighborhood commercial districts. Hence they are good candidates for reducing common traffic problems in inner cities and older suburbs. However, unless coupled with major efforts to promote the use of alternative modes (transit, walking, biking), they do little to reduce overall traffic volumes and in fact may worsen congestion on major arterials to which through traffic is redirected. In addition, some traffic calming schemes increase fuel use and emissions by making routes more circuitous or increasing stops and starts. Most jurisdictions recognize these trade-offs but believe the benefits in neighborhood quality of life outweigh the detriments.

Funding for traffic calming is a problem for many jurisdictions. Most localities pay for traffic calming out of the general fund, where traffic calming must compete with many other worthwhile projects. Many jurisdictions report that funding constraints restrict their traffic calming programs in both scope and strategy, permitting only a portion of their highest-priority projects to be implemented. In addition, many would use different (more expensive) designs if more money were available. For example, speed humps are often used because they are cheaper than other traffic calming devices, even though they may not be the preferred choice aesthetically or from a traffic operations perspective. Finally, funding shortages have led some jurisdictions to respond to complaints on a spot basis, whereas with more money the city would have done neighborhoodwide planning instead.

A number of other funding sources have been used to supplement local general funds, including gasoline tax subventions, local sales tax revenue dedicated for transportation, and revenue from city and county license plate fees. In addition, a number of jurisdictions are now making the evaluation of neighborhood traffic effects a formal part of their develop-

ment reviews and are assessing fees or requiring specific actions for traffic calming. Also, one city in three requires residents to pay for all or a part of the cost of traffic calming installations. Some believe this requirement serves as a useful test of resident commitment to the planned changes, but others are concerned that such a payment deters poorer neighborhoods from seeking needed changes.

Very few jurisdictions have used federal money for traffic calming, and those that have are more likely to have received it from the Department of Housing and Urban Development than from the Department of Transportation. Intermodal Surface Transportation Efficiency Act (ISTEA) flexible funds have been used in a few jurisdictions, but most have not even looked into ISTEA funding for traffic calming, citing other pressing needs for the money as well as concerns that the pursuit of federal funds would be too time-consuming and costly.

Livable Communities Initiatives

A burgeoning set of initiatives aim to revitalize neighborhood and commercial districts through a combination of infill and redevelopment projects, traffic management, and improvements to transit, pedestrian, and bicycle facilities. These initiatives are being implemented under a variety of names: livable communities, transit-oriented development, pedestrian-oriented development, and neotraditional town plans, among others. The initiatives share the belief that higher-density and mixed-use developments and coordinated transportation facilities can bring a new vibrancy to city districts, making them attractive places to live and work and at the same time reducing transportation requirements below what they otherwise would be.

Livable communities initiatives vary widely in scale and scope, from individual projects around transit stations to regionwide efforts such as those embodied in Portland, Oregon's 2040 plan. One fairly typical example is the Metropolitan Transportation Commission's Transportation for Livable Communities (TLC) program, established in 1997. Initially the TLC program is focusing on inner-city and older suburban neighborhoods in San Francisco and the East Bay and is providing seed money for community-based planning efforts plus "on call" technical assistance in working with developers on project concepts and designs. First projects include (*a*) a plan for new vendor stalls, bus shelters, community art, and a building providing community and commercial space at San Francisco's 16th Street Bay Area Rapid Transit (BART) station, and (*b*) a West Oakland neighborhood transportation plan intended to better connect residents to neighborhood shopping, downtown Oakland, the West Oakland BART station, and other key points. Both projects involve partnerships with developers and community groups as well as joint funding by several government agencies.

Brownfields redevelopment programs are another variant on the livable communities theme. Brownfields are abandoned or underused parcels of land located primarily in urban areas. They contain or are suspected to contain some level of contamination, but they are not considered degraded enough to be listed by the U.S. Environmental Protection Agency (EPA) as "Superfund" sites. Brownfields may range from the former site of a refinery or steel plant to an abandoned dry cleaning establishment.

EPA and several states have recently embarked on programs to encourage brownfield redevelopment. Proponents argue that the reuse of urban brownfield sites is important both to mend the urban fabric and to reduce pressures for development on the suburban fringe. They contend that the full costs of brownfield development are usually lower than those of "greenfield" development, since transportation, utilities, schools, and roads are already in place for the brownfield sites. The most commonly proposed uses for brownfields are light commercial or industrial, but a California study found that some parcels also could be used for housing, community gardens, parks, open space, and recreation (*5*). Indeed, endangered species have been identified on several brownfield sites.

Skeptics raise a number of questions about the efficacy and feasibility of both livable communities initiatives and brownfield redevelopment programs. The critics question the size of the market for infill development as well as its political feasibility given typical neighborhood

concerns about traffic and other effects. They doubt that developers will be interested in most of the sites or products being proposed, at least without a subsidy. They also challenge claims made by proponents that automobile use will be substantially lower among inner-city dwellers. Brownfield programs in addition face pressing concerns about the costs, feasibility, and long-term performance of cleanup efforts. Current programs attempt to alleviate these concerns through a variety of assurances and releases by assisting with planning, helping to secure project financing, and so on. But federal and state agencies have limited funds to help with site cleanup, and buyers, lenders, and developers often remain reluctant to invest in a site when cleanup costs are uncertain and liability risks may remain. In addition, as with other redevelopment projects, there often are concerns that the market for a particular site is too weak to justify investment, especially if developers have different ideas of what uses might be appropriate from those of environmentalists, area residents, or local government.

Proponents of livable communities and brownfield redevelopment efforts have attempted to respond to these challenges through program design and partnership building. Active promotion of redevelopment, facilitation of stakeholder participation and dispute resolution, assistance in the development of a cleanup program if necessary, market assessments of development or reuse options, recruitment of potential developers, and assistance in putting together a finance package are among the elements of the most aggressive of these programs. In addition, the emphasis on partnerships is intended in part to build support for implementation and to overcome barriers that might otherwise arise through a lack of understanding of the options.

Community-Building Initiatives

Community-building is a term that has come to be used to describe a variety of efforts being undertaken in inner cities and older suburbs to improve K-12 education; expand housing opportunities; revitalize commercial districts; create jobs and provide job training; rebuild streets, transit, and other infrastructure; clean up and redevelop brownfields and abandoned and obsolete land uses; and restore urban creeks, beaches, and parks and recreational facilities. Community-building efforts thus address a full range of social, economic, and environmental issues with the aim of improving the quality of life for city residents.

Like the livable community and brownfields initiatives discussed previously, community-building initiatives emphasize the development of partnerships between local government, federal and state agencies, community-based nonprofits, and area businesses. The Department of Housing and Urban Development has provided support for these efforts, but other federal agencies including EPA, the Departments of Commerce and Education, and the Federal Transit Administration have also been major contributors. In addition, urban universities often play an important role in community-building efforts through their professional schools, where fieldwork, applied research, teaching, and professional practice or clinical experience are important parts of the educational experience.

Effective community-building efforts can take a number of forms, reflecting the size and characteristics of the community, the specific issues to be addressed, and the partners' previous experiences with one another. Sockett (*6*) presents a typology of partnerships in which one-directional service relationships are the simplest, followed in increasing complexity by exchange relationships involving sharing of resources, cooperative relationships involving joint planning, and finally transformational relationships in which the participants are fundamentally changed by their joint efforts. Other authors view only the latter types of relationships as partnerships per se. In particular, Wolshok (*7*) argues that mutual self-interest and common goals for the relationship; a willingness to share decision-making authority over the agenda, priorities, and resources; a willingness to make a long-term commitment to joint efforts; and real money on the table to support the partnership's efforts are all critical elements in successful community-building. Rubin et al. (*8*, p. 18) also identify mutual individual or collective benefit as the indication of a true partnership; in their view, a major objective is to build the capacity to tackle complex issues that no one partner could address

alone. Gruber (9) has further described these actions as creating social, intellectual, and political capital—the trust and relationships that make cooperation possible; shared learning and an enlarged pool of knowledge about the community, its wants and needs, and workable strategies for intervention; and the ability to turn agreed-upon objectives into solid accomplishments.

Long-term community-building initiatives have been under way in St. Louis, Detroit, Oakland, Boston, and New Orleans, among other cities. In the case of Oakland, the University-Oakland Metropolitan Forum provides an example of both the potential and the limitations of the community-building approach. The forum is a long-term collaborative effort among the University of California, the city of Oakland, and four other colleges; it combines university and community resources to address a wide range of concerns—academic, economic, social, environmental. Over the years the forum has convened citywide leadership groups, evaluated major city initiatives, provided technical assistance, conducted research, and designed and implemented community projects in cooperation with city agencies and nonprofit organizations. The forum maintains networks in the community and among the participating universities, develops proposals, raises funds, and mobilizes students and faculty to work on needed topics. Work is done through a variety of methods including studio courses, internships, and funded research and action projects. Support has come from foundations; federal, state, and city contracts; and special funds from UC Berkeley.

The forum's earliest initiatives focused on education, aiming to improve the quality of schools through a variety of actions including teacher training, student mentoring, tutoring programs, specialized academies, and job placement programs. More recently, the UC Berkeley/Oakland Joint Community Development Program, carried out with funding from the U.S. Department of Housing and Urban Development, has worked on neighborhood commercial revitalization, community networking efforts, a neighborhood environmental watch project, a nonprofit management technical assistance program, a housing rehabilitation program, and a job network pilot project.

Participants in the forum programs meet together as a group every few months to share experiences, discuss problems and opportunities that have arisen, and brainstorm about future directions. From these sessions, a picture of accomplishments has emerged. Participants are proud of the direct results produced by their collaborative efforts—the trees planted, facades renewed, plans developed, training completed, and so forth. They also are convinced that the collaborative efforts have helped them learn and grow as individuals and organizations, and that they have accomplished more through group action than their individual efforts could have produced. Still, the participants are concerned about funding for the longer term and about how to move from the largely project-level focus to a neighborhoodwide and city or regional perspective. They also are concerned that whereas efforts have been effective at the small scale, more active involvement of elected officials and other key community leaders will be necessary to have a greater effect.

A related issue is that community expectations sometimes run higher and faster than community-building projects can produce, especially when volunteer efforts are a major part of the resource base. Those expecting a quick, concrete product may become impatient and dismiss the effort as ineffective or drop out before ideas can jell and programs get under way. An important part of the benefits of community-building may be intangible and indirect, for example, increasing the level of trust among participants, which in turn increases their longer-term capacity to be productive. But these results are not easily measured or observed, and reviewers who overlook the less immediate or obvious products of collaboration may underestimate the benefits. Moreover, both participants and reviewers may underestimate the time and work needed to build organizational capacity and undertake institutional change, or they may downplay the difficulties of status and resource differences among partners and thus paper over rather than deal with the issues of power and powerlessness that often come to the table along with the participants. Designing processes that generate enthusiasm and build hope and confidence without becoming oversold is a difficult challenge for most partnerships.

Sustainable Development Initiatives

Concerns about environmental quality, social equity, economic vitality, and the threat of climate change have converged to produce a growing interest in the concept of sustainable development. Whereas a variety of definitions of sustainability have been proposed (Figure 3), definitions that encompass the full set of community and environmental issues that are at stake are increasingly being put forward.

Sustainable development initiatives have been motivated in large part by concerns about global climate change—the greenhouse effect. Scientists generally agree that increasing concentrations of greenhouse gases (water vapor, carbon dioxide, methane, nitrous oxide, halocarbons) in the atmosphere are causing the average temperature of the earth to rise, though the timing, magnitude, and consequences of this temperature increase are not fully understood or agreed upon and doubters are vocal. Most analyses have predicted that warming could be on the order of 1°C to 4°C within a century. Average temperature increases of this magnitude could produce marked changes in precipitation patterns, with accompanying disruptions in other natural systems.

The United States, the largest energy user in the world, is also the largest emitter of carbon dioxide, currently accounting for almost one-fourth of the total. U.S. carbon dioxide emissions come from transportation activities, residential and commercial activities, and industrial processes in roughly even shares. Surface transportation alone is 25 percent of the U.S. total. Three-quarters of that 25 percent, or about 16 percent of greenhouse gas emissions, currently are from personal vehicle use.

The Kyoto Protocol hammered out in 1997 was a significant step toward the reduction of greenhouse gas emissions over the next decades. The protocol sets forth targets for industrialized nations averaging out to about 5 percent below 1990 levels by the 2008–2012

Sustainability. Meeting the needs of the present without compromising the ability of future generations to meet their own needs

World Commission on Environment and Development 1987

Sustainable Transportation: Transportation that does not endanger public health or ecosystems and meets mobility needs consistent with use of renewable resources below their rates of regeneration, and use of non-renewable resources at below the rates of development of renewable substitutes

- OECD

Sustainability: Relationship between human economic systems and larger dynamic, but normally slower-changing ecological systems, in which (1) human life can continue indefinitely, (2) human individuals can flourish, and (3) human cultures can develop; but in which effects of human activities remain within bounds, so as not to destroy the diversity, complexity, and function of the ecological life support system.

- Costanza 1991

Ecological sustainability: refers to ecosystems and maintenance of their integrity. *Economic sustainability:* refers to the market-based perspective that is premised on the fundamental assumption of maximizing rather than foregoing growth and consumption. *Social sustainability.* refers to the ability of people to take collective actions to strive for fair access to the benefits of human progress

- Berke and Kartez, 1995

Sustainable Transportation: Allows the basic access needs of individuals and societies to be met safely, and in a manner consistent with human and ecosystem health, and with equity within and between generations; is affordable, operates efficiently, offers choice of transport mode, and supports a vibrant economy; limits emissions and waste within the planet's ability to absorb them, minimizes consumption of non-renewable resources, reuses and recycles its components, and minimizes the use of land and the production of noise.

- Centre for Sustainable Transportation (Canada), March 1998

FIGURE 3 Definitions of sustainability and sustainable transportation.

period. For the United States, the target level is a 7 percent reduction by about 2010; additional reductions would follow in later decades.

Finding ways to achieve such a reduction in greenhouse gas emissions is a major challenge, particularly in light of the fact that, absent strong new action, emissions are projected to increase substantially over the next several decades. In the U.S. transportation sector, for example, after accounting for projected growth, reductions of as much as 40 percent from projected baseline levels would be required by about 2010.

Strategies to reduce transportation greenhouse gas emissions could involve substantial changes in vehicles and fuels, strenuous demand management, or both. Figure 4 shows some of the strategies most commonly suggested; the list is similar to ones produced for energy conservation in earlier decades and for current transportation–air quality and traffic mitigation planning. Drawing on experiences and studies of these measures, scenario testing (*1*) has produced estimates that the following greenhouse gas reductions might be achieved in the United States:

- From aggressive demand management and land use planning strategies, 6 percent reduction by 2020, 15 percent by 2040;
- From a 1.5 percent annual increase in average new vehicle fuel efficiency, 15 to 20 percent reduction by 2020, 35 percent by 2040;
- From higher fuel prices amounting to a 3 percent increase per year, 20 percent reduction by 2020, 40 percent by 2040; and
- From the introduction of new low-emissions vehicles (5 percent of fleet by 2020, 35 percent by 2040), no significant change by 2020, 30 percent reduction by 2040.

If these estimates are approximately correct, meeting the Kyoto Protocol reductions would require either aggressive changes in vehicles (fuel efficiency levels, technologies) or their fuels or a combination of vehicle, fuel, and demand management strategies. Considerable uncertainty about implementation feasibility attaches to each of the scenarios, suggesting that further consideration of the full range of options is a prudent strategy.

National policy directions are still under development and are moving fairly slowly at the time of this writing. On the other hand, local initiatives are under way: in the last 5 years sustainability initiatives have been undertaken in several dozen cities and regions here and abroad. Among those in the United States are the Maryland Smart Growth Initiatives, the Portland (Oregon) 2040 Plan, Sustainable San Francisco, Sustainable Seattle, and The Bay Area Alliance for Sustainable Development. There also are important examples from the Netherlands, France, and Germany.

These efforts largely follow on the Brundtland Commission report and in the United States on the PCSD report, "Sustainable America—A New Consensus," which argued that sustainable development can only be achieved by building sustainable communities. Reflecting the recommendations and action items in those precedent documents, the local and regional efforts typically focus on the interrelationships among transportation, housing and employment trends and policies, and the resulting consequences for the environment (especially air quality), energy use, economic prosperity, and social equity. Indeed, it is an interest in this broader set of issues rather than a concern about climate change alone that has stimulated most of these efforts.

The leaders of the sustainability efforts, like those in community-building efforts, put considerable emphasis on developing partnerships for planning and implementation. Consequently the plans typically involve a wide range of interests (business leaders, environmentalists, social justice advocates, etc., as well as public officials and agency staff members). Agreements on roles and responsibilities, including commitments to implementation, are often negotiated as part of the planning process, and the indicators for monitoring progress and performance are developed.

Critics of sustainability efforts raise doubts about the need for action, the efficacy of the measures that can be implemented, and the feasibility of those that appear effective. Proponents counter that the difference between current and past efforts is that the new

Emissions

Vehicle / Fuel Technological Changes:

1. **Improved Efficiency of Conventional Vehicles**
   - Manufacturer Innovations / Supplier Offerings
   - Responses to Consumer Demand
   - Responses to Government Regulation and Incentives: CAFE Standards, R&D Partnerships, Taxes, Rebates, Subsidies
2. **New Vehicle Technologies**
3. **New Fuels**

Road/Vehicle Operations Improvements:

1. **Conventional Traffic Flow Improvements**
   - Traffic Signal Timing, Ramp Metering, Flow Metering, Bottleneck Removal
2. **Intelligent Transportation System Improvements**
   - Smart Highways
   - Smart Vehicles
   - Accident/Incident Management
   - Routing and Scheduling Enhancements
3. **Driver Education**
4. **Improved Logistics and Fleet Management**

Demand Management:

1. **Modal Substitution**
   - Transit, Paratransit, Ridesharing, Walking, Biking Improvements and Incentives
   - Rail Substitutes for Truck
2. **Telecommunications Substitutions**
   - Telecommuting
   - Teleshopping
   - Teleconferencing
   - Distance Learning
   - Information Technology-Enhanced Routing and Scheduling (Passengers, Freight)
3. **Pricing Incentives / Disincentives**
   - Gas Tax Increases
   - Vehicle Sales Tax Based on Fuel Efficiency and Expected Life
   - Vehicle Registration / License Fee Based on Fuel Efficiency, Use (Measured or Estimated)
   - Other Impact Fees Based on Use
   - Subsidies for Preferred Modes, Telecommunications Substitutes, etc.
4. **Land Use-Transportation Strategies**
   - Compact Development
   - Mixed Use Development
   - Higher Development Densities
   - Transit, Pedestrian, Bike Friendly Development

FIGURE 4 **Strategies for reducing transportation greenhouse gas emissions.**

processes are devoting considerable attention to implementation issues, in contrast to earlier planning efforts, which merely produced a technical plan. It is still too early to tell whether their efforts will prove successful.

Opportunities for Research and Action

The environmental and quality of life issues faced by central cities in the largest metropolitan areas of the United States are complex and changing, reflecting the web of connections among social, economic, and ecological systems. Specific concerns range from noise, air, and water pollution to issues of development policy and social equity. All are deeply dependent on community values.

Programs to address central city environment and quality-of-life issues are beginning to reflect this broader understanding of system effects and the need for flexible, adaptive, and experimental management approaches. Among the promising initiatives are GIS-based mapping and modeling, traffic calming programs, livable communities and brownfields redevelopment initiatives, community-building initiatives, and sustainable development programs. The latter programs, in particular, emphasize the development of partnerships for planning and decision making, which, in contrast to earlier technically focused plans, offer important new prospects for effective implementation.

Future work could profitably evaluate the efficacy of the various initiatives and explore their interrelationships. The extent to which partnership approaches are successful in fostering implementation is a topic that deserves special attention. Finally, if the evaluations are favorable for some of these programs, it would be worthwhile to develop mechanisms to put the successful programs on a stable financial footing.

REFERENCES

1. *Special Report 251: Toward a Sustainable Future.* Transportation Research Board, National Research Council, Washington, D.C., 1997.
2. Hanna, S. S., C. Folke, and K.-G. Mäler (eds.). *Rights to Nature: Ecological, Economic, Cultural, and Political Principles of Institutions for the Environment.* Island Press, Washington, D.C.
3. Burke, L. Race and Environmental Equity: A Geographic Analysis in Los Angeles. *GeoInfo Systems*, Oct. 1993, pp. 44–50.
4. Weinstein, A., and E. Deakin. A Survey of Traffic Calming Practices in the United States. Presented at the Institute of Transportation Engineers Conference, Monterey, Calif., March 1998.
5. *The Trust for Public Land.* Special Issue on Land Recycling. Summer–Fall 1997.
6. Sockett, H. Levels of Partnership. *Metropolitan Universities*, Vol. 8, No. 4, Spring 1998, pp. 75–82.
7. Wolshok, M. *Knowledge Without Boundaries.* Jossey-Bass Publishers, San Francisco, Calif., 1995.
8. Rubin, V., J. Fleming, and J. Innes. Evaluating Community Outreach Partnership Centers as Complex Systems: In Search of the "COPC Effect." *Metropolitan Universities*, Vol. 8, No. 4, Spring 1998, pp. 11–21.
9. Gruber, J. *Coordinating Growth Management Through Consensus Building: Incentives and the Generation of Social, Intellectual, and Political Capital.* University of California at Berkeley, 1994.

BIBLIOGRAPHY

Abramson, A. J., M. S. Tobin, and M. R. VanderGoot. The Changing Geography of Metropolitan Opportunity: The Segregation of the Poor in U.S. Metropolitan Areas, 1970 to 1990. *Housing Policy Debate,* Vol. 6, No. l, 1995.

Advisory Commission on Regulatory Barriers to Affordable Housing. *Not in My Backyard: Removing Barriers to Affordable Housing.* Washington, D.C., 1991.

Advisory Commission on Regulatory Barriers to Affordable Housing. *Removing Regulatory Barriers to Affordable Housing: How States and Localities Are Moving Ahead.* Washington, D.C., 1992.

American Planning Association. *Modernizing State Planning Statutes: The Growing Smart Working Papers,* Volume 1. Chicago, 1996.

Appleyard, D., S. Gerson, and M. Lintell. *Livable Streets.* University of California Press, Berkeley, 1981.

Ascher, F. Modernities, Discontinuities, and Urbanities: What Issues for European Towns? *Europan 5*, 1998.

Audirac, I., A. H. Shermven, and M. T. Smith. Ideal Urban Form and Visions of the Good Life: Florida's Growth Management Dilemma. *Journal of the American Planning Association,* Vol. 56, No. 4, 1990, pp. 470–482.

Automotive News. Governments, Utilities Must Do More for EVs, Exec Says. Dec. 22, 1997.

Bank of America, California Resources Agency, Greenbelt Alliance, and the Low Income Housing Fund. *Beyond Sprawl: New Patterns of Growth to Fit the New California.* 1995.

Bay Area Transportation and Land Use Coalition. *Performance Goals and the RTP.* RTP Issue Paper 4, 1998.

Been, V. Siting of Undesirable Land Uses: Directions for Future Research. *Maryland Journal of Contemporary Legal Issues,* Vol. 5, No. 1, pp. 105–113.

Ben-Joseph, E. Changing the Residential Street Scene: Adapting the Shared Street (Woonerf) Concept to the Suburban Environment. *APA Journal,* Autumn 1995, pp. 504–515.

Berke, P., and J. Kartez. *Sustainable Development as a Guide to Community Land Use Policy.* Lincoln Institute of Land Policy, 1995.

Boerner, C., and T. Lambert. Environmental Injustice. *The Public Interest,* Winter 1995.

Bogart, W. T. What Big Teeth You Have!: Identifying the Motivations for Exclusionary Zoning. *Urban Studies,* Vol. 30, No. 10, 1993, pp. 1669–1681.

Bosselmann, P. Redesigning American Residential Streets. *Built Environment,* Vol. 12, Nos. 1 and 2, 1986, pp. 98–106.

Bovy, P. H. L. *The Spread of Congestion in Europe.* Round Table 109. European Conference of Ministers of Transport, Paris, March 1998.

Braidotti, R., et al. *Women, the Environment and Sustainable Development: Towards a Theoretical Synthesis.* Zed Books, London, 1994.

Brambilla, R., and G. Longo. Woonerf Areas: A Historic Profile. In *Traffic Restraint in Residential Neighborhoods* (G. Wynn, ed.), Transaction Books, New Brunswick, N.J., 1980.

Bratt, R. G. Community-Based Housing: Strengths of the Strategy Amid Dilemmas That Won't Go Away. In *The Affordable City: Toward a Third Sector Housing Policy* (J. E. Davis, ed.), Temple University Press, Philadelphia, Pa., 1994.

Brose, M. Neighborhood Organizations on the Internet. *REPORTER* Center for Urban and Regional Affairs, University of Minnesota, Vol. 28, No. 2, April 1998, pp. 16–20.

Brower, D. J., D. R. Godschalk, and D. R. Porter. *Understanding Growth Management: Critical Issues and a Research Agenda.* Urban Land Institute, Washinton, D.C., and the Center for Urban and Regional Studies, University of North Carolina, Chapel Hill, 1991.

Brown, L. R. *Building a Sustainable Society.* Norton, New York, 1981.

Brown, S. F. The Automakers' Big-Time Bet on Fuel Cells. *Fortune Magazine,* March 30, 1998, p. 122.

Buchanan, C. *Traffic in Towns: The Specially Shortened Edition of the Buchanan Report.* Hazells Offset Ltd., United Kingdom, 1963.

Burchell, R. W. *Regulatory Approaches to Affordable Housing: A Review of State and County Programs.* Center for Urban Policy Research, Rutgers University, New Brunswick, N.J., 1992.

Burchell, R. W., D. Listokin, and A. Pashman. *Regional Housing Opportunities for Lower-Income Households: An Analysis for Affordable Housing and Regional Mobility Strategies.* Center for Urban Policy Research, Rutgers University, New Brunswick, N.J., 1994.

Burchell, R. W., D. Listokin, N. A. Shad, H. Phillips, A. Downs, S. Seskin, J. S. Davis, T. Moore, D. Helton, and M. Gall. 1998. *Costs of Sprawl Revisited: The Evidence of Sprawl's Negative and Positive Impacts.* Interim Report, TCRP Project H-10. Transportation Research Board, National Research Council, Washington, D.C., 1998.

Burke, L. Race and Environmental Equity: A Geographic Analysis in Los Angeles. *Geolnfo Systems,* Oct. 1993, pp. 44–50.

Burton, M. Speech to the Conference on Managing Growth: Learning from the Oregon and Portland Experiences, Portland, Oreg., July 24–26, 1997.

Button, K., and P. Nijkamp. Social Change and Sustainable Transport (SCAST). Preprint.

California Center for Land Recycling. Brownfields. http://www.cclr.org.

California Center for Land Recycling. Focus on the Whole. http://www.cclr.org.

California Center for Land Recycling. *Land Recycling and the Creation of Sustainable Communities: A Strategy for Ensuring Prosperity and Quality of Life for Californians in the 21st Century.* Policy Paper Series 01.

California Journal. Special Issue on Race. Vol. 29, No. 1, Jan. 1998.

Calthorpe, P. *The Next American Metropolis: Ecology, Community, and the American Dream.* Princeton Architectural Press, New York, 1993.

Campbell, S. Green Cities, Growing Cities, Just Cities? Urban Planning and the Contradictions of Sustainable Development. *Journal of the American Planning Association,* Vol. 62, No. 3, 1996, pp. 296–312.

Carmon, N. Neighborhood Regeneration: The State of the Art. *Journal of Planning Education and Research,* Vol. 17, No. 2, 1997.

Centre for Sustainable Transportation. Beyond Kyoto. *Sustainable Transportation Monitor,* No. 1, Toronto, Ontario, Canada, March 1998, p. 14.

Centre for Sustainable Transportation. Defining and Envisioning Sustainable Transport. *Sustainable Transportation Monitor,* No. 1, Toronto, Ontario, Canada, March 1998, p. 2.

Centre for Sustainable Transportation. How Canada's Kyoto Target Could Be Met. *Sustainable Transportation Monitor,* No. 1, Toronto, Ontario, Canada, March 1998, pp. 11–14.

Centre for Sustainable Transportation. Social and Economic Sustainability of Transport. *Sustainable Transportation Monitor,* No. 1, Toronto, Ontario, Canada, March 1998, pp. 2–3.

Centre for Sustainable Transportation. The Kyoto Protocol as a Stepping Stone Towards Sustainability. *Sustainable Transportation Monitor,* No. 1, Toronto, Ontario, Canada, March 1998, p. 10.

Cervero, R. Jobs/Housing Balance and Regional Mobility. *Journal of the American Planning Association,* Vol. 55, No. 2, 1989, pp. 136–151.

Cervero, R. Jobs/Housing Balance as Public Policy. *Urban Land,* Vol. 50, No. 10, 1991.

City of San Francisco. *The Sustainability Plan for the City of San Francisco.* Department of the Environment, 1997.

Clay, P. L. 1992. The (Un)Housed City: Racial Patterns of Segregation, Housing Quality and Affordability. In *The Metropolis in Black and White: Place, Power and Polarization* (G. C. Galster and E. W. Hill, eds.), Center for Urban Policy Research, Rutgers University, New Brunswick, N.J., 1992.

Clough, M. Challenges and Opportunities Facing the East Bay. Manuscript. Oakland, Calif., 1998.

Congress of the New Urbanism. *Charter of the New Urbanism.* San Francisco, Calif., 1996.

Cooke, T., and J. Shumway. Developing the Spatial Mismatch Hypothesis: Problems of Accessibility to Employment for Low-Wage Central City Labor. *Urban Geography,* Vol. 12, 1991, pp. 310–323.

Costanza, R. (ed.). *Ecological Economics: The Science and Management of Sustainability.* Columbia University Press, New York, 1991.

Coy, P. Pollution: Technology Got Us into This . . . *Business Week,* March 30, 1998.

Daly, H., and J. B. Cobb, Jr. *For the Common Good: Redirecting the Economy Toward Community, the Environment, and a Sustainable Future.* Beacon Press, Boston, Mass., 1989.

Davis, J. S., A. C. Nelson, and K. J. Dueker. The New Burbs: The Exurbs and Their Implications for Planning Policy. *Journal of the American Planning Association,* Vol. 60, No. 1, 1994, pp. 45–57.

De Souza Briggs, X. Moving Up Versus Moving Out: Neighborhood Effects in Housing Mobility Programs. *Housing Policy Debate,* Vol. 8, No. 1, 1997, pp. 195–234.

Deakin, E. Linking Transportation Design to Good Land Use Planning. Transcription of presentation to the Mayors' Institute on City Design. West Berkeley, Calif., Nov. 1997.

Deakin, E. Perspectives on Causes and Cures for Urban Decay: The Role of University Urban Planning Departments in Community Building. Presented at the University of Connecticut Law School, Hartford, Feb. 1998.

Deakin, E. *State Programs for Managing Land Use, Growth, and Fiscal Impact: A Report to the Senate Office of Research.* University of California at Berkeley, 1990.

Deakin, E. Growth Control: A Summary and Review of Empirical Research. *Urban Land,* Vol. 48, No. 7, 1989, pp. 16–21.

Dear, M. Understanding and Overcoming the NIMBY Syndrome. *Joumal of the American Planning Association,* Vol. 58, No. 3, 1992, pp. 288–300.

De Grove, J. M., and D. Miness. *The New Frontier for Land Policy: Planning and Growth Management in the States.* Lincoln Institute of Land Policy, Cambridge, Mass., 1992.

Dittmar, H. Access Is a Right. *Progress* (newsletter of the Surface Transportation Policy Project), Vol. 7, No. 8, 1997.

Downs, A. *New Visions for Metropolitan America.* Brookings Institute and Lincoln Institute of Land Policy, Washington, D.C., 1994.

Downs, A. Regulatory Barriers to Affordable Housing. *Joumal of the American Planning Association,* Vol. 58, No. 4, 1992, pp. 419–422.

Downs, A. The Advisory Commission on Regulatory Barriers to Affordable Housing: Its Behavior and Accomplishments. *Housing Policy Debate,* Vol. 2, No. 4, 1991, pp. 1139–1160.

Environmental Defense Fund. *Strategic Plan.* New York, 1997.

Environmental Defense Fund/Transportation Program. Sustainable Transportation: Getting from Here to There. Draft Strategic Plan, April 1998.

Erlich, P. R., and A. H. Ehrlich. *Betrayal of Science and Reason: How Anti-Environmental Rhetoric Threatens Our Future.* Island Press/Shearwater Books, Washington, D.C., 1996, 335 pp.

Ewers, H.-J., and P. Nijkamp. Sustainability as a Key Force for Urban Dynamics. In *Sustainability of Urban Systems: A Cross-National Evolutionary Analysis of Urban Innovation* (P. Nijkamp, ed.), Avebury, Brookfield, 1990.

Farley, R., and W. H. Frey. Changes in the Segregation of Whites from Blacks During the 1980s: Small Steps Toward a More Racially Integrated Society. *American Sociological Review,* Vol. 59, Feb. 1994, pp. 23–45.

Feitelson, E. 1993. The Spatial Effects of Land Use Regulation: A Missing Link in Growth Control Evaluations. *Journal of the American Planning Association,* Vol. 59, No. 4, 1993, pp. 461–481.

Fischel, W. A. *Do Growth Controls Matter? A Review of Empirical Evidence on the Effectiveness and Efficiency of Local Government Land Use Regulations.* Lincoln Institute of Land Policy, Cambridge, Mass., 1990.

Galster, G. C. Housing Discrimination and Urban Poverty of African-Americans. *Journal of Housing Research,* Vol. 2, No. 2, 1991, pp. 87–122.

Galster, G. C. *Neighborhood Evaluations, Expectations, Mobility, and Housing Reinvestment: Measuring the Social Impacts of Community Development Corporations.* Community Development Research Center, New York, 1990.

Galster, G. C., and E. W. Hill (eds.). *The Metropolis in Black and White: Place, Power, and Polarization.* Rutgers Center for Urban Policy Research, New Brunswick, N.J., 1992.

Galster, G. C., and R. B. Mincy. Understanding the Changing Fortunes of Metropolitan Neighborhoods: 1980 to 1990. *Housing Policy Debate,* Vol. 4, No. 3, 1993.

Galster, G. C., and S. P. Killen. The Geography of Metropolitan Opportunity: A Reconnaissance and Conceptual Framework. *Housing Policy Debate,* Vol. 6, No. 1, 1995.

Geddes, R. Metropolis Unbound: The Sprawling American City and the Search for Alternatives. *American Prospect,* Vol. 35, Nov.–Dec. 1997, pp. 40–46.

Gerard, G., and K. S. Nelson. Pioneering Restorative Justice: A New Response to Urban Crime. *REPORTER* Center for Urban and Regional Affairs, University of Minnesota, Vol. 28, No. 2, April 1998, pp. 6–11.

Gerondeau, C. *The Spread of Congestion in Europe.* Round Table 109. European Conference of Ministers of Transport, Paris, March 1998.

Giuliano, G., and A. Gillespie. Research Issue Regarding Societal Change and Transport. *Journal of Transport Geography,* Vol. 5, 1997.

Goode, A. E. Promise and Problems in Brownfield Redevelopment. *Environmental Planning Quarterly,* Vol. 13, No. 2, Spring 1996, pp. 3–10.

Goodwin, P. B., and J. M. Dargay. *The Spread of Congestion in Europe.* Round Table 109. European Conference of Ministers of Transport, Paris, March 1998.

Greene, D. L., and M. Wegener. Sustainable Transport. *Journal of Transport Geography,* Vol. 5, 1997.

Goetz, E. G., K. Cooper, B. Thiele, and H. K. Lam. Pay Now or Pay More Later: St. Paul's Experience in Rehabilitating Vacant Housing. *REPORTER* Center for Urban and Regional Affairs, University of Minnesota, Vol. 28, No. 2, April 1998, pp. 12–15.

Goetz, E. G. Promoting Low Income Housing Through Innovations in Land Use Regulations. *Journal of Urban Affairs,* Vol. 13, No. 3, 1991, pp. 337–351.

Goldberg, D. Commitments and Responsibilities: The Need for the U.S. To Take Domestic Action. *Hotline* (U.S. Climate Action Network), Vol. 5, No. 1, 1998.

Goldsmith, W. W., and E. J. Blakely. *Separate Societies: Poverty and Inequality in U.S. Cities.* Temple University Press, Philadelphia, Pa., 1992.

Gottlieb, P. D. Neighborhood Development in the Metropolitan Economy: A Policy. *Journal of Urban Affairs,* Vol. 19, No. 2, 1997.

Gruber, J. *Coordinating Growth Management Through Consensus Building: Incentives and the Generation of Social, Intellectual, and Political Capital.* Institute of Urban and Regional Development, University of California, Berkeley, 1994.

Hall, D. Metropolitan Governance and Regional Planning: Four Cities, Four Approaches. *Planners Network,* No. 128, March–April 1998. http://www.plannersnetwork.org.

Halpern, R. *Rebuilding the Inner City: A History of Neighborhood Initiatives To Address Poverty in the United States.* Columbia University Press, New York, 1995.

Hamilton, M. M. Global Warming Gets a 2nd Look: Oil Executives Are Shifting Their Stance. *The Washington Post,* March 3, 1998, pp. C1, C6.

Hanna, S. S., C. Folke, and K.-G. Mäler (eds.). *Rights to Nature: Ecological, Economic, Cultural, and Political Principles of Institutions for the Environment.* Island Press, Washington, D.C., 1996, 298 pp.

Harmon, T. Who Pays the Price for Regional Planning? How To Link Growth Management and Affordable Housing. *Planners Network,* No. 128, March–April 1998. http://www.plannersnetwork.org.

Hart, M. *Guide to Sustainable Community Indicators.* Atlantic Center for the Environment, Ipswich, Mass., 1995.

Haughton, G., and C. Hunter. *Sustainable Cities.* Jessica Kingsley Publishers, Ltd., London, 1994.

Hayes, D. *Repairs, Reuse, Recycling—First Steps Toward a Sustainable Society.* Worldwatch Institute, Washington, D.C., 1978.

Helvarg, D. *The War Against the Greens: The "Wise Use" Movement, the New Right, and Anti-Environmental Violence.* Sierra Club Books, San Francisco, Calif., 1997, 502 pp.

Hodge, D., and H. Koski. Information and Communication Technologies and Transportation: European-U.S. Collaborative and Comparative Research Possibilities. *Journal of Transport Geography,* Vol. 5, 1997.

Holzer, H. J. The Spatial Mismatch Hypothesis: What Has the Evidence Shown? *Urban Studies,* Vol. 28, No. 1, 1991, pp. 105–122.

Homburger, W. S., E. A. Deakin, P. C. Bosselmann, D. T. Smith, and B. Beukers. *Residential Street Design and Traffic Control.* Institute of Transportation Engineers, 1989.

Hughes, M. A. A Mobility Strategy for Improving Opportunity. *Housing Policy Debate,* Vol. 6, No. 1, 1995.

Hughes, M. A. Moving Up and Moving Out: Confusing Ends and Means About Ghetto Dispersal. *Urban Studies,* Vol. 24, 1987, pp. 503–617.

Innes, J., J. Gruber, M. Neuman, and R. Thompson. *Coordinating Growth and Environmental Management Through Consensus Building.* University of California, Berkeley, 1994.

Jacobus, P., and M. Hytha. How Developers' Dream Died in Contra Costa: Tassajara Valley Was Too Much for Too Many People. *San Francisco Chronicle,* May 26, 1998, p. 1.

Janelle, D. G., and M. Beuthe. Globalization and Research Issues in Transportation. *Journal of Transport Geography,* Vol. 5, 1997.

Kain, J. F. 1968. Housing Segregation, Negro Employment, and Metropolitan Decentralization. *Quarterly Journal of Economics,* Vol. 82, 1968, pp. 175–197.

Kasarda, J. 1993. Inner-City Concentrated Poverty and Neighborhood Distress: 1970–1990. *Housing Policy Debate,* Vol. 4, No. 3, 1993.

Keating, W. D. *The Suburban Racial Dilemma: Housing and Neighborhoods.* Temple University Press, Philadelphia, 1994.

Kleit, R. G. Housing, Social Networks, and Access to Opportunity: Modeling the Benefits of Mixed-Income Housing. In *ACSP,* Ft. Lauderdale, Fla., 1997.

Komanoff, C. Pedestrians in Peril. *The New York Times,* Jan. 27, 1998.

Kunstler, J. H. *The Geography of Nowhere: The Rise and Decline of America's Man-Made Landscape.* Simon and Schuster, New York, 1993.

Lazarus, R. The Meaning and Promotion of Environmental Justice. *Maryland Journal of Contemporary Legal Issues,* Vol. 5, Issue 1, pp. 1–12.

Lempinen, E. W. Reworking the Waterfront: Proposal Before S.F. Would Add 12,000 h.

Lewis, P. G. *Shaping Suburbia: How Political Institutions Organize Urban Development.* University of Pittsburgh Press, 1996.

LINKS. EPA Requests Comment on More Stringent Vehicle Standards. Vol. 3, No. 6, April 1998.

LINKS. Congress Approves TEA-21; Boosts CMAQ Funding and Alters Some Clean Air Schedules. Vol. 3, No. 7, May 1998.

Litman, T. *Transportation Cost Analysis: Techniques, Estimates and Implications.* Executive Summary. Victoria, British Columbia, Canada.

Litvan, L. M. Paying Up for Global Warming: Greenhouse Treaty or No, Clinton Moving Ahead. *Investors Business Daily,* Vol. 14, No. 220, Feb. 23, 1998, pp. A1, A38.

Local Government Commission. *Land Use Strategies for More Livable Places.* Sacramento, Calif., 1992.

Lockwood, I. M., P. Eng, and the Route 50 Corridor Coalition. A Traffic Calming Plan for Route 50. *Transportation Planning,* Vol. 23, No. 3, Fall 1997, pp. 1, 4–8.

Logan, J. R., and H. L. Molotch. *Urban Fortunes: The Political Economy of Place.* University of California Press, Berkeley, 1987.

Lowry, I. S., and B. W. Ferguson. *Development Regulation and Housing Affordability.* Urban Land Institute, Washington, D.C., 1992.

Lyle, J. T. *Regenerative Design for Sustainable Development.* John Wiley and Sons, New York, 1994.

Maclaren, V. W. Urban Sustainability Reporting. *Journal of the American Planning Association,* Vol. 62, No. 2, Spring 1996, pp. 184–202.

Massey, D. S., and M. L. Eggers. The Ecology of Inequality: Minorities and the Concentration of Poverty, 1970–1980. *American Journal of Sociology,* Vol. 95, No. 5, 1990, pp. 1153–1188.

Massey, D. S., and N. A. Denton. 1993. *American Apartheid: Segregation and the Making of the Underclass.* Harvard University Press, Cambridge, Mass., 1993.

Maclaren, V. W. Urban Sustainability Reporting. *Journal of the American Planning Association,* Vol.62, No. 2, 1996, pp. 184–202.

Mega, V. *European Cities in Search of Sustainability: A Panorama of Urban Innovations in the European Union.* European Foundation for the Improvement of Living and Working Conditions, Dublin, Ireland, 1997.

McCosh, D. Hybrids Get Real: Could Your Next Car Be an Energy-Efficient High-Tech Hybrid? *Popular Science,* March 30, 1998, pp. 72–77.

McCrory, J. The First Regional Government Still Cries for Planning: The Case of Waste Management. *Planners Network,* No. 128, March–April 1998. http://www.plannersnetwork.org.

Meadows, D. H., et al. *The Limits To Growth: A Report for the Club of Rome's Project on the Predicament of Mankind.* Universe Books, New York, 1972.

Meyer, M. D. 1997. Mobility and Congestion in Urban Areas: What the Future Holds. *Transportation Planning,* Vol. 23, No. 3, Fall 1997, pp. 3, 9–18.

Mitchell, J. Ecological Integrity as a Public Right. *Planning and Law Division Newsletter,* American Planning Association, April 1994.

Mitlin, D. Sustainable Development: A Guide to the Literature. *Environment and Urbanization,* Vol. 4, April 1992.

Moore, T. G. Why Global Warming Would Be Good for You. *Public Interest,* No. 118, Winter 1995.

Morgan, J. 1998. The Kyoto Protocol: The Devil's in the Details. *Hotline,* U.S. Climate Action Network, Vol. 5, No. l, 1998, pp. 1, 3–4.

Nelson, K. S. Bridging Two Worlds: Neighborhood Planning for Community Revitalization. *REPORTER* Center for Urban and Regional Affairs, University of Minnesota, Vol. 28, No. 2, April 1998, pp. 1–5.

Nenno, M. K. 1991. State and Local Governments: New Initiatives in Low-Income Housing Preservation. *Housing Policy Debate,* Vol. 2, No. 2, 1991, pp. 467–497.

Netter, E., and R. G. Price. Zoning and the Nouveau Poor. *Journal of the American Planning Association,* Vol. 48, No. 2, 1983.

Nijkamp, P., and A. Perrels. *Sustainable Cities in Europe: A Comparative Analysis of Urban Energy-Environmental Policies.* Earthscan, London, 1994.

Norgaard, R. B. 1994. *Development Betrayed: The End of Progress and a Coevolutionary Revisioning of the Future.* Routledge, New York, 1994.

Nucleus: The Magazine of the Union of Concerned Scientists. Special Issue: In the Spotlight: UCS Focuses International Attention on Global Warming. Vol. 19, No. 4, Winter 1997–1998.

Okamoto, A. R. (ed.). A Blueprint Action Agenda: 20 Ways to Build a More Sustainable Bay Area. *Urban Ecologist,* Vol. 4, No. 7, 1996.

Orfield, G. Minorities and Suburbanization. In *Critical Perspectives on Housing* (R. Bratt, C. Hartman, and A. Meyerson, eds.), Temple University Press, Philadelphia, Pa., 1986.

Orfield, M. *Metropolitics: A Regional Agenda for Community and Stability.* Brookings Institute/Lincoln Institute of Land Policy, Washington, D.C., 1997.

O'Toole, R. The Vanishing Automobile and Other Urban Myths: A Critique of New Urbanism and Portland's Metro 2040 Plan. In *Different Drummer,* Thoreau Institute, Oak Grove, Oreg., 1996.

Otto, S. Linking Neighborhoods with Academic Classrooms. *REPORTER* Center for Urban and Regional Affairs, University of Minnesota, Vol. 28, No. 2, April 1998, pp. 21–25.

Pearce, D., E. Barbier, and A. Markandya. *Blueprint for a Green Economy.* Earthscan, London, 1989.

Phelan, T. J., and M. Schneider. Race, Ethnicity, and Class in American Suburbs. *Urban Affairs Review,* Vol. 31, No. 5, 1996, pp. 659–680.

Policy Group Workshop: Urban Environmental Issues. Proceedings of the First National People of Color Environmental Leadership Summit, Washington, D.C., Oct. 24–27, 1991.

Porter, D. R. (ed.). 1992. *State and Regional Initiatives for Managing Development: Policy Issues and Practical Concerns.* Urban Land Institute, Washington, D.C., 1992.

President's Council on Sustainable Development. *Sustainable America.* Government Printing Office, Washington, D.C., 1996.

Principles of Environmental Justice: Preamble. Proceedings of the First National People of Color Environmental Leadership Summit, Washington, D.C., Oct. 24–27, 1991.

Rademacher, I. Global Warming: Local Solutions. *Hotline,* U.S. Climate Action Network, Vol. 5, No. 1, 1998.

Repetto, R. (ed.). *The Global Possible: Resources, Development, and the New Century.* Yale University Press, New Haven, Conn., 1985.

Research Rap. Pro-Homeowner Tax Policy Has Contributed to Cities' Decline. No. 1, March 1998.

Roberts, P. Sustainable Regional Planning. *Regional Studies,* Vol. 28, No. 8, 1994, pp. 781–787.

Rubin, J. 1993. *Marketable Emission Permit Trading and Banking for Light-Duty Vehicle Manufacturers and Fuel Suppliers.* Ph.D. dissertation. Institute of Transportation Studies, University of California, Davis, 1993, 235 pp.

Rubin, V., J. Fleming, and J. Innes. Evaluating Community Outreach Partnership Centers as Complex Systems: In Search of the "COPC Effect." *Metropolitan Universities,* Vol. 8, No. 4, Spring 1998, pp. 11–21.

Rusk, D. *Cities Without Suburbs.* Johns Hopkins University Press, Baltimore, Md., 1993.

Savitch, H. V., and R. K. Vogel (eds.). *Regional Politics: America in a Post-City Age.* Urban Affairs Annual Reviews 45. Sage, Thousand Oaks, Calif., 1996.

Schallaböck, K.-O., and R. Petersen. The Spread of Congestion in Europe. Round Table 109. European Conference of Ministers of Transport, Paris, March 1998.

Schill, M. H. 1992. The Federal Role in Reducing Regulatory Barriers to Affordable Housing in the Suburbs. *Journal of Law and Politics,* Vol. 8, No. 4, 1992, pp. 703–730.

Serageldin, I., M. A. Cohen, and J. Leitman. *Enabling Sustainable Community Development.* The World Bank, Washington, D.C., 1995.

Shen, Q. Spatial Technologies, Accessiblilty, and the Social Construction of Urban Space. *Proc., 5th International Conference on Computers in Urban Planning and Urban Management,* Dec. 1997.

Sitarz, D. (ed.). *Sustainable America: America's Environment, Economy and Society in the 21st Century.* Earthpress, Carbondale, Ill., 1998, 312 pp.

Sockett, H. Levels of Partnership. *Metropolitan Universities,* Vol. 8, No. 4, Spring 1998, pp. 75–82.

Sperling, D. 1991. An Incentive-Based Transition to Alternative Transportation Fuels. In *Energy and the Environment* (J. W. Tester, D. O. Wood, and N. A. Ferrari, eds.), MIT Press, 1991, pp. 251–264.

Sperling, D. Marketable Credits for Vehicle Emissions in California. RP-91-12. Presented at Conference on Tomorrow's Clean and Fuel-Efficient Automobile: Opportunities for East-West Cooperation, Berlin, Germany, March 25–27, 1991.

Sperling, D. Toward More Efficient Regulation of Vehicles. Presented at Conference on Emissions Policies and Regulations, Atlanta, Ga., Oct. 12–14, 1997.

Sperling, D., M. A. DeLucchi, and Q. Wang. Toward Alternative Transportation Fuels and Incentive-Based Regulation of Vehicle Fuels and Emissions. UCD-ITS-RP-91-11. California Policy Seminar, Berkeley, 1991, pp. 1–80.

Squires, G. D. *Capital and Communities in Black and White.* State University of New York Press, Albany, 1994.

Stegman, M. A., and J. D. Holden. *Nonfederal Housing Programs: How States and Localities Are Responding to Cutbacks in Low-Income Housing.* The Urban Land Institute, Washington, D.C., 1987.

Stivers, R. L. *The Sustainable Society: Ethics and Economic Growth.* Westminster Press, Philadelphia, Pa., 1976.

Stoffer, H. EPA OKs Plan for Cleaner Car; Will States Sign On? *Automotive News,* Dec. 27, 1997.

Stoffer, H. Higher Tax of CAFE Needed To Meet Treaty. *Automotive News,* Dec. 22, 1997.

Stough, R. R., and P. Rietveld. Institutional Issues in Transport Systems. *Journal of Transport Geography,* Vol. 5, 1997.

Sustainable Seattle Coalition. *Indicators of Sustainable Community.* Seattle, Wash., 1995.

Technology Transfer Program, Institute of Transportation Studies, University of California. *Tech Transfer: Technology Transfer for Local Transportation Agencies.* Issue on Reducing Transportation Emissions. Spring 1998.

The Trust for Public Land. Special Issue on Land Recycling. Summer–Fall 1997.

Toward a Sustainable Transportation Future. Draft paper for the Transportation Futures Roundtable, Washington, D.C., April 1998.

Turner, S. C. Barriers to a Better Break: Employer Discrimination and Spatial Mismatch in Metropolitan Detroit. *Journal of Urban Affairs,* Vol. 19, No. 2, 1997.

United Nations. *Agenda 21: Program of Action for Sustainable Development.* New York, 1992.

United Nations Center for Human Settlements. *The Habitat Agenda.* Nairobi, Kenya, 1996.

University Corporation for Atmospheric Research, Joint Office for Science Support. *Our Changing Climate.* Reports to the Nation. No. 4, Boulder, Colo., Fall 1997.

Urban Habitat Program. *Developing Multicultural Urban Environmental Leadership: Creating Socially Just and Ecologically Sustainable Communities in the San Francisco Bay Area.* San Francisco, Calif., 1998.

Urban Research Initiative (URI): The Dynamics of Change in Urban Environments. Initiative Solicitation and Announcement (NSF 98-98), 1998. http://www.nsf.gov.

U.S. Climate Action Network. Anti-Kyoto Resolutions: Coming Soon to a State House Near You. *Hotline,* Vol. 5, No. 1, 1998.

Vandell, K. D. Market Factors Affecting Spatial Heterogeneity Among Urban Neighborhoods. *Housing Policy Debate,* Vol. 6, No. 1, 1995, pp. 141–162.

Van der Ryn, S., and P. Calthorpe (eds.). *Sustainable Communities.* Sierra Club Books, San Francisco, Calif., 1984.

Vidal, A. C. *Rebuilding Communities: A National Study of Urban Community Development Corporations.* Community Development Research Center, New School for Social Research, New York, 1992.

Vidal, A. C. Reintegrating Disadvantaged Communities into the Fabric of Urban Life: The Role of Community Development. *Housing Policy Debate,* Vol. 6, No. 1, 1995.

Walker, C. Nonprofit Housing Development: Status, Trends, and Prospects. *Housing Policy Debate,* Vol. 4, No. 3, 1993, pp. 369–414.

Wang, Q. 1992. *The Use of a Marketable Permit System for Light-Duty Vehicle Manufacturers and Fuel Suppliers.* Ph.D. dissertation. Institute of Transportation Studies, University of California, Davis, 1992, 243 pp.

Wang, Q., C. Kling, and D. Sperling. Light-Duty Vehicle Exhaust Emission Control Cost Estimates Using a Part-Pricing Approach. *Air and Waste,* Vol. 43, 1993, p. 1461.

Wang, Q., C. Kling, and D. Sperling. Marketable Credits for Light-Duty Vehicle Emission Control in California. Presented at 85th Annual Meeting and Exhibition, Air and Waste Management Association, Kansas City, Mo., June 21–26, 1992.

Wannop, U. A. *The Regional Imperative: Regional Planning and Governance in Britain, Europe and the United States.* Jessica Kingsley Publishers, Ltd., London, 1995.

Washington Post. Hot Air and Climate Change. March 26, 1998, p. A22.

Weaver, C. *Regional Development and Local Community: Planning, Politics, and Social Context.* John Wiley and Sons, New York, 1984.

Weinstein, A., and E. Deakin. A Survey of Traffic Calming Practices in the United States. University of California Institute of Urban and Regional Development Working Paper 703. Presented at the Institute of Transportation Engineers Conference, Monterey, Calif., March 1998.

Wheeler, S. Planning for Sustainability at the Metropolitan Regional Level: The Example of Portland, Oregon. Presented at the Annual Conference of the Association of Collegiate Schools of Planning, Fort Lauderdale, Fla., Nov. 1997.

Wilson, C. A. Restructuring and the Growth of Concentrated Poverty in Detroit. *Urban Affairs Quarterly,* Vol. 28, No. 2, 1992, pp. 187–205.

Wilson, W. J. *The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy.* University of Chicago Press, Chicago, Ill., 1987.

Wilson, W. J. *When Work Disappears: The World of the New Urban Poor.* Knopf, New York, 1996.

Wolshok, M. *Knowledge Without Boundaries.* Jossey-Bass Publishers, San Francisco, Calif., 1995.

World Commission on Environment and Development. *Our Common Future.* Oxford University Press, 1987.

World Conservation Union. *Caring for the Earth: A Strategy for Sustainable Living.* Gland, Switzerland, 1991.

Worster, D. D. 1993. *The Wealth of Nature: Environmental History and the Ecological Imagination.* Oxford University Press, New York, 1993.

Yinger, J. *Housing Discrimination Study: Incidence of Discrimination and Variations in Discriminatory Behavior.* Urban Institute, Washington, D.C., 1991.

Young, D. (ed.). *Alternatives to Sprawl.* Lincoln Institute of Land Policy, Cambridge, Mass., 1995.

Zuckerman, W. *End of the Road: From World Car Crisis to Sustainable Transportation.* Chelsea Green Publishing Company, Post Mills, Vt., 1991, 299 pp.

Urban Transportation System Characteristics, Condition, and Performance

David F. Schulz, *Department of Civil Engineering, McCormick School of Engineering and Applied Science, Northwestern University*

Perhaps of more interest to conference participants than the contents of this paper is what is not contained in it. After considerable searching of literature sources and the Internet and contacts with government officials responsible for collecting and analyzing such information, the author was unable to develop credible comprehensive data on the differential condition of transportation infrastructure within urban areas, that is, the differences between central city and suburban facility condition and performance.

Whereas it is interesting to speculate on why this is so, it is probably sufficient to note that metropolitan planning organizations and state governments are simply not organizing and reporting their information along such lines, and in fact may be motivated not to do so. In any event, the fact that such data are not readily available is a useful finding in itself.

In the paper, therefore, the condition of "urban" transport infrastructure is reviewed, including all road and transit facilities in designated urbanized areas with population exceeding 50,000, along with small urban areas with population from 5,000 to 50,000, in comparison with their rural counterparts. Most of this discussion is derived from—and, frankly, extracted from—*1997 Status of the Nation's Surface Transportation System: Condition and Performance (1)*, recently published by the Federal Highway Administration and the Federal Transit Administration.

Urban Transportation System Characteristics

Any discussion of system condition and performance must begin with a brief review of its extent.

Roads and Bridges

There were more than 3.91 million centerline- or route-mi (6.29 million route-km) of roads and streets in the United States in 1995 (21 percent "urban"), providing more than 8.2

million lane-mi (13.2 million lane-km) (22.6 percent "urban"). Urban centerline highway mileage increased 1.7 percent annually between 1985 and 1995. Whereas new construction was responsible for some of this increase, much of it was due to growing urban area boundaries as a result of the 1990 census, a factor that also contributed to a 0.3 percent annual decrease in rural mileage.

Roads in the United States are classified in a functional hierarchy, as shown in Figure 1. At the top of the hierarchy, Interstate highways carry the largest amount of traffic per lane-mile and the longest trips and operate at the highest speeds. Generally, trip length and speed decrease as one moves down the hierarchy until the local streets perform essentially a land access function in both urban and rural areas.

There were 581,862 bridges in the United States in 1996, 21.5 percent "urban."

Transit

In 1995, 537 local public transit operators provided transit services in 316 urbanized areas, and 5,010 organizations provided transit services in rural and small urban areas. These systems used 135,564 vehicles, including 58,405 buses and 16,729 rail vehicles, with the remainder being small or special-purpose vehicles, including ferryboats.

The nation's transit systems provided 1.6 billion equivalent vehicle-mi (2.6 billion vehicle-km) of rail service in 1995, an annualized increase of 2.5 percent since 1985, and 1.7 billion vehicle-mi (2.7 billion vehicle-km) of nonrail service, an annualized increase of 1.2 percent since 1985.

Freight

Freight in the United States is carried by a complex and increasingly intermodal system of trucking companies, railroads, waterborne shipping companies, pipelines, and air freight companies. Together, business and industry spent $421 billion in 1994 to move 3.5 trillion tons (3.2 trillion metric tons) of freight over transportation networks totaling 2.3 million mi (3.7 million km).

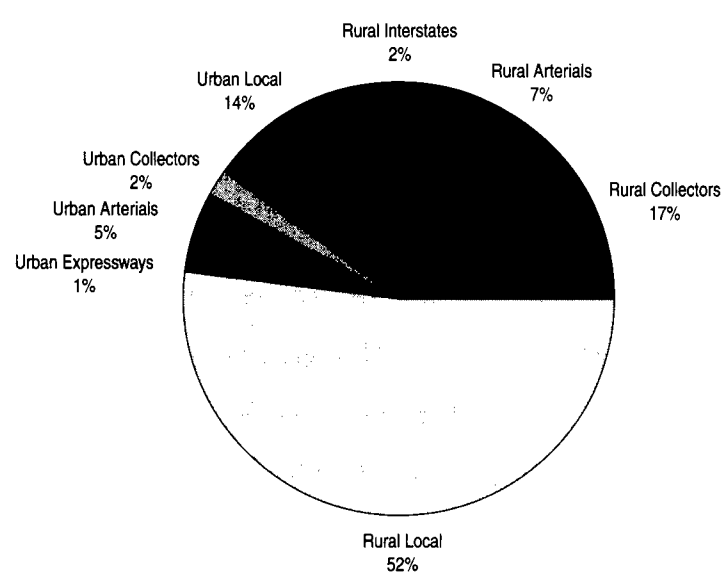

FIGURE 1 Functional classification of U.S. roads.

PERFORMANCE

Roadways

As indicated in Figure 2, urban expressways—Interstates, other freeways and tollways, and so-called "expressways"—carried 20.3 percent of the vehicle miles traveled in 1995 on only 1.4 percent of the lane miles. Urban arterials carried 27.4 percent of the vehicle miles of travel on only 5 percent of the lane miles.

Conversely, rural roads represent 77.4 percent of the lane miles of roads in the United States but carry only 38.5 percent of the vehicle miles of traffic.

As indicated in Figure 3, urban roadways also experienced higher traffic growth than their rural counterparts. Traffic on urban expressways grew at an annual rate of 4.7 percent in the 1985–1995 period.

Interestingly, as indicated in Figure 4, congestion on urban roadways, as measured by peak-hour travel with volume to capacity ratios greater than 0.80, has been fairly constant during the 1985–1995 period. However, traffic volumes per lane mile have been increasing steadily, as indicated in Figure 5, with the largest increase on rural Interstates.

Whereas peak-hour congestion has been relatively steady and traffic volumes have been growing, fatality rates on both urban and rural roadways have been declining in the 1985–1995 period, as indicated in Figure 6, although there was a slight upturn in three of the six categories from 1993 to 1995. Despite their high traffic volumes, urban Interstates continue to be the safest facilities in terms of fatalities per 100 million vehicle-mi.

Transit

As indicated in Figure 7, total transit ridership has been relatively stable during the 1985–1995 period, although rail ridership has grown at the expense of nonrail. Preliminary statistics from the American Public Transit Association indicate that in 1996 ridership grew more than 2.7 percent. Some systems, including the nation's largest, the New York subway,

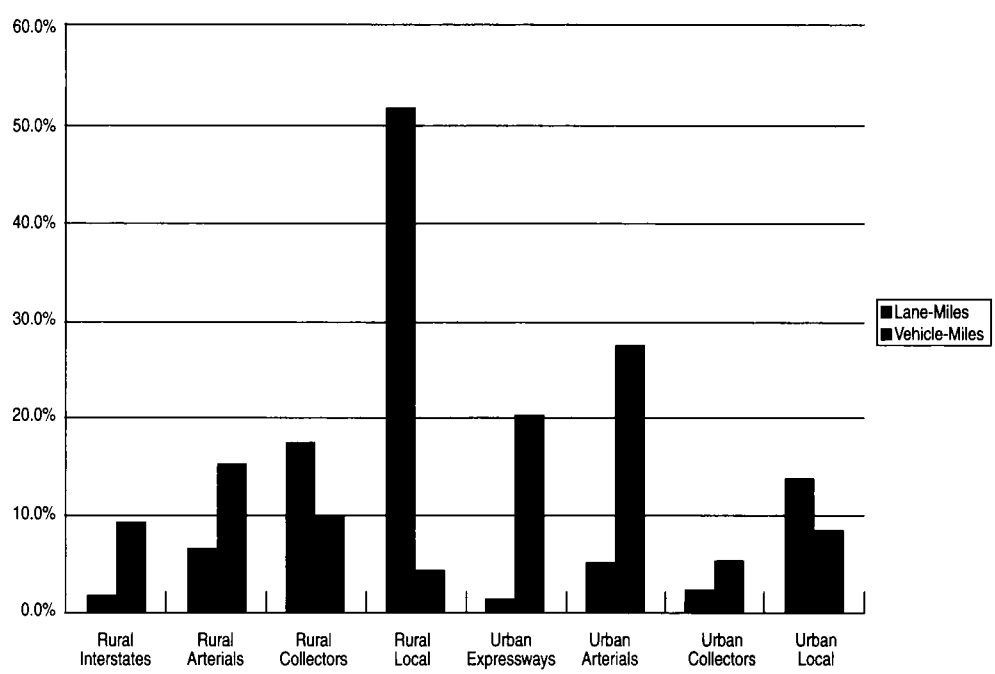

FIGURE 2 Proportions of lane miles and vehicle miles carried, by functional classification.

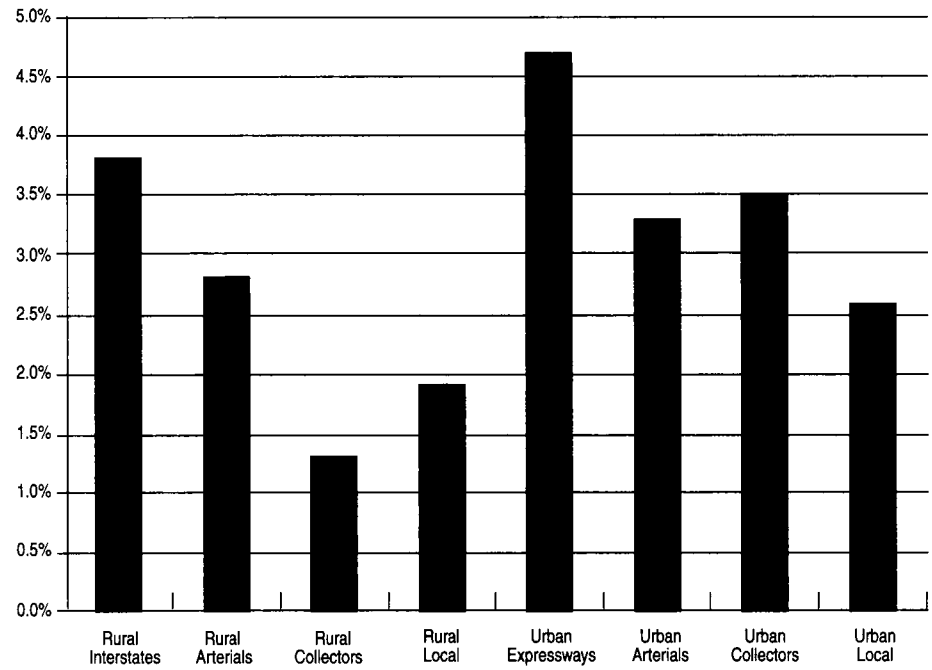

FIGURE 3 Annual rate of traffic growth by functional classification, 1985–1995.

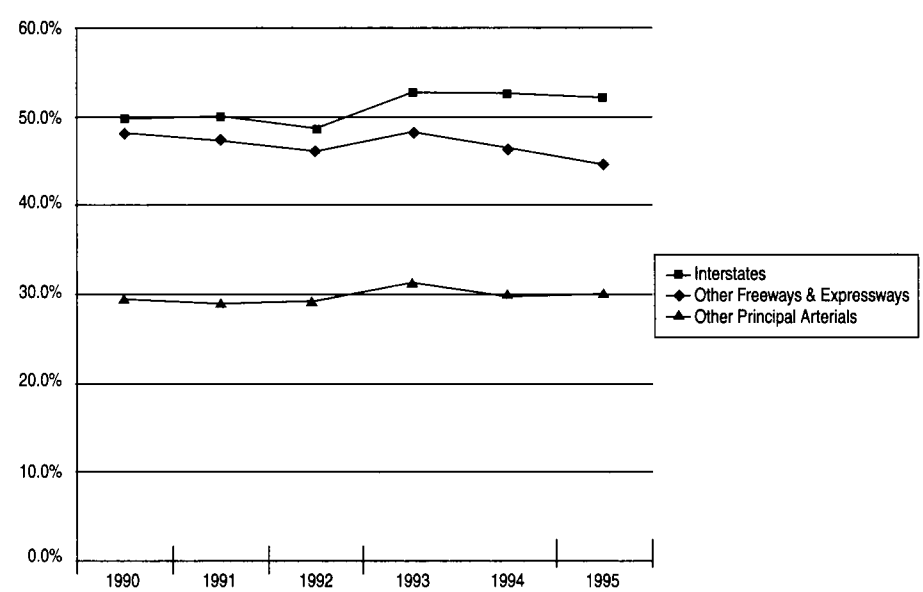

FIGURE 4 Congestion on urban roadways, as measured by peak-hour travel with volume to capacity ratios greater than 0.80.

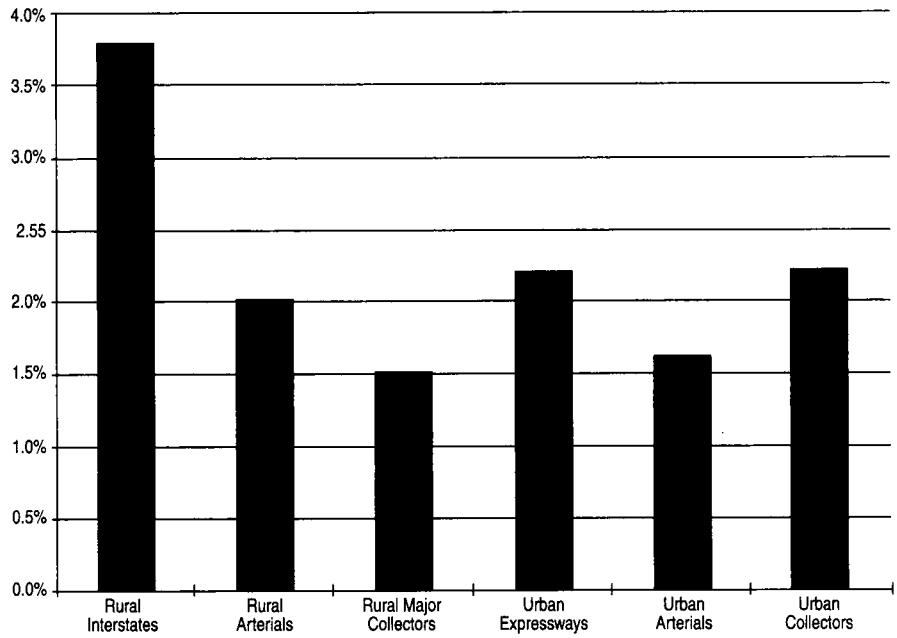

FIGURE 5 Annual rates of increase in traffic volume per lane mile, by functional classification.

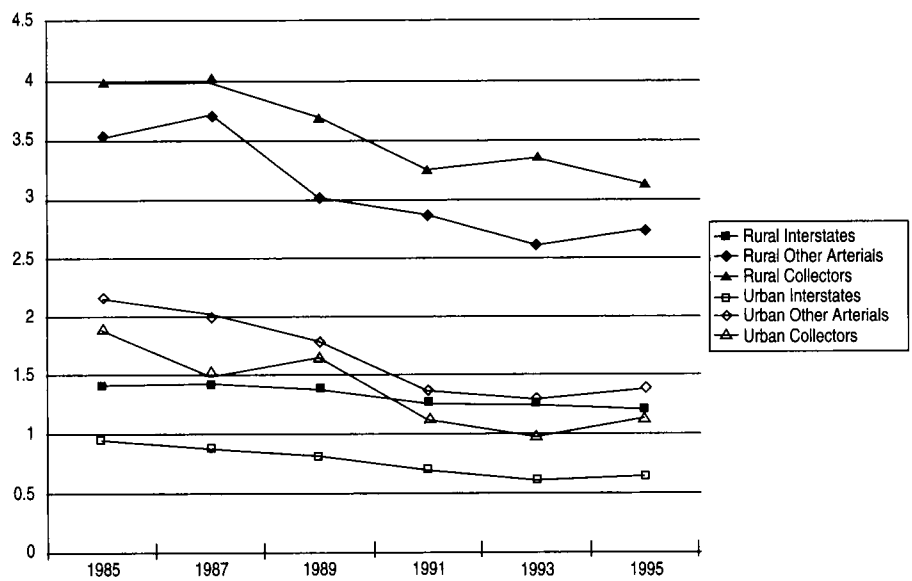

FIGURE 6 Fatality rates per 100 million vehicle-mi on U.S. roads, 1985–1995 (1 mi = 1.6 km).

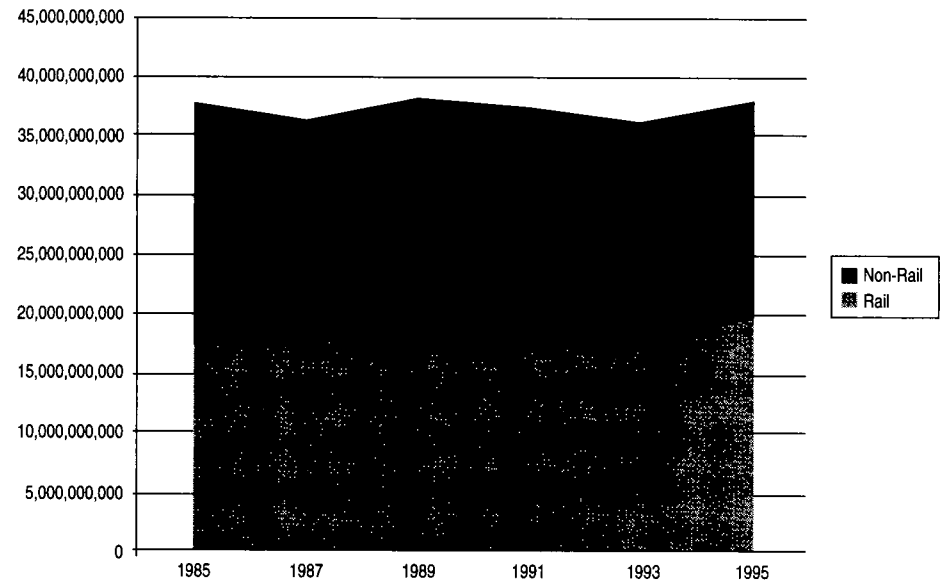

FIGURE 7 Transit ridership, 1985–1995.

are reporting substantially greater ridership increases. Unfortunately, other systems have fared worse, notably the Chicago Transit Authority, which lost 30 percent of its riders in the last decade.

Transit performance can also be judged by the rider experience. Passenger-weighted average speed rose 10.3 percent from 1985 to 1995. In 1995, 71 percent of transit riders had seats for their entire trip, and 9 percent more had seats for part of their trip. Fifty-nine percent of transit riders waited less than 5 min in 1995, and 80 percent waited less than 10 min. Fifty-one percent of riders had to make at least one transfer. Twenty-five percent of transit riders had a total trip time of less than 10 min in 1995, 57 percent less than 20 min, and 76 percent less than 30 min.

Much is made of the energy efficiency of transit, at least compared with the automobile. Yet, as indicated in Figure 8, when actual person miles of travel are compared with actual energy utilization, transit has almost the same energy efficiency as the automobile. Of course, "small trucks," which include vans and sport-utility vehicles, fare much worse.

Whereas another resource paper is looking at the issue of finance, one aspect of performance is inescapable. Despite all the arguments about funding, fairness, and financial policy, one statistic is compelling: in 1995 each passenger mile of travel on the nation's transit systems required 43.5 cents in public expenditure (27.0 cents per kilometer) (exclusive of fares), whereas each passenger mile of travel on the roadways required 3.25 cents (2.02 cents per kilometer)—91 percent of which was derived from highway user fees.

CONDITION

Roadways

Figure 9 presents the portion of "rough road"—defined as rated "poor" in pavement roughness—by functional classification from 1985 to 1995. Whereas there have been fluctuations primarily related to statistical measurement changes, the overall trend has been improving in most categories. At the other end of the spectrum, the proportion of pavements rated "good" or better has generally been increasing.

However, the numbers still appear to be intolerably high, with 36.3 percent of urban Interstate pavements rated "poor" or "mediocre" in 1995 and 26.3 percent of other urban

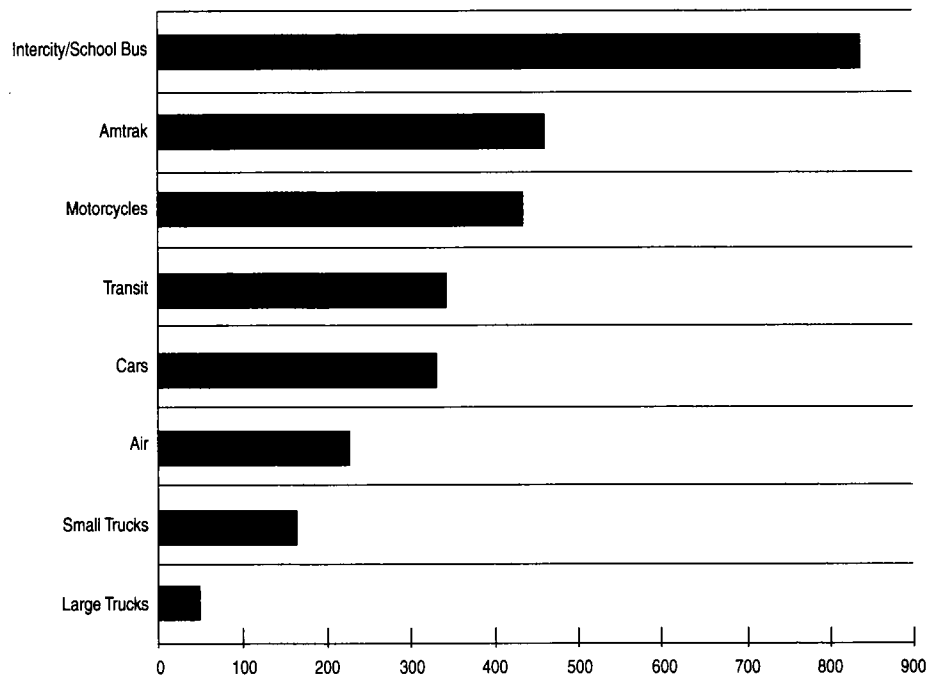

FIGURE 8 Comparison of energy efficiencies.

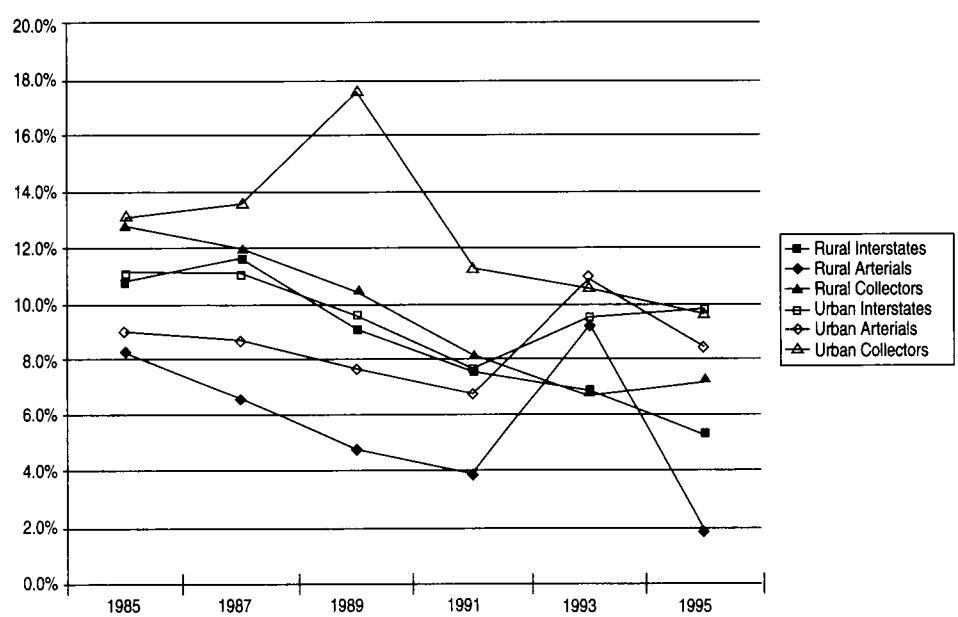

FIGURE 9 Proportion of "rough road" by functional classification, 1985–1995.

principal arterials in the same categories. These two roadway classifications account for almost half the vehicle miles traveled in the country.

Bridges

Figure 10 presents deficient bridges by functional classification. There has been a steady reduction in the proportion of deficient bridges in all categories, reflecting substantial recent local, state, and federal reinvestment in bridges.

The deficient category includes both bridges that are "structurally deficient" and those that are "functionally obsolete." Focusing on "structurally deficient" bridges, one finds 7.8 percent of urban Interstate bridges were so rated in 1995, along with 11.7 percent of other urban arterial bridges. This compares with 4.4 percent of rural Interstate bridges and 7.8 percent of other rural arterial bridges rated "structurally deficient" in 1995.

Transit

Transit vehicles represent a wide range of vehicle types and styles. Whereas age was used as a surrogate for vehicle condition in the past, recently the U.S. Department of Transportation introduced the Transit Economic Requirements Model with a new methodology to report transit vehicle condition consistently over time. As shown in Figures 11 and 12, this system uses a 5-point rating scale. The figures indicate a steady decline in the condition of rail transit vehicles in the 1990s and the stabilization of bus condition, although at a level lower than that of rail vehicles. Given the increases in service volumes discussed previously, this represents a consistent aging of the rail vehicle fleet, presumably as retirements are deferred to accommodate service increases, whereas bus ages are relatively constant as new buses replace retirements.

With regard to the transit physical plant, 27 percent of elevated transit structures and 18 percent of underground structures were rated "bad" or "poor" in 1995, as were 27 percent of stations, 20 percent of maintenance facilities, and 20 percent of electrical substations. Nineteen percent of urban bus maintenance facilities were rated "substandard" or "poor" in 1995.

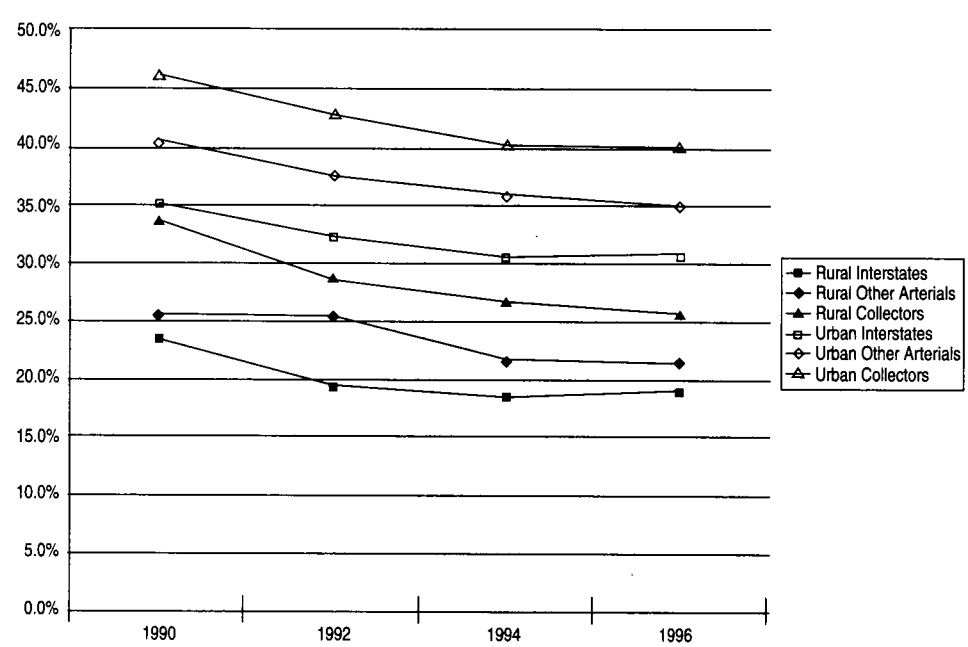

FIGURE 10 Percentage of deficient bridges, by functional classification.

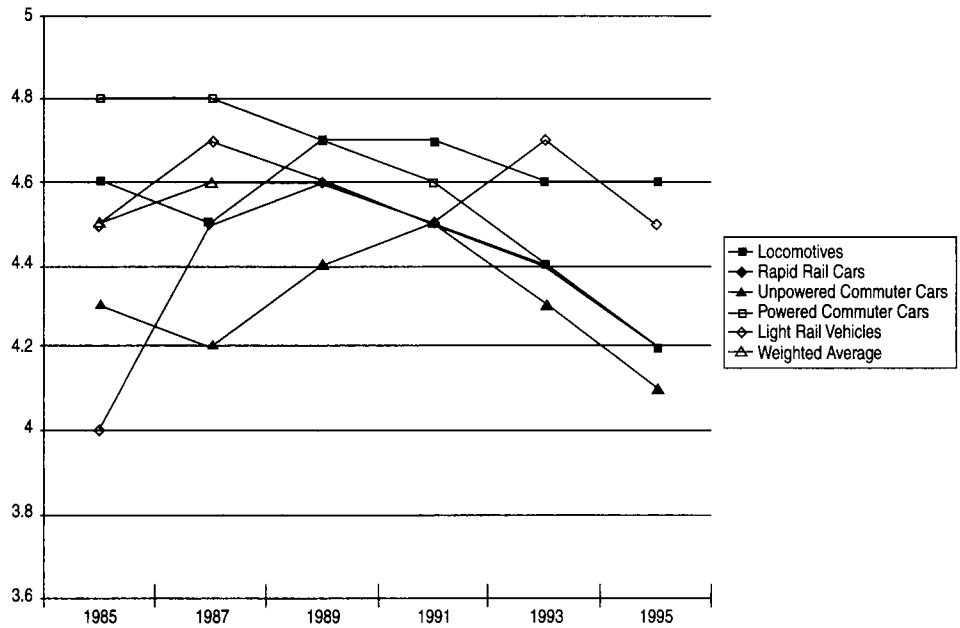

FIGURE 11 Transit vehicle condition—rail.

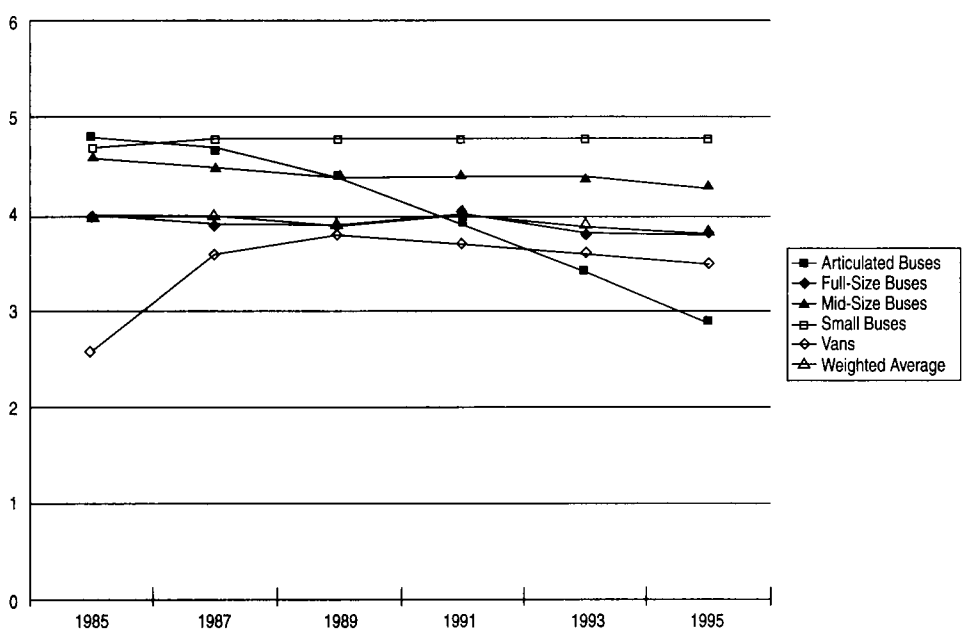

FIGURE 12 Transit vehicle condition—buses.

Freight

Because virtually all the nation's freight is carried by private concerns, albeit with the largest single mode—motor truck—using public highways, statistics on freight transportation condition and performance are hard to find. Figure 13 shows the 1993 "mode split" for freight shipments by both value and volume. Of note is the predominance of trucks, the growth of intermodal, the resurgence of freight rail, and the important role of air freight in moving high-value cargo.

Conclusions and Observations

1. Urban arterial roadways—Interstates, other freeways, tollways, and other arterials—carry almost half the nation's traffic on less than 6 percent of its lane miles. These highly congested facilities have pavements and bridges in demonstrably worse condition than their more lightly traveled rural counterparts. Traffic on them is growing substantially faster than our willingness or ability to expand them. Urban Interstates are truly the foundation of the American transportation system, and maintaining them in sound condition and improving them where warranted must be a top national transportation priority.

2. As the first- and second-generation Interstates reach the end of their useful lives, much greater recognition must be given that conventional highway funding formulas do not adequately address the extraordinary costs of rebuilding these truly nationally significant and vital transportation links "from the ground up." Substantial amounts of the much derided "pork barreling" in the recent federal surface transportation legislation resulted from the necessity of rebuilding these vital facilities without completely draining the formula funding for National Highway System facilities in a number of states.

3. Also deserving special attention are arterial streets and highways, which together carry more traffic than Interstates, freeways, and tollways. Again, members of Congress saw the necessity to dedicate funding for desperately needed arterial improvements that otherwise could not be built because of inadequate formula funds.

4. Aside from the funding problems, urban Interstates especially, but also major arterials and key bridges, have emerged as irreplaceable transportation links. The severity of the effects of partially or totally shutting down these facilities for necessary repair and reconstruction cannot be overstated. Whereas much is being done to mitigate such effects, it is important for both transportation professionals and the general public to understand and support both the necessity to renew these facilities and the importance of doing everything possible to return them to service quickly and mitigate the effects of their disruption during construction.

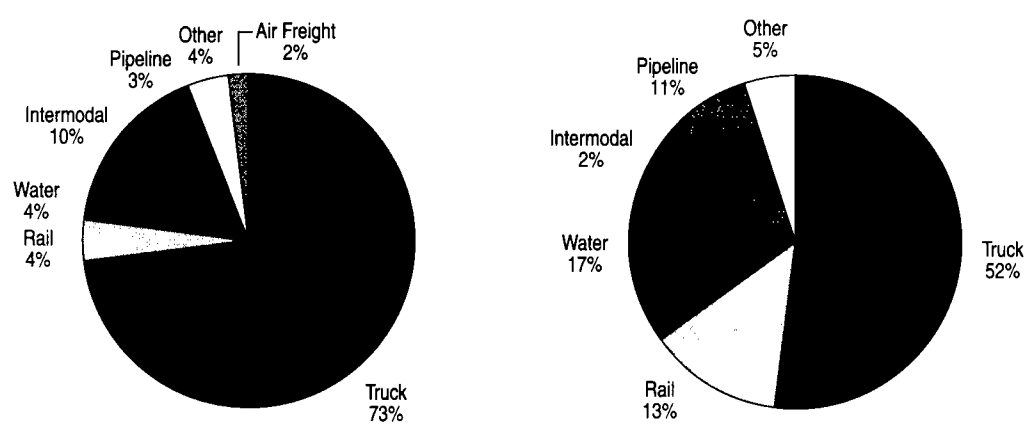

FIGURE 13 Mode split for freight shipments in 1993 by (*left*) value and (*right*) volume.

5. Rural roadways render important services not only to people who live, work, and do business in small-town and rural America, but as "the ties that bind" urban areas together—a reality reflected in the 3.8 percent annual traffic increase per lane mile they experienced from 1985 to 1995, the highest of any functional classification. With the rebound in population of small-town and rural areas reflected in the 1990 census and subsequent reports, there will be increasing pressure—and need—to reinvest in and upgrade the rural road network.

6. In a society dominated by the automobile, public transit continues to play a vitally important role of providing competitive mobility options in congested corridors and providing mobility to people who by virtue of age, income, disability, or choice do not drive a car. The United States has invested substantial resources in transit, and transit services have expanded over the last decade. Yet ridership has not kept pace with this expansion, and transit continues to lose market share.

7. Whereas New York and other cities have made some progress on backlogged transit capital investment needs, they share with Chicago and other transit systems the reality that deferred capital investment impinges on operating budgets not only through expensive emergency repairs and even unplanned shutdowns, but through generally more unreliable services that discourage riders. Even relatively new systems are not immune to the need for substantial capital reinvestment.

8. Concern must be expressed that the general decline in the condition of both buses and rail transit cars may reflect a set of decisions to, in effect, finance expanded transit services by deferring fleet and facility upgrading and replacement. One must also question whether an important factor in transit's loss of market share is the decline in the condition of its infrastructure.

9. Conventional wisdom has it that transport infrastructure in older central cities is generally old, deteriorated, and inadequate, whereas counterparts in the suburbs are new, in good condition, and have at least adequate and possibly excessive capacity. Whereas this paper was not able to prove or disprove this hypothesis because of lack of data, a cautionary note is needed. Many older central cities have recognized and effectively taken action on the need to reinvest in their transportation infrastructure. New York has substantially upgraded its subway system. Chicago is systematically rebuilding both its freeways and its neighborhood streets. Los Angeles had, at least until recently, embarked on the nation's most ambitious rail transit construction program. Boston has courageously chosen to remake its Central Artery. Smaller cities have done likewise. Meanwhile, many suburban areas find themselves with little or no transit and with highways that are not much more than "sprawled over" farm-to-market two-lane roads. Many new and expanded highways have been constructed in suburbs across the country, but other suburban areas experience some of the worst congestion in their urban areas and are unable because of policy, lack of funds, or NIMBY to proceed with needed road development. A policy of favoring reinvestment in existing transportation facilities and services in central cities and older ring suburbs may have a certain appeal, but there appears to be no readily available data to support the contention that such a policy would fulfill a more objectively important or necessary "need" than investment in transportation facilities in congested growing suburban areas. This, of course, does not address the role of such facilities in promoting sprawl or directing new development along desirable and efficient paths.

10. Before any generalized policy decision is made to favor central city over suburban infrastructure investment, there is a need for a national study of the physical condition and operational performance of central city versus suburban transportation infrastructure.

11. At the millennium, the United States finds itself as a "hegemon," an economically, culturally, and militarily world-dominant superpower. Yet to maintain this position and the quality of life it confers on most—but certainly not all—Americans, there is a need to take steps now to ensure that the United States can continue to compete effectively in an increasingly competitive world marketplace. An important component of that competitiveness is the ability to quickly and efficiently transport raw materials and finished products between and within American cities. Concern must be expressed that "just-in-time"

manufacturing techniques place critical importance on reliable freight transportation at a time when the largest freight mode—the truck—is beset by urban and suburban traffic congestion. Of special interest are the difficulties trucks have in navigating much of the urban road network because of both congestion and physical deficiencies such as low bridge clearances, low bridge load limits, inadequate turning radii, insufficient loading areas, and poor pavements.

12. Railroads are not immune to central city congestion. The Union Pacific Railroad fiasco in Houston is a cautionary tale to those familiar with the "hubbing" problems of rail and intermodal interchanges in Chicago, Los Angeles, New York, and elsewhere. Happily, there is a much-touted "urban renaissance" in many American central cities, where advantages of proximity, culture, education, communications, and worker availability are promoting business growth. How ironic it would be if this renaissance either did not reach its full potential or, worse, was choked off because of the inability of urban road and rail systems to efficiently move freight.

13. After a decade or more of concern about a lack of jobs, it is sobering to confront the reality that the United States is running out of people—at least skilled people—to fuel its continued economic growth. And because of the movement of jobs to the suburbs, particularly low- to medium-skill manufacturing jobs, the problem is both a skills and a spatial mismatch. This problem is, of course, an opportunity to deal with the largest social problem facing the country, the stubbornly disproportionately high minority unemployment in certain parts of the central cities. Whereas in the long run "bringing the jobs to the people" (central city economic development) and "bringing the people to the jobs" (opening up low- and moderate-income housing opportunities in the suburbs) together with job training are undoubtedly the answer, in the short run the transportation system must bridge the gap through innovative reverse commute facilities and services.

14. It is important to recognize that the increasingly competitive world economy emphasizes the importance of good long-distance air transport services. Continuing air travel growth is stretching the capacity of many airports to provide reliable service, particularly access to and from the airports. Yet airports find themselves constrained by surrounding development, funding shortages, and the concerns of neighboring communities from expanding their physical plants. Many cities are seeing proposals to build ever-larger new airports at great distances from the central city. Although it is questionable whether either building new airports or substantially expanding existing ones can realistically be accomplished in the current environment, those concerned with the health of central cities must also concern themselves with ensuring that existing airports remain viable and competitive well into the new century.

15. Connecting existing airports, central cities, and nearby [up to 400 mi (644 km)] cities with high-speed rail is an attractive option not only for deferring and perhaps eliminating the need for airport expansion or new airport development, but also for strengthening the economy of the central cities themselves.

16. Since the enactment of the Intermodal Surface Transportation Efficiency Act (ISTEA) in 1991, the existence of transportation enhancement funds and the emphasis on multimodal transportation have brought into prominence the importance of bicycle facilities. It is no coincidence that bicycle sales in the United States have increased from 6.9 million in 1970 to an estimated 12 million in 1995, after peaking at 13 million in 1993. This is a substantially greater increase than any other vehicle type except motor trucks. Whereas many cities and suburbs had previously developed recreational bicycle trail systems and many states had used abandoned rail rights-of-way for long-distance trails, the ISTEA initiatives prompted many areas to consider bicycles more seriously as a work commuter mode. The barriers to such use are well known: inadequate secure storage, prohibitions against bicycles on transit vehicles or in elevators, safety concerns when sharing streets with motor vehicles, and lack of locker and shower facilities at workplaces. Yet bicyclists and their advocates have persevered, and today many cities are identifying work trip bicycle routes with special signage and, where possible, dedicated space, as well as incorporating bicycle paths in new or rebuilt facilities. Clearly, the assault on the bicycle barriers needs to continue.

17. After decades of trying to segregate pedestrians from vehicles in downtowns and neighborhood business areas, central cities are increasingly recognizing that projects such as pedestrian malls can rob mixed-use and commercial centers of cities of much of their vitality. Yet the concerns for safety and convenience that drove the original malling remain. It is not clear whether there are as yet a complete set of technological or urban design "fixes" for encouraging pedestrian movement within city centers while facilitating automobile and transit access to them.

18. Everyone concerned with transport infrastructure—road or transit; central city, suburban, or rural—must be troubled by the increasing paralysis of our society in building new infrastructure and substantially renovating existing facilities. A litany of problems including funding shortages, environmental concerns, construction disruption, NIMBY, highway-transit disputes, and byzantine legal requirements, to mention only the most prominent, have made building almost any large project—road, transit, airport—extremely problematic in America today. Yet as we contemplate a new century, and indeed a new millennium, we only have to look back at the great urban infrastructure projects of this century—the great waterways, railroads, urban transit systems, highways, and international airports—and try to imagine our economy and society without them. Before it is too late, we must recognize that we are effectively losing our capacity to build big infrastructure, we are going to have to build some in the future, and it is therefore important that we halt the slide.

Reference

1. *1997 Status of the Nation's Surface Transportation System: Condition and Performance.* Federal Highway Administration and Federal Transit Administration, U.S. Department of Transportation, Dec. 1997.

Institutional and Governance Issues for Large Cities in Transportation

Henry Peyrebrune, *Center for Transportation Policy and Management, New York University*

The Steering Committee for the Conference on Transportation Issues in Large U.S. Cities identified issues concerning the institutional and governance structure for transportation in central cities as one of the six major issues for the conference. Five questions were raised for discussion and research:

- What is the institutional and governance framework for transportation in these central cities, both internally within city government and within the region and state?
- What is the decision-making process for transportation?
- How do central cities fare in this structure, both for short-term and long-term decision making?
- What is the role of the central city in regional organizations, regulated transportation, and other modes?
- Is fragmentation of responsibilities and authority a concern?

A questionnaire was prepared that included all the points of interest from the Steering Committee as well as additional questions designed to obtain a complete picture of the institutional and governance framework. The responses to the questionnaire serve two purposes: to illuminate the preparation of this paper and, at the request of the Steering Committee, to provide a description to the conference participants of the institutional and governance structure in each of the subject cities for the conference. To date, eight cities have responded, and their responses are the basis for this paper.

A literature search was performed to obtain input for the paper. No similar effort to examine the institutional and governance structures for transportation in large cities was recorded; however, there are several sources *(1–5)* dealing with the broader questions of institutional and governance issues. These sources are incorporated in this paper.

Context: Current and Future Challenges

Each city has an internal structure for dealing with transportation decisions, often spread out among a number of different agencies within the city. In this paper, the various internal struc-

tures, coordination mechanisms, and issues related to these internal structures will be documented.

Each city also functions in a larger environment within the region and state (or several states) in the provision of transportation facilities and services. These external structures, coordination mechanisms, and issues will also be presented. Included in the internal and external environments is the concept of the "authorizing environment," which has been effectively articulated by former Administrator of the Federal Highway Administration, Tom Larson.

The authorizing environment is the total of all the institutions and programs that allow agencies, in this case the central city transportation agencies, to provide transportation facilities and services. The environment includes the authorizing legislative and financing activities as well as the internal and external institutions.

The review of the role of the central city in the transportation authorizing environment comes at a time of transition in the institutional and governance arrangements in transportation. The passage of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) established new guidelines and requirements for transportation planning, programming, and project development.

The role of the metropolitan planning organization (MPO) is evolving. The literature *(1–5)* concludes that the transition is, in fact, working to the benefit of all parties. The proposals for the reauthorization of ISTEA continue the planning and programmatic innovations of ISTEA, although with some refinements.

ISTEA has been considered an experiment in democracy, and the reauthorization continues that experiment. An issue for this conference is to assess the degree of involvement and success of the central city in this new environment. The results of previous conferences suggest that the picture is mixed.

One of the conclusions of the Conference on Institutional Aspects of Metropolitan Transportation Planning is the need to "assess the MPO role in central cities, including strengthening the involvement of central city residents and decision-makers in the MPO process." Four strategies were recommended to deal with this issue:

- "Ensure that central cities are adequately represented in the MPO and are treated equitably in the planning and project selection process."
- "Ensure that the potential impacts of transportation projects in central cities are fully explored and assessed."
- "Identification of transportation improvements required in the central cities to enhance their quality of life and economic development."
- "Advancement of local partnerships to address critical issues, including the mix of suburban and urban employment opportunities, jobs/housing balance, social service requirements and other issues beyond the scope of traditional transportation elements."

As important as the federal transportation programs are to the central cities and the regions, federal funds and programs are still a small part of the total transportation program in central cities. The decision processes for state transportation programs and locally derived funds are as important to the day-to-day operation of transportation services in central cities. The federal planning and programming requirements can establish a framework for cooperative technical and transportation processes, but if these processes are restricted only to federal programs, the participants are missing the majority of the programs. Therefore, another issue for this conference is integrating the various programs at the different levels of government into a cohesive whole.

In a presentation at the Workshop on Institutional Aspects of Metropolitan Transportation Planning, Stephen Del Giudice of the Metropolitan Washington Council of Governments states, "I also think that it is a myth that central cities are not adequately represented on MPO boards. In most cases, the central cities do have representatives on MPO boards and do participate in the transportation planning process. To the extent that this is an issue, however, it may reflect a larger concern about central city representation in the political process

in general." Therefore, this paper will look at not only the internal institutional issues but also the larger "authorizing environment" that reflects the political structure and role of the central city in that structure.

The responses to the questionnaires provide a snapshot of the current institutional and governance structures and to some degree recount past restructuring efforts. However, of equal concern to this conference is the future. The Transportation Research Board (TRB) Executive Committee has selected the topic "Institutional Arrangements in Transportation: Impacts of Changing Roles" as a special subject for discussion of future directions in transportation. The first discussion is contained in *TR News* (Sept.–Oct. 1997) *(3)*.

Steve Lockwood frames the issues in "Transportation Infrastructure Services in the 21st Century." He points out that the current programs, organizations, and financial arrangements have been stable and well defined for the past 50 years to support a mission of constructing and preserving a basic network of major public facilities.

In the 21st century, a number of forces will require reexamination of this structure. Lockwood lists nine vectors of change:

- Customer service mission focus,
- Performance measurement and accountability,
- Systems operations and management priority,
- Streamlined project delivery,
- Enterprise-style management,
- Innovative financing and progressive commercialization,
- Devolution and reconfiguration,
- Public-private partnerships, and
- Strong leadership and cross-institutional negotiation.

In the response to the questionnaire from the eight cities, these vectors appear in different places but basically as ad hoc attempts to solve specific problems. The reinvention of transportation government structures is occurring on an incremental, ad hoc basis, if at all. This is especially evident in the attempt to implement Intelligent Transportation Systems programs. Research has shown that the primary impediment to implementation is not the technology but the institutional and governance structures *(5)*. Therefore, the results of the survey and the subsequent discussion at the conference should look to the future.

Lockwood concludes, "What is currently missing is a broad, vigorous, and organized national dialogue focused on the institutional challenges faced at the national, state, regional and local levels, drawing on collective wisdom and varied experience. The existing institutional conventions, having been explicitly developed through policy and professional support for the mid-20th century mission, can be just as explicitly evolved in new directions more supportive of 21st century missions."

Institutions and Governance of Transportation in Central Cities: Survey Results

Agencies Involved in Highways and Their Responsibilities

Jurisdictional Responsibilities

The general model for highway jurisdictional responsibilities in the United States has the state department of transportation (DOT) responsible for expressways and some major routes, a county responsible for the next level of roads, and the city responsible for some arterials, collectors, and local streets. The model includes some special-purpose agencies, typically toll agencies, also responsible for key roads and bridges.

In a review of the role of state DOTs nationwide, there is a great variation in the level of responsibility for highways from state to state. In rural areas, the range of state respon-

sibility for rural roads is from a low of 7.7 percent of the highway length accommodating 50 percent of daily travel to a high of 96 percent of highway length covering 99.5 percent of travel. Four states have more than 90 percent of the length under state jurisdiction, whereas 10 states have less than 10 percent.

Similar statistics occur in urban areas. Nineteen states have less than 10 percent of urban length, with a low of 4 percent handling 28.8 percent of travel. Six states have over 40 percent of the urban length, with a high of 78 percent handling 93 percent of travel. Statistics are not readily available for central cities within the urban area, but the statistics quoted set the context for the wide variability among states and indirectly describe the urban versus rural orientation of each state DOT and the degree of state involvement in and control of highways in general.

Of the eight cities in the survey, Los Angeles, Boston, Philadelphia, Miami, and Chicago follow this general model. Table 1 gives the variation in the jurisdictional responsibility of the state, the central city, and other organizations. The range is from a low of 2.4 percent of mileage under state jurisdiction to a high of 15 percent. Each of these cities was compared with the overall state responsibility for highways in all urban areas within the state.

There is a direct relationship between the percentage of state responsibility in all urban areas and the state responsibility in central cities. However, in all cases the percentage of state responsibility in central cities is lower than state responsibility in all urban areas. Perhaps this finding is a reflection of the larger political question raised previously.

Internal Responsibility for Highway Activities Within Central Cities

Table 2 gives the number of agencies with jurisdictional responsibilities for highways in each city. Two cities are unique. Washington, D.C., being a federal district, is responsible for all roads except for 45 km (28 mi) of National Park Service Roads. In Baltimore, there is a one-of-a-kind arrangement making the city responsible for all highways. The state provides most of the nonfederal funds and has assumed responsibility for some Interstate highways, I-95 and I-395, but this represents less than 1 percent of total mileage. I-95 was built by the city and turned over to the state for maintenance.

Two cities, Los Angeles and Boston, have a Public Works Department responsible for construction and maintenance of highways and a Department of Transportation with responsibilities for traffic, parking, and other programs. Chicago and Philadelphia have centralized organizations responsible for all highway activities within their jurisdiction, although in Philadelphia, a Parking Authority is responsible for the parking programs.

TABLE 1 Jurisdictional Responsibility for Highways

	Miles Under Jurisdiction				Statewide — Jurisdiction (Percentage)		
City	City	State	Other	Total	State	Urban	Rural
Los Angeles	6400	160	—	6560	2.4	4.7	16.4
Boston	820	35	53	908	3.8	11.2	15.1
Philadelphia	2000	350	—	2350	24.3	24.3	42.3
Chicago	2990	399	79	3468	11.5	13.4	13.9
Miami	663	88	65	816	10.7	10.2	12.2
Baltimore	1880	20	—	1990	1.0	14.1	23.4
District of Columbia	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dallas	N/A	N/A	N/A	3383	N/A	12.7	31.2
Nationwide						13.6	22.3

Note: 1 mi = 1.6 km.

TABLE 2 Internal Highway Agencies by City

City	Agency	Responsibility
Los Angeles	Dept. of Public Works	Construction and Maintenance
	Dept. of Transportation	Planning, Traffic Control, Parking, Intersection Control
Boston	Dept. of Public Works	Construction and Maintenance — Joint Control on Street Permits
	Dept. of Transportation	Traffic and Parking Operations, Planning
	Public Improvement Commission	Utilities Layout
	Air Pollution Control Commission	Fee Parking Regulation
	Police	Traffic Enforcement / Taxi Regulation
Philadelphia	Dept. of Streets	Design, Construction, Maintenance, Traffic Control
	Parking Authority	Parking
	Deputy Mayor's Office	Coordination, Other Programs
Baltimore	Dept. of Public Works	Design, Construction, Maintenance, Operations
Miami	City	Parking Regulation and Traffic Enforcement
Chicago	Dept. of Transportation	Design, Construction, Maint., Operations—Skyway
District of Columbia	Dept. of Public Works	Design, Construction, Maintenance and Operation
	Division of Motor Vehicles	Motor Vehicle Regulation and Parking
Dallas	Dept. of Public Works and Transportation	Design, Construction, Operations, Signals
	Dept. of Streets and Sanitation	Maintenance

Dallas has two agencies involved in highways. The Department of Streets and Sanitation has maintenance responsibilities, whereas the Department of Public Works and Transportation has the other highway functions. In addition, the North Texas Tollway Authority is responsible for tollway construction and maintenance.

Miami is a special case. The Miami–Dade County government structure was created in the late 1950s as a two-tier regional government structure. The county has the primary responsibility for highways, including all street regulatory signs and signals and all highways in unincorporated areas. In municipalities such as the city of Miami, the municipality has the responsibility for parking regulation, traffic enforcement, and construction and maintenance of basically local roads.

Agencies Responsible for Public Transportation Services and the Role of Central Cities

Agencies Responsible for Public Transportation

In two cities, the responsibility for the provision of public transportation rests with a county or state governmental agency. In Miami, the county government is the provider of public

transportation with a state agency providing commuter rail service. In Baltimore, the Maryland Department of Transportation provides all public transportation services in the state. The role of the city is limited to the role in the MPO and city representation in the county and state political structure.

Chicago has a two-tier transit governance structure. The Regional Transit Authority is an oversight organization responsible for planning, coordination, and fund allocation. Services are provided by three separate authorities. The city has five representatives on the 13-person RTA board.

The Transit Authority (CTA) is responsible for bus, elevated subway, and paratransit services in the city, with some connections to the suburbs. The CTA board is composed of seven members; four are city appointees. METRA provides commuter rail services in the region, and the city has one representative on the seven-person board. PACE provides bus service in the suburbs; the city is not represented on the board.

In Boston, public transportation is provided by MBTA. The seven-person MBTA board is appointed by the governor. A 78-person MBTA Advisory Board reviews and approves the MBTA budget; representation is weighted by the municipal government share of the costs of service.

The primary transit agency in Philadelphia is SEPTA, a regional operator of all public transit modes. Of the 15-member SEPTA board, two are appointed by the city. The city owns most of the infrastructure and provides 85 percent of the operating deficit and capital match. Additional service is provided by PATCO (a commuter rail link) under an arrangement whereby the city owns the subway right-of-way and receives funds from the operator (Delaware River Port Authority). Other service is provided by the New Jersey Transit Authority, which runs commuter buses from New Jersey communities to the central city.

Los Angeles is served by the Los Angeles County Metropolitan Transportation Authority. The board of the authority has 13 members, four appointed by the mayor, with the approval of the city council. Commuter rail service is provided by a state agency, the Southern California Regional Rail Authority. In addition, the city DOT sponsors 40 bus routes provided by private operators on a competitively bid basis.

Transit service to the District of Columbia is provided by the Washington Metropolitan Area Transit Authority, a regional authority with a 12-person board. The District of Columbia has two members of the board and provides 40 percent of the operating budget and 38 to 40 percent of the local capital requirements.

Dallas Area Rapid Transit (DART) is responsible for public transportation within the Dallas metroplex. The city has eight individual members and shares one representative with three smaller cities on a 15-member board. The City of Dallas representatives are nominated by city council members and approved by the full city council. There is a localized trolley service operated by a local transit authority.

Role of the Central City

The provision of public transit services varies greatly in each of the areas served. The role of the central city includes membership of the governing boards in five cities. In all cases, except for CTA in Chicago and DART in Dallas, the central city is a minority member of the board and in some cases provides a larger portion of costs than the proportion of representation. CTA operates only within the city and is one of four organizations with boards involved in public transportation in the city. This minority representation may reflect the role of the central city in the state and regional political structure. The Federal Transit Administration is sponsoring research on the governance of transit organizations and, under the New Paradigms project, future governance structures to meet the needs of the 21st century. Central cities should monitor these activities with a focus on efficiency and performance of the different structures and the equity issues of funding and representation.

Agencies Responsible for Other Transportation Facilities and Services and the Role of the Central City

Airports

Three cities—Los Angeles, Philadelphia, and Chicago—have responsibility for the airports serving their regions. In all three, a separate division or department of aviation is responsible for the airport. In Boston, there is a state authority for the airport, whereas in Baltimore the airport is run by the state DOT. The Miami–Dade County Airport is under the jurisdiction of the county government. Airports in the Washington, D.C., area are under the jurisdiction of the federal government. The city of Dallas has responsibility for one local airport and shares responsibility with the city of Fort Worth for the regional airport.

Water and Port Facilities

In Boston and Baltimore, waterborne facilities are under state control, with the same agencies responsible for airports. A new agency has been created in Philadelphia, the Port of Philadelphia and Camden, to consolidate functions of three previous organizations. The county is responsible for the Port of Miami. Los Angeles has a Harbor Department governed by the Board of Harbor Commissioners within the city government. The Port of Chicago is governed by the Illinois International Port District, with the city appointing five of the nine board members.

Rail Facilities

The Philadelphia Industrial Development Corporation constructs and maintains rail facilities in that city's parks. Chicago has a program for dealing with some 1,600 rail viaducts. The city owns or maintains 113 viaducts and has maintenance responsibility for many of the 103 viaducts over state expressways. In addition, the city has a viaduct clearance improvement program designed to increase vertical clearance beneath railroad viaducts to between 4.3 and 4.4 m (14 and 14½ ft). The Illinois Commerce Commission may reimburse up to 60 percent of the cost of improvements. Otherwise, cities reported that rail facilities were basically private-sector responsibilities. Los Angeles is involved in the $1.9 billion rail corridor improvement that links the ports of Los Angeles and Long Beach to the major intercontinental rail network.

Regulation

The regulation of taxi services is currently under review in Los Angeles and Philadelphia. Dallas monitors and licenses taxicabs within the city and for shuttle service to the regional airport.

Role of Central Cities in Regional Planning

Under federal legislation, MPOs are a prerequisite for federal highway and transit funding. Literature references document the history and evolution of MPOs [Francois (1)]. MPOs in different states and regions have very different organization and decision structures. The current MPO structure is a reflection of past planning efforts and the current political structure of the region.

All cities responding to the survey are voting members of their MPO. The size of the MPO board and city representation are given in Table 3. Again, the city representation is in the minority on all boards. In two areas, Boston and Los Angeles, these are separate organiza-

TABLE 3 MPO Board Size and City Representation

City	MPO	Board Size	Number of City Representatives
Los Angeles	SCAG	71	16
	LACO MTA	13	4
Boston	MPO	14	1
	MAPC	N/A	N/A
Philadelphia	DVRPC	18	1
Baltimore	Baltimore Metro Council	6	1
Miami	Board of Commissioners	17	1
Chicago	CATS	20	1
District of Columbia	Wash. Council of Governments	33	5
Dallas	NCTCOG	223	1

tions dealing with funding allocations. In Boston, the Metro Area Planning Council (MAPC) deals with the TIP distribution and project selection and, in Los Angeles, the Los Angeles Metro Transportation Authority handles the state-created funding programs amounting to more than $2.3 billion per year.

Issues for the workshop include

- The effectiveness of the existing MPO processes to meet federal requirements,
- The evolving role of MPOs under ISTEA and new opportunities under reauthorization,
- The representation and voting power of central cities, and
- The use of the MPO structure for all transportation programs rather than just federal programs.

Hierarchy of Transportation Decision Making and Coordination of Transportation Activities in the City

Mechanisms for coordination vary among the cities responding to the survey. The District of Columbia is unique in that the government is under congressional authority and oversight. Internal coordination occurs within the Department of Public Works. In Miami, where the county plays a strong role, coordination is done within the county and the MPO governing board.

Several cities use the budgetary process for coordination. In Baltimore, the Department of Public Works develops the initial budget with input from housing, planning, and the Baltimore Development Corporation. Projects are prioritized by the planning department and the program is approved by the City Planning Commission (which includes representatives of city departments and mayoral appointees), then the Board of Finance, Board of Estimates, city council, and, finally, the mayor. In Boston, the Capital Budget Office coordinates infrastructure investment and interagency partnerships. The Chicago Department of Transportation submits its program to the Office of Management and Budget (OMB). Programs are then reviewed by a 15-member Capital Improvement Advisory Committee before approval by OMB, the mayor, and then the city council.

The Los Angeles Department of Transportation takes the lead for coordination through its planning responsibilities. Additional coordination is achieved through checks and balances between the mayor and the city council. Philadelphia has established a deputy mayor for transportation to coordinate programs as well as assume responsibility for several programs without a departmental home. Boston also has a mayoral cabinet position responsible for integrating services.

Dallas is managed by a city manager and five assistant city managers, one of whom is responsible for the Department of Public Works and Transportation, another for the Department of Streets and Sanitation, and a third for legislative duties.

In some ways, the different arrangements reflect the individual charter or structure of each city government. Where there is a strong mayoral charter, the mayor's office clearly has the lead. In other instances, the balance of power shifts between the executive and legislative branches. In three areas—Miami, Baltimore, and the District of Columbia—the major coordination is at another level of government given jurisdictional responsibilities for the various modes and programs. In Dallas, the direction is under the city manager.

Role and Organization of Any City Legislative Body Concerning Transportation

Each city except Miami reported involvement of the legislative body in transportation decision making. In Los Angeles and Philadelphia, two committees of the city council affect transportation. In Los Angeles, there is a Committee on Transportation and a Committee on Planning and Land Use. A Committee on Streets and Services and a Committee on Transportation and Public Utilities both have transportation responsibilities in Philadelphia. The City of Dallas Council has a Transportation and Telecommunications Committee. Chicago has three council subcommittees—the Committee on Budget and Government Operations, which has jurisdiction over government expenditures; the Committee on Finance, which oversees intergovernmental grant agreements; and the Committee on Transportation and the Public Way, which has jurisdiction over transportation issues. Whereas the primary responsibilities of these committees and the respective city councils is in approving budgets and passing legislation, they are also involved in constituent issues and appointments to boards.

Transportation Financing

A separate paper on transportation financing has been prepared for this conference. The financing paper provides an overview of the financing issues, whereas this paper and the accompanying responses to the questionnaire provide some specifics for the eight cities.

In general, the financing of highway projects follows the outline of jurisdictional responsibilities presented earlier in this paper. Federal funds are administered by the state and programmed for projects in a number of ways. The discussion on programming issues of federal funds was the subject of a separate conference and is reported in *Transportation Research Circular 465 (2)*.

A discussion of the national trends in financing, comparing local financing with state and federal financing, helps provide some context for the effect of financing on institutional and governance issues. Again, the term "local" means all local governments because the data source does not break the data out by level of local jurisdiction.

Nationally, in 1995, total highway disbursements were $92 billion—$57 billion for state-administered highways and $35 billion for local highways. The source of highway receipts for state and local governments is given in Table 4, which reveals that state funding for highways comes mainly from motor fuel taxes, vehicle taxes and fees, and federal aid. About 22 percent of state-collected motor fuel and vehicle taxes is shared with local governments. Of this, 82 percent is grants-in-aid, and 18 percent represents direct expenditures by the states on local highways. (The term "local highways" means all nonstate highways. The source of the data does not distinguish between city, town, and county.)

The direct level of sharing and the proportions vary from state to state. The proportions are somewhat related to the level of jurisdictional responsibility for highways between the state and local governments. Whereas population is the most frequently used parameter for distributing taxes to local governments, a variety of other factors are used, including equal shares, origin and amount of fuel sales, geographic area, and minimum shares coupled with

TABLE 4 Financing of Highways—Sources of Funds—State and Local Governments

Source	Percentage of State Receipts	Percentage of Local Receipts
Motor fuel and vehicle taxes	45	4
Tolls	6	2
General funds	3	27
Property taxes and special assessments	0	14
Other	3	6
Miscellaneous	3	12
Bonding	8	9
Subtotal, jurisdiction-generated funding	68	74
Outside funding	2 (local)	24 (state)
Federal aid	30	2

other factors. Several states have different distributions associated with increments of fuel and motor vehicle taxes imposed at different times. Some increments are for specific program purposes, and the allocation is a function of the specific purpose.

Federal aid is a small portion of highway receipts for local governments (2 percent), compared with 30 percent for states. Local governments raise a larger share of highway receipts internally (74 percent) than do states (68 percent). State and local governments use the same proportion of bonding, although that proportion may change with the introduction of state infrastructure banks.

For public transportation, federal funding is about 45 percent of total capital expenditures ($5.6 billion) and 5 percent of total operating expenditures ($17.3 billion). State governments fund 18 percent of capital and 21 percent of operating costs. Locally generated funds support 26 percent of capital and 31 percent of operating costs. The remainder of the operating costs (44 percent) comes from fares and other operator revenues.

For the eight cities in the survey, the funding sources vary greatly.

Baltimore reports that most of the funding is federal or comes from state-collected fuel and vehicle taxes allocated to the city, with only a small amount from the city's general fund.

Chicago lists nine funding sources: federal, state gas tax/motor fuel taxes allocated to counties and cities on a population share, city gas tax collected by the state, general obligation bonds backed by property tax revenues, public-private partnerships such as a 50 percent/50 percent partnership on sidewalks, tax assessment special service areas, tax increment financing, special use fees such as vehicle stickers and parking taxes, and transit asset sales/leasebacks.

Los Angeles submitted a 29-page matrix prepared by the local MPO describing all the various federal, state, and local funding sources. Miami enclosed a one-page summary of conventional transportation funding sources.

Restructuring or Consolidation of Responsibilities: Implemented or Under Consideration

Nationally, much has been written about reengineering government agencies. Concepts such as consolidation of services with other governments have been proposed. Privatization of services is also reported as a major trend. Examples of these trends are seen in responses to the questionnaire on which this paper is based.

In other parts of this paper, there is discussion of the organizational structures in the eight cities, many of them resulting from reorganizations or consolidations. Examples include

- Creation of the Chicago Department of Transportation, which consolidated all highway and planning responsibility in one agency;
- Consolidation of highway programs in Baltimore under one city agency with state responsibility for all financing;
- The region (county) approach in Miami–Dade County, where the traffic engineering and control responsibility as well as transit, aviation, and ports are under the county government;
- Creation of the position of deputy mayor for transportation in Philadelphia to coordinate transportation activities and undertake unique programs that do not fit into existing organizations;
- The restructuring of the MPO in Boston to give local officials a voice in the MPO;
- Creation of LADOT in 1979 to coordinate key transportation responsibilities within one department; and
- Creation of special-purpose organizations, such as the Dade County Expressway Authority and the Alameda Corridor Transportation Authority for the construction and financing of a $1.9 billion rail corridor project in Los Angeles.

Several consolidations or reorganizations are under discussion, including shifting responsibility for taxi regulation from a larger commission to a local taxi regulatory authority and creation of a special transportation zone in the San Fernando portion of Los Angeles to assume control from the existing regional transit authority.

Additional Information Provided

In the survey there was room for respondents to list activities that did not fit into the preceding questions. The additional information generally presents ongoing activities in the city that help shape the transportation future. Items reported include the following:

- The Automated Traffic Surveillance and Control System in Los Angeles;
- The Logan Airport 2000 project in Boston;
- Boston Department of Transportation involvement in managing the competition for scarce access to public ways between residential, retail, and institutional developments;
- Philadelphia's initiation of a "transit first" policy in 1989 (to further the policy, a joint city-SEPTA transit improvement committee meets to review street designs, traffic controls, and other strategies);
- District of Columbia completion of a strategic vision transportation plan and a 6-year capital improvement program; and
- Chicago's reengineering of the processes for design and materials procurement (Chicago is now submitting projects for budget approval on an annual program basis).

Summary of Issues Relating to Steering Committee Questions

What Is the Institutional and Governance Framework for Transportation in These Central Cities, Both Internal Within City Government and Within the Region and State?

Internal Organization

The survey has identified a number of different ways in which cities have organized transportation activities. The organizational structures for highways can be grouped into two generic models and several specialized organizations responding to local conditions.

Under one generic model, most responsibilities are consolidated under a city DOT. This model is analogous to state DOTs. The second model has internal activities spread among several agencies, with strong coordination at the mayoral level. Highway construction and maintenance is accomplished in a larger, multifunctional public works department.

A specialized model exists in Miami, where the county has the major responsibility for highway construction and maintenance as part of a larger consolidation of government responsibilities. Another specialized model is found in Baltimore, where the city and state have consolidated responsibilities into one organization currently housed under city government.

Several cities have responsibility for airports and ports. The organizations are separate from other transportation-related functions.

In the cities studied, multimodal or intermodal coordination occurs, if at all, at a level higher than city; there are no city-level multimodal agencies.

External Organization

Cities typically rely on external organizations for the provision of public transportation services. The role of the city government in these organizations varies; however, in all but two cases the city representation is in the minority. The role of the state in highways within the city also varies. The jurisdictional role of the state is related to the amount of revenue shared by the state with cities. There are many special-purpose organizations with their own revenue sources, generally toll authorities, that greatly affect the transportation picture. Again, city involvement varies, but in most cases these organizations are created and controlled by the state.

What Is the Decision-Making Process for Transportation?

City transportation agencies operate in a complex authorizing environment subject to legislation, regulations, and funding programs from federal, state, county, and city executive and legislative bodies. The authorizing environment is different from the generic organization models described under the section titled "Internal Organization."

How Do Central Cities Fare in This Structure, Both for Short- and Long-Term Decisions?

The distribution of the jurisdictional responsibility for highways among states and other levels of government has been studied.

State responsibility for highways in central cities varies with the overall state role for highways in the entire state. In all instances, the level of state involvement in central cities is lower than the level of involvement for urban areas in the state. Countering this is the fact that the state has the responsibility for the highest level of highways, including Interstate highways, expressways, and arterials that carry the heaviest traffic volumes. Similar statistics on financing have been presented.

The conference will discuss these issues at length and present recommendations for both the short and the long term.

In the context of how central cities fare in transportation, conference participants will benefit from discussion of the statement made by Stephen Del Giudice of the Metropolitan Washington Council of Governments, as quoted earlier: "To the extent that this is an issue, however, it may reflect a larger concern about central city representation in the political process in general."

What Is the Role of the Central City in Regional Organizations, Other Modes, and Regulated Services?

In all cases, the central city is a voting member of the MPO, but in a minority position with regard to the region. The effectiveness of the central city in this regional structure should be discussed in greater detail. The evolving role of MPOs to make sense of this multiagency transportation picture increases the need for meaningful city involvement in the MPO.

Is Fragmentation of Responsibilities and Authority a Problem?

The answer to the question, "Is fragmentation of responsibilities and authority a problem?" rests not in this paper but in the total conference setting. The answer goes to the performance of the system and the users' perception of system performance. Is there a significant difference between the condition, operation, and performance of transportation services between the central cities? Is there a correlation between structure and governance and the system's performance? Is performance different for the facilities under the jurisdiction of the city versus those under jurisdiction of the counties, the states, or the special-purpose authorities?

Issues for the Conference

- Is there a significant difference in system performance among central cities?
- Can the differences be correlated with differences in institutional and governance settings and structures?
- Are central cities being treated equitably in the assumption of jurisdictional responsibilities and financing among state, county, and special-purpose organizations?
- Given the evolving influence of MPOs, how can the central cities play a more significant role in the process?
- Since federal funding is a small portion of city transportation budgets, are there processes for coordinating programs between the other funding agencies, states, counties, and special-purpose authorities? Is the MPO the appropriate mechanism?
- How can multimodal coordination be accomplished within the city? within the region?
- How can cities better share information on institutional and governance structures and issues, and on some of the special programs?
- What is the future mission for cities in transportation? Do the "vectors of change" listed earlier point to the need to reexamine existing organizations and reinvent an institutional and governance structure for tomorrow's mission?

References

1. *Transportation Research Circular 450: Institutional Aspects of Metropolitan Transportation Planning.* Transportation Research Board, National Research Council, Washington, D.C., Dec. 1995.
2. *Transportation Research Circular 465: Conference on Transportation Programming Methods and Issues.* Transportation Research Board, National Research Council, Washington, D.C., Dec. 1996.
3. *TR News 192.* Institutional Arrangements in Transportation: Impacts of Changing Rules (entire issue). Sept.–Oct. 1997.
4. T. F. Humphrey. *NCHRP Synthesis of Highway Practice 217: Consideration of the 15 Factors in the Metropolitan Planning Process.* Transportation Research Board, National Research Council, Washington, D.C., 1995.
5. H. L. Peyrebrune. *Technology: A Bridge to the States—Opportunities for Intergovernmental Cooperation on Intelligent Transportation Systems.* Public Technologies, Inc., 1996.

Financing

Joseph M. Giglio, *Northeastern University*

The U.S. transit industry faces a series of profound economic, social, and political forces that force it to consider alternative ways of providing urban transportation services. Without significant structural change, the industry's ability to survive in its current form has to be questioned. This paper focuses on financial and related operational changes that can provide practical help in the near term. Many of these options have been selected, however, for their potential to assist in resolving long-term problems as well.

How serious is the problem? Despite more than $100 billion in federal investments over the past quarter century, transit continues to lose market share to the private automobile. For example, between 1980 and 1990, the share of those driving alone to work increased from about 64 percent to about 73 percent, while the fraction of commuters who traveled by carpool declined from about 20 percent to about 13 percent. Commuters using transit decreased from 6.4 percent to 5.3 percent during the same period. Transit is now the mode of last resort for most urban travelers, and it lost business in both absolute and relative terms between 1980 and 1990. Any private business faced with these losses would be disinvesting.

Five long-term trends appear to account for these problems:

- Increases in personal income mean people can afford to select higher-quality, more expensive forms of transport. This movement to quality can be seen across all markets and reduces the size of transit's captive market.
- Where we work and live is more dispersed. Most jobs and homes are in the suburbs, with a lower density of trips between specific locations—ironically, with greater general congestion. Traditional transit systems have been built along fixed routes and fare poorly when demand is dispersed.
- Changes in lifestyles mean that the classic home-to-work trip no longer dominates urban travel. Two-income families and single-parent families are more common than the traditional nuclear family with its single breadwinner. As a result, fewer trips have a single purpose, and the amount of "trip chaining" (the process of linking multiple destinations into a single trip) has grown. Together, these trends favor modes with greater flexibility—such as the automobile.

• The pace of business has also changed. Reliability and predictability are now more important than cost. The move toward "just-in-time" systems affects workers as much as business.

• Transit remains the last major mode whose market is protected from commercial competition (although in effect personal vehicles compete directly with transit). This lack of competition for provision of transit services has reduced openness to new ideas.

In addition, local and regional transit agencies face numerous more mundane but still daunting challenges. A nonexhaustive list of challenges faced by many transit agencies includes the following:

• Many transit agencies need to find funds to replace federal operating assistance that is no longer available.

• The costs of travel to which consumers are most sensitive—such as the costs of fuel and parking—are either at all-time lows or subsidized by employers and developers. The vast majority of new jobs in the suburbs include free parking.

• Transit agencies are increasingly required to support the mobility needs of society's most disadvantaged populations.

• Experience has shown that transit can attract single-occupancy vehicle commuters, but only if it enjoys travel time and travel cost advantages. Without preferential treatment for buses including the use of new technologies, transit can only offer limited incentives to "choice" riders.

Together, these challenges create an environment in which it is increasingly costly per passenger mile to operate, increasingly difficult to compete with private vehicles in the service dimension, and increasingly challenging to find funds to maintain service levels.

At the same time, transit agencies have significant opportunities—both technical and strategic—that may help them meet these challenges, including

• More flexible federal funding for transit projects under both the Surface Transportation Program and the Congestion Mitigation and Air Quality Program, and proposals to allow greater flexibility between capital and operating funds;

• Transit agency representation on metropolitan planning organization (MPO) boards, giving transit agencies an institutional role in regional transportation planning;

• Increased congestion on the nation's roads, making transit an increasingly attractive alternative to the stress of single-occupancy-vehicle travel;

• Growing public pressure to reduce pollutants, including greenhouse gas emissions, making transit systems an increasingly attractive component of air quality and global climate change strategies;

• Growing power and adaptability of technology [via intelligent transportation systems (ITS)] to improve transit efficiency and raise service quality;

• Growing commitment to making suburban employment accessible to urban residents, thus increasing the role and visibility of transit systems as a mechanism for meeting social goals (while offering the potential to generate revenues on reverse commutes as well as on primary commute routes);

• Development of new financing tools such as State Infrastructure Banks (SIBs); and

• Growing recognition of paratransit as a way to complement and supplement traditional transit operations.

Together, this nonexhaustive list of opportunities focuses attention on how transit systems can help society meet many of its important goals, be increasingly competitive with other travel modes, take advantage of new financing tools, leverage private-sector efficiencies, and do what it does better.

In this paper, historic and expected funding trends, financing tools and approaches that can help transit systems meet their needs, and the role these tools and approaches may play in relationship to the other transit operating factors listed above are described.

Four ideas important to keep in mind when considering the usefulness of innovative financing tools are the following:

1. To implement most innovative finance tools and to leverage private-sector participation, it is crucial to be able to think like private-sector partners. These efforts will be most successful, in turn, when they are combined with a good understanding of the direct and indirect economic benefits provided by transit service.
2. In most cases, innovative financing tools and private participation will help reduce reliance of transit system operators on public funds, not replace public funds.
3. Transit system operators must sit at all of the funding tables, not just those to which they are accustomed. As transportation funding sources become more flexible, as the transit environment becomes increasingly multimodal, and as states and MPOs continue to jockey for influence, transit operators must not let innovative finance opportunities pass them by because of a misplaced focus on traditionally reliable revenue sources. New arenas for transit participation could include chamber of commerce committees, business roundtables, and economic development agencies.
4. It is important that transit operators not become caught up in the technical details of innovative finance mechanisms. Such mechanisms are relatively straightforward to write up, and many public documents already describe them in detail. Inevitably, though, these documents present hypothetical scenarios for the implementation of such mechanisms. These scenarios are often coupled with detailed discussions of risks inherent to each mechanism—political risk (e.g., benefit assessment districts), market growth risk (e.g., joint development potential), currency exchange rate risk (e.g., cross-border leases), and so forth. In this environment, it may be easier for transit agency officials to fall back on the tried and true methods of raising funds. But it is important to emphasize that the arena of uncertainty is where hypothetical situations can be developed into reality and where innovation takes place. As a result, the most innovative aspect of any finance tools used by transit agencies will not be the tools themselves, but the creativity, iconoclasm, and persistence that transit agencies show in implementing them.

Historic and Expected Trends for Federal, State, and Local Operating Funding

In 1981, annual federal outlays for transit reached about $5.4 billion (all figures are in constant 1997 dollars unless otherwise noted). After that date total federal outlays began to decline. Total outlays declined to about $3.2 billion in 1992 (see Figure 1), and operating assistance declined from about $2.1 billion in 1981 to $800 million in 1995 before being eliminated for all but the smallest systems in 1997 (see Figure 2).

In response to these pressures, transit expenditures have increased sharply at the state and local levels, rising from about $9.7 billion annually in 1982 to slightly more than $17 billion annually by 1994 (see Figure 3). This increase has several principal components, including replacement of federal funds, operating support for transit new starts for which the federal government has provided only capital assistance, and expanded service in suburban jurisdictions.

The result of these shifts in the sources of transit funding is that today, fare box revenue represents about 40 percent of total transit system receipts, state and local funding sources provide a little over 20 percent each of system receipts, nonfare revenues (including such receipts as those from advertising, interest, and joint development) generate about 13 percent of receipts, and federal sources provide only about 4 percent of all transit system operating income (see Figure 4).

It is not expected that there will be any major change in the magnitude of federal funding for transit operations. To the extent that there are relative changes in levels of state and local support for transit operations, such changes are likely to be determined by the responses of different transit agencies and states. Transit agencies are divided generally

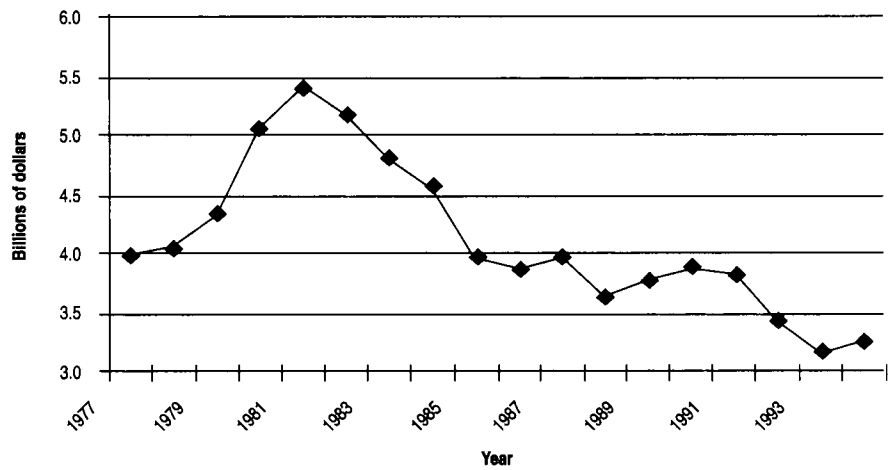

FIGURE 1 Federal outlays for transit, 1977–1994 (constant 1997 dollars). (Source: transportation receipts and outlays in the federal budget, fiscal years 1977–1994, Bureau of Transportation Statistics, U.S. Department of Transportation.)

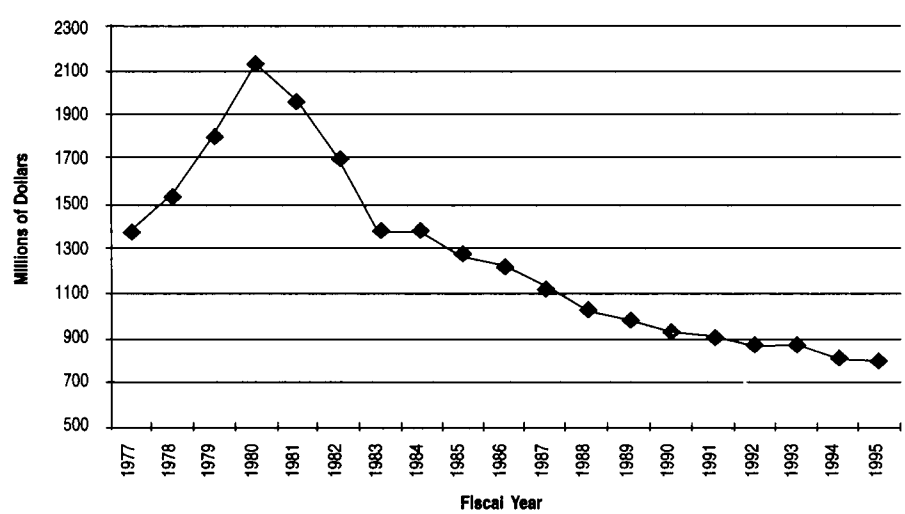

FIGURE 2 Federal operating grant approvals for urbanized areas, 1977–1995 (constant 1997 dollars). (Source: transportation receipts and outlays in the federal budget, fiscal years 1977–1995, Bureau of Transportation Statistics, U.S. Department of Transportation.)

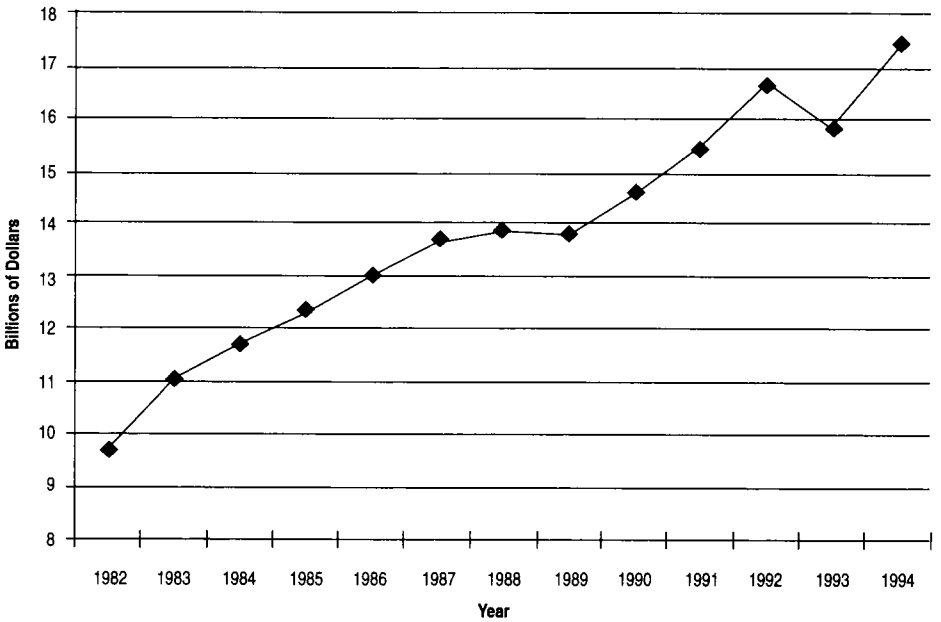

FIGURE 3 Transit expenditures by state and local governments, 1982–1994 (constant 1997 dollars). (Source: transportation receipts and outlays in the federal budget, fiscal years 1982–1994, Bureau of Transportation Statistics, U.S. Department of Transportation.)

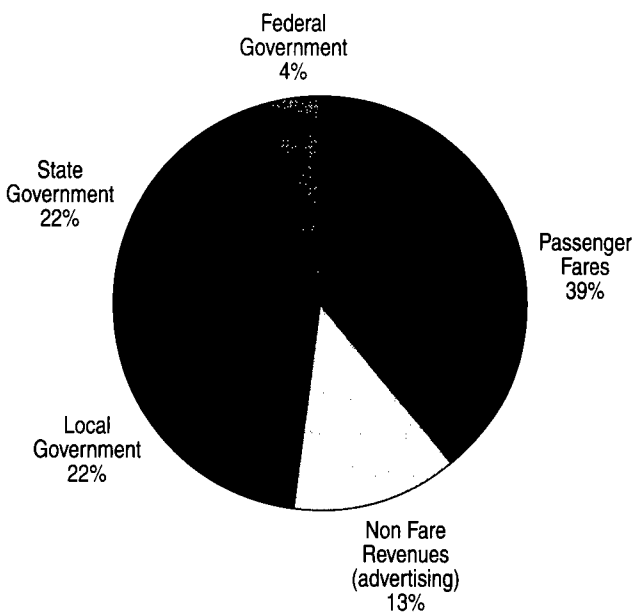

FIGURE 4 Sources of operating income (1995 total = $17.7 billion in constant 1997 dollars). (Source: *Transit Fact Book,* American Public Transit Association.)

into those receiving the majority of their nonfederal public funding from states (e.g., MTA in New York City) and those receiving the majority of their nonfederal public funding from local sources (e.g., MARTA in Atlanta). As a result, transit agencies can be grouped into two categories for purposes of considering opportunities for innovative funding and financing: those whose greatest opportunities are in the state and "other revenue" categories and those whose greatest opportunities are in the local and "other revenue" categories.

State Sources of Transit Operating Assistance

Of the systems that rely primarily on states as their major source of nonfederal public funding, the largest fraction, slightly more than one-third, is provided by the "other" category. This category predominantly includes general funds but could include state lotteries, toll revenue set-asides, or state special taxes. Gasoline and sales taxes provide slightly less than one-fourth each of all state funding and are followed by income taxes, which provide almost all of the remainder. Property taxes represent a mere 1 percent of all state-provided transit operating assistance (see Figure 5). Examples of how transit agencies use state-based revenue sources to supplement fare box and other revenues are provided in Table 1.

Local Sources of Transit Operating Assistance

For systems that rely primarily on local governments as their major source of nonfederal public funding, most support is provided by dedicated sales taxes. This category provides about 80 percent of all such funds. The remaining 20 percent of local funds is composed of property taxes (8 percent), "other" revenues (7 percent), income taxes (3 percent), and gasoline taxes (2 percent)(see Figure 6). Examples of how transit agencies use locally generated revenue sources to supplement fare box and other revenues are provided in Table 2. Many local governments provide for transit out of their general tax proceeds and do not have dedicated transit taxes.

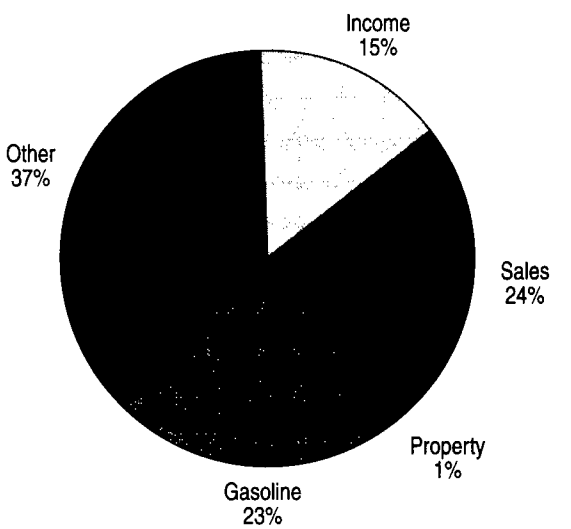

FIGURE 5 Breakdown of state dedicated taxes (1995 total = $1.45 billion in constant 1997 dollars). (Source: National Transit Database, Federal Transit Administration.)

TABLE 1 Examples of Systems Receiving State Dedicated Taxes, 1995 (Millions of Constant 1997 Dollars) (National Transit Database, Federal Transit Administration)

Type	Systems	Amount
Income	New York City Transit Authority	199
	San Francisco MUNI	19
Sales	Statewide in California (a one quarter of one percent sales tax is collected statewide in California; these funds MUST be used for transit unless a county certified there are no unmet transit needs; in addition counties can adopt an additional local option tax with voter approval)	
	Chicago	56
Property	New York City Transit Authority	151
	Lansing, MI (CATA)	4
	Oakland-Alameda County Transit	1.5
	Bay Area Rapid Transit (SF)	1
Gasoline	Washington State DOT (Ferries)	13

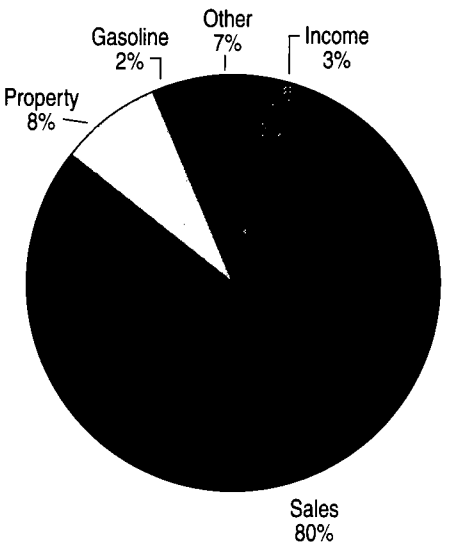

FIGURE 6 Breakdown of local dedicated taxes (1995 total = $1.73 billion in constant 1997 dollars). (Source: National Transit Database, Federal Transit Administration.)

Sources of Capital Investment

As shown in Figure 7, in 1995 federal sources provided 51 percent of capital investment in transit systems, state sources provided 13 percent of investment, and local sources provided 36 percent. States that are unusual in terms of the support they provide to transit capital investment include California, New Jersey, the District of Columbia, and selected others (Table 3).

TABLE 2 Examples of Systems Receiving Local Dedicated Taxes, 1995 (Millions of Constant 1997 Dollars) (National Transit Database, Federal Transit Administration)

Type	Systems	Amount
Income	Cincinnati (SORTA)	28
	San Francisco MUNI	24
	Cincinnati (TANK)	6
Sales	Los Angeles (LACMTA)	366
	Chicago—Chicago Transit Authority	214
	Chicago—METRA (commuter rail)	127
	Cleveland	127
	Atlanta (MARTA)	114
	Orange County, CA (OCTA)	73
	New Orleans (RTA)	43
	Oakland-Alameda County Transit	32
	Kansas City	25
	San Diego (San Diego Transit)	24
Property	Bay Area Rapid Transit (SF)	12
	Montgomery County, MD (Ride-On)	15
	Minneapolis-St. Paul (MCTO)	59
Gasoline	Ft. Lauderdale (BCT)	17
	Washington, DC (WMATA)	14

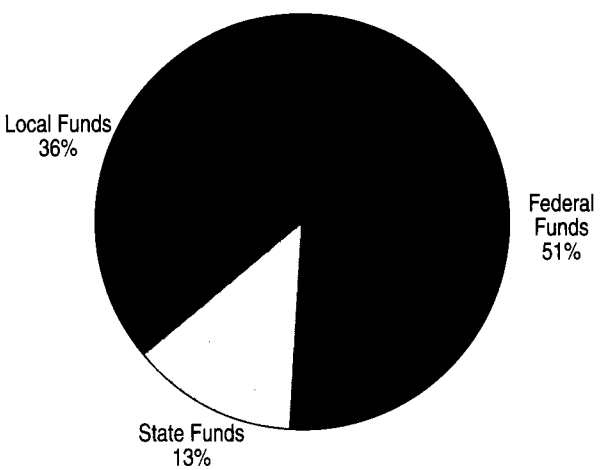

FIGURE 7 Transit capital outlays by source (1995 total = $7.3 billion in constant 1997 dollars). [Source: *Highway Statistics,* 1995, Federal Highway Administration (from Federal Transit Administration statistics).]

TABLE 3 States with Significant Transit Capital Spending, 1995 (Millions of Constant 1997 Dollars) [*Highway Statistics,* 1995, Federal Highway Administration (from Federal Transit Administration Statistics)]

State	Amount
California	268
New Jersey	146
Pennsylvania	145
District of Columbia	89
Washington	82
Illinois	72
Florida	49
Maryland	42
Connecticut	30

Getting Transit Agencies to the Table

As transit operators consider how to take advantage of the funding sources available to them, and as they consider how to use these funding sources creatively, it is important for them to take the first step: getting to the table when funding tools are being developed, when funds are being allocated, and when new facilities are being prioritized.

The importance of this principle can be illustrated by analogy to the highway funding environment. Figures 8 and 9 provide an indication of the degree to which state highway funds seem disproportionately targeted toward rural and lightly populated areas. Figure 8 compares the fraction of state capital funds spent on areas with more than 50,000 population with the fraction of state population that resides in such areas. Figure 9 makes a similar comparison but uses road maintenance funds as the basis for the comparison. The two figures suggest that with one or two exceptions, states allocate capital funds disproportionately toward rural and lightly populated areas.

The information presented in Figures 8 and 9 comes with several very important caveats. The sources of data for the two figures use different definitions for areas with more than 50,000 population; the data do not distinguish center cities from suburbs; and the data have not been adjusted to reflect certain important factors (e.g., the fraction of maintenance costs that are incurred simply because of a facility's existence and the fraction of costs attributable to traffic volume; or lane miles per capita, which may be greater in rural areas than in urban areas). Without adjusting for these factors, it is not possible to reach a definitive conclusion. However, the consistent difference between the fraction of state highway funds spent in urbanized areas and the fraction of state populations residing in urbanized areas suggests disproportionate spending practices. The Surface Transportation Policy Project reached a fundamentally similar conclusion in its 1996 report, "Getting a Fair Share: An Analysis of Federal Transportation Spending."

Whatever the reasons for the disproportionate funding levels reflected in Figures 8 and 9, a strong implication of this analysis is that representatives of urban constituencies and providers of service to these constituencies could benefit from spending more time advocating for their transportation interests, whether these interests are highway or transit related.

Two other examples illustrate the importance of "being at the table."

1. In the 1970s, the Georgia Department of Transportation (GDOT) reconstructed the radial Interstate system serving Atlanta. One major component of the effort was to build left-side high-occupancy vehicle (HOV) ramps for future use when HOV was implemented. For the 1996 Olympics, GDOT restriped the existing lanes and narrowed the shoulder areas to create a new inside lane on I-85 and I-75 for HOV 2. While the HOV ramps were being planned and constructed, MARTA was in the middle of building its heavy rail subway system. Three of the four major legs of the rail system parallel GDOT's HOV system now in place.

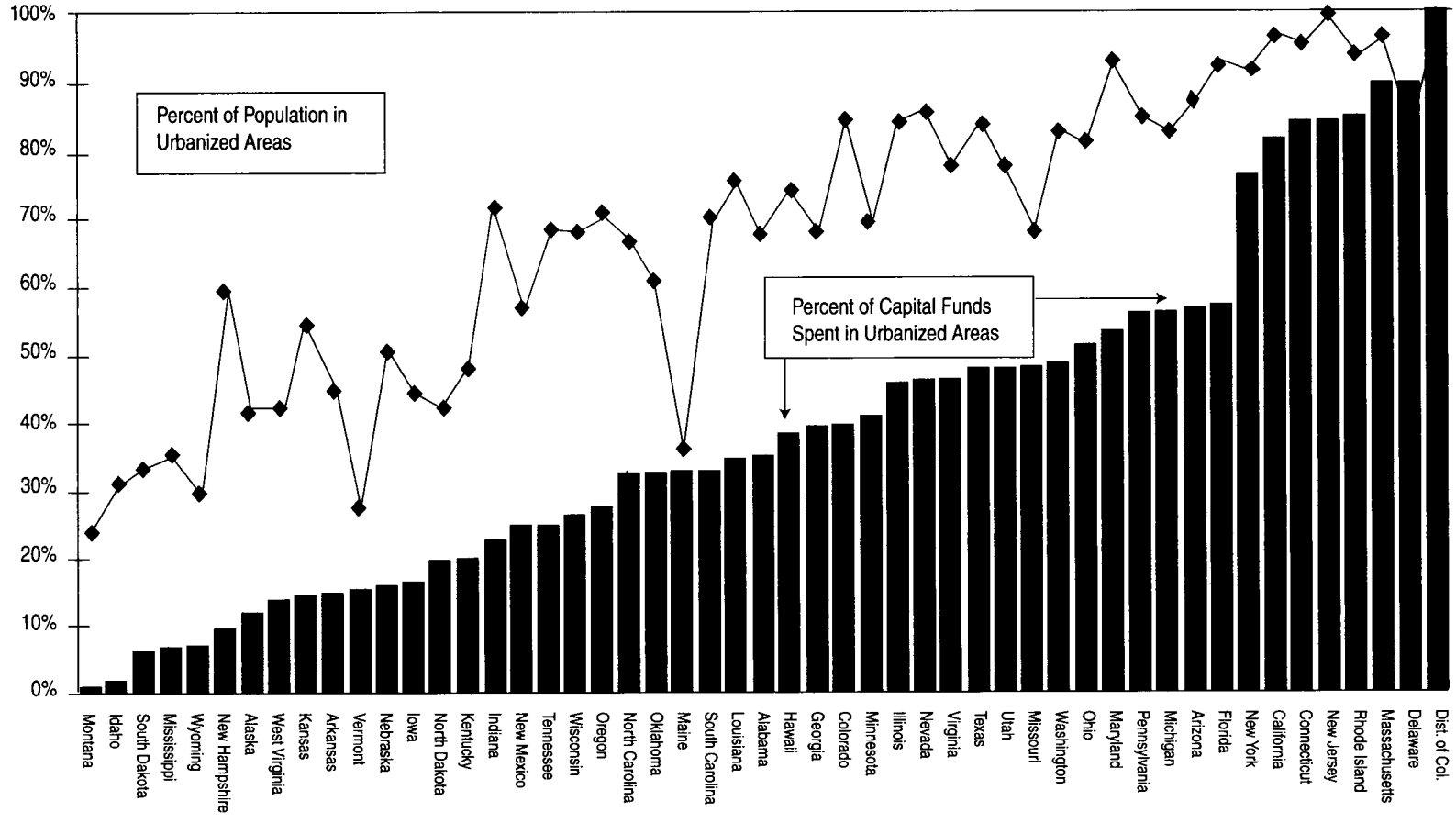

FIGURE 8 Percentage of capital funds spent in urbanized areas (1995) compared with percentage of state population in urbanized areas (1994). (Source: *Highway Statistics,* 1996, Table SF 12; *Statistical Abstract of the United States,* 1995, Table 42.)

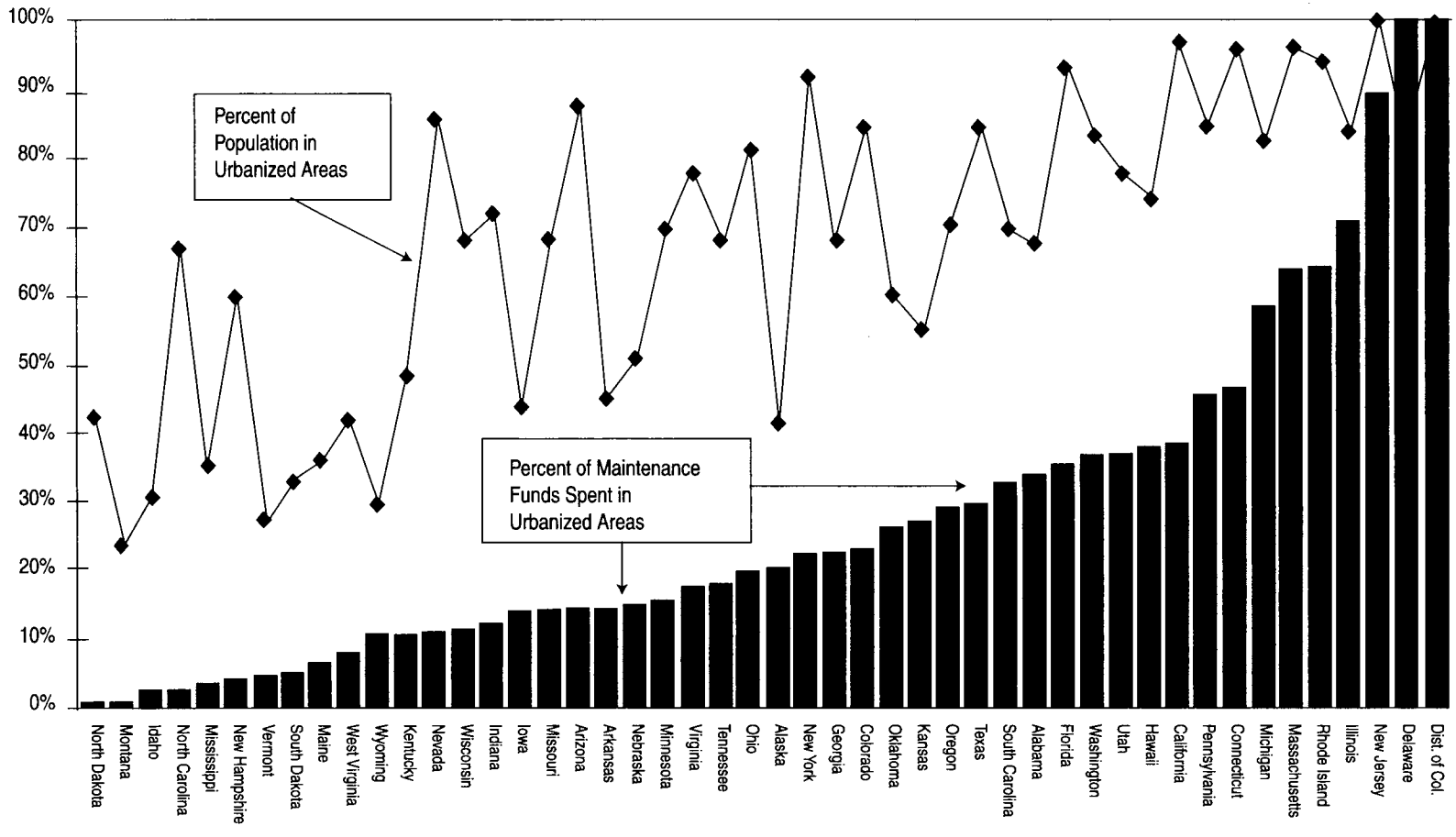

FIGURE 9 Percentage of maintenance funds spent in urbanized areas (1995) compared with percentage of state population living in urbanized areas (1994). (Source: *Highway Statistics,* 1996, Table SF 12; *Statistical Abstract of the United States,* 1995, Table 42.)

While both the rail system and the new HOV system are worthwhile endeavors, they are not coordinated and they operate independently. MARTA does not run express bus service on the Interstate system, preferring to run local feeder bus service to the more efficient rail system. As a result, MARTA is not running any buses on the GDOT HOV system, and there is no sharing of park-and-ride facilities. Had MARTA officials participated in the roadway decision making at the right level and the right time, it is possible that they would have made a different decision about the allocation of their capital resources to take advantage of the facility being built. As it is, the opportunity to use the new highway capacity for bus operations has now been lost without MARTA having the opportunity to strategically evaluate the services it provides in this corridor.

2. When federal SIB legislation was originally written, SIBs were intended to have the flexibility to fund either highway or transit projects. Transit advocates, fearing that highway projects would consume funds that should instead go to transit, lobbied to create separate highway and transit accounts within each SIB. Transit advocates were successful in this effort and helped establish a system wherein funds could not be transferred from one account to the other after SIB allocations are made. The same advocates, however, have not been as vigilant in ensuring that transit accounts are funded. As a result, the rigid separation of SIB highway and transit accounts may make it more difficult, rather than easier, for transit operators to take advantage of the financing opportunities presented by SIBs.

Opportunities for New Funding Sources

Many state and local transit agencies have clearly identified and taken advantage of new funding sources to replace federal sources that have dried up. Even so, transit agencies around the country continue to confront difficult questions as they consider how to increase their public funding levels or how to pare services.

The preceding summary of transit agencies' recent funding history provides a useful backdrop for a discussion of opportunities for new funding sources. However, the ability of transit agencies to simply "backfill" for lost federal funds is not what is meant by the term "innovative financing." For the purposes of this paper, innovative financing refers to increasing funds for transit by

1. Increasing private participation in transit operations and ownership,
2. Using new financing techniques to leverage existing resources or attract new ones (some of these may also involve public-private partnerships), and
3. Increasing revenue ridership.

As indicated earlier, though, the goal of all the efforts described below is to supplement public funds, not to replace them.

Again, the message here is that there are many opportunities for innovative financing, but almost all involve cooperation of public entities, complex public processes, and negotiation with private parties. To take advantage of any of them, it will be necessary to have transit agency staff who can energetically pursue opportunities and who can clearly see both benefits and potential costs and risks.

Finally, the entrepreneurial spirit advocated here should result in attempts to apply the successes experienced elsewhere to the transit setting. But it is equally important to be clear-eyed about the differences between the transit environment and other transportation environments and about the limits of innovative measures imported from other settings. Projects that are poorly thought through are just as bad as no innovation at all.

Private Participation

Private participation in transit projects can offer many advantages. Involving private-sector entities in transit project development and operation can result in the following nonexhaus-

tive set of benefits: increased likelihood of time-certain completion of projects; increased likelihood that projects are developed when needed, not when public funds are available; more cost-effective service delivery; and development of innovative service delivery options. The arrangements described below all offer at least one of these types of benefits.

• Use of "bridge" financing by the private sector: The construction of the Hudson-Bergen line in northern New Jersey provides a good example of this. The use of grant anticipation notes in this project ensured that construction of the Hudson-Bergen line would begin well before Federal Transit Administration (FTA) funds were available.

• Linking the private sector to the development of transit-related projects: Ideally, the gains that result from these projects can be used to support transit investment and operations. Examples include a recent offer from Bechtel real estate/development partnership to build an airport transit line in Portland, Oregon, that will run through properties that the partnership aims to develop; Commonwealth & Atlantic construction of a transit station at Potomac Yards (eventually); and in Fairfax County, Virginia, developer proffers of land and cash to construct park-and-ride facilities and a bus transfer center in support of the Dulles Corridor Express Bus Park-and-Ride Program.

• Private construction of facilities and related risk sharing: Because claims are a big part of traditional transit construction financing, design-build arrangements may be able to reduce costly and time-consuming disputes. Design-build arrangements also are useful for projects that require time-certain delivery of a functional system. The recently opened extensions of Baltimore's light rail system relied on a design-build arrangement. FTA also is sponsoring a pilot program to implement design-build procedures more widely.

• Transfer of responsibility for some operations to private operators (paratransit): Taxicabs offer an example of one paratransit option, but privately operated jitneys, shuttle buses, and minibuses have the potential to compete successfully for even more transit traffic.

• Joint development of transit facilities: Partnerships with telecommunications firms for right-of-way, shared facilities, and rider services can enable transit agencies to share costs associated with route construction.

Innovative Financing Techniques

Most innovative finance techniques involve finding ways to reduce interest costs, increase the flexibility of repayment terms, reduce the need for up-front capital costs, share financing responsibilities with parties that traditionally have not assumed these responsibilities, or expand the range of expenditures for which local matches can be credited (typically to include expenditures that local governments would have made anyway but that also happen to support project development). All of the innovative financing techniques described below offer these benefits (although to varying degrees). However, no financing technique will be able to put a project over the feasibility "hump" if revenues and costs are not in line with one another. In other words, transit system fundamentals almost always need to be addressed before innovative finance techniques will be useful.

• Use of state revolving loan funds/SIBs: SIBs are revolving loan funds that have the potential to offer below-market interest rates and flexible repayment terms to projects that might not be built without such terms. There are only a few examples to date of projects that have used SIB financing successfully. A loan from the Florida SIB for development of Orlando's light rail system is close to closing and provides a good example. The Orlando project will be supported by future federal funds rather than by any permanent increase in funds. The Missouri Department of Transportation has proposed an intermodal facility for St. Louis, and the SIB application for Massachusetts calls for support of park-and-ride lots.

• Private financing/BOT structures: A number of examples of such projects currently exist, including the Tren Urbano, the BART extension to San Francisco International, and the Hudson-Bergen line. However, such projects are more typical abroad than in the United

States. This is because (*a*) the United States enjoys more established tax-exempt debt financing for public projects, (*b*) other countries have a poorer public sector compared with the private sector, (*c*) public requirements for bidding in the United States can be relatively cumbersome, and (*d*) lenders like the World Bank get involved in projects in less developed countries but not in the United States.

Unlike the preceding examples, most uses of innovative financing by transit agencies appear to involve a relatively large amount of paperwork for moderate financial benefits. Examples of highly touted but frequently only moderately effective mechanisms include the following:

- Certificates of participation (COPs): COPs are issued by special-purpose entities that can purchase assets and lease them back to transit systems. An example of how these special-purpose entities can offer access to savings is by obtaining discounts on bulk purchases of equipment that can then be leased to transit agencies.
- Cross-border leases: Cross-border leases involve the ownership of transit (or other) assets by entities outside U.S. borders. These assets are then leased back with the tax advantages associated with foreign ownership passed through. The acquisition of Baltimore's light rail transit vehicles involved cross-border leases. Note that savings from these complex transactions rarely total more than 2 or 3 percent of capital costs.
- Joint development: Joint development involves the private development of transit-owned property or the cooperative development of property adjacent to transit facilities. Joint development projects can provide tangible benefits. For example, the Washington Metropolitan Area Transit Authority enjoys an annual revenue stream of about $5 million from leases on its joint development projects. In most existing applications, however, transit authorities have not been able to acquire significant amounts of excess real estate to develop, or are constrained in the ways that they can use such property. An important point regarding joint development projects is that they are typically not able to provide much cash up front to assist with facility construction costs.
- Delayed local matching: Delayed local matching refers to a practice (permitted by FTA) in which local project sponsors can defer their local match share of transit projects from early to later years.
- Toll revenue credits: FTA also permits toll revenues to be used to provide the local match for the nonfederal portion of a federal transit grant. This flexibility in crediting local governments for their local matches may make it easier in some locations to generate funds to support transit facility development.
- Benefit assessment districts: Benefit assessment districts represent the attempt to capture a portion of the value enabled by newly constructed transit facilities. Typically, a fee representing some fraction of the estimated benefit per development unit is assessed on private development that is constructed within a specified impact area around a transit station or other transit facility. Benefit assessment districts were used in the Denver Tech Center project, but this dedicated funding source was not sufficient to meet capital and operating needs. In Los Angeles, attempts to impose special assessment districts around heavy rail stations encountered resistance in the courts for many years. These two issues—funding capability insufficient for systemwide support and vulnerability to judicial and political challenge—will continue to characterize the funding potential and institutional environment associated with benefit assessment districts.

Increasing Revenue Ridership

Despite the history of declining market share over the past several decades, real opportunities exist to attract new ridership—often with some combination of technology and innovative service. Successful implementation of these approaches will often require private-sector involvement. Others will require significant shifts in how transit authorities provide service.

Though the focus of this paper is not on innovations in transit service, these approaches are mentioned because the ability to increase transit ridership and transit efficiency has significant implications for the role that innovative methods can play in the financing of transit service improvements. The more that transit agencies can close the gap between revenues and costs, the more important that innovative financing methods will become to the establishment of new and improved transit operations. In other words, the smaller the difference between costs and revenues, the greater the role of financing schemes in supporting the viability of new transit projects.

Examples of methods that could potentially increase revenue ridership include the following:

- Use of ITS to increase ridership and reduce operating costs: A good example of this is New York's introduction of electronic fare cards. In this and other instances, technology offers not only a service improvement for riders but also an opportunity to develop a relationship between an operator and a third-party information service provider through integrated advanced passenger information systems. Other examples include the adoption of advanced passenger information systems, implementation of high-tech/user-friendly fare collection, and use of high-tech customer services (such as interactive trip planning via the Internet or cable TV).
- Use of ITS technology to improve transit service: For instance, technology currently exists to allow smaller buses to provide on-call service for door-to-door service in certain corridors. This has the potential to support service comparable with private automobile use at a fraction of the cost. This approach could actually involve two innovations: implementation of ITS and use of ITS to establish franchise agreements with small-scale operators.
- Joint development of transit facilities: Joint development is often touted for its potential to support financing of transit facilities. However, joint development with transit-compatible land uses (mainly higher-density, mixed use, pedestrian-friendly development) also has the potential to increase system ridership and increase revenues without increasing operating costs.
- Improvements in transit service levels and focusing service improvements on corridors with high ridership potential: Adopting a customer-service orientation and adapting to changing travel patterns and purposes are important areas for increasing ridership and efficiency. These approaches could well involve cutting service to areas with low ridership and encouraging paratransit operations to serve marginally productive routes.

Economic and Social Relevance of Central Cities in the Nation's 12 Largest Urban Regions

Regina Armstrong, *Urbanomics*

The nation's 12 largest urban regions, located throughout the continental United States, make up the essential core of the American economy. With few exceptions, they are America's major centers of innovation and technological advancement. Yet they are also at the front line of demographic change: they house the bulk of the country's new immigrants, they deal with evolving family and household relationships, and they cope with major growth in the nation's elderly population. Collectively home to 90 million inhabitants—a population greater than that of Mexico or Germany—the 12 largest regions and their 14 central cities represent a significant force in the global economy.

In this paper a brief overview of the economic and social relevance of the nation's largest cities and their urban regions is presented. Although some cities, independent of their surrounding suburban areas, would not rank among the largest in population terms, their importance is established through their status as the central cities of the largest urban agglomerations. Because the two—city and region—are so inextricably bound, the focus in this paper is on socioeconomic trends and conditions in both areas. The largest cities and their urban regions, defined as consolidated metropolitan statistical areas (CMSAs) or metropolitan statistical areas (MSAs) by the U.S. Office of Management and Budget (OMB), were ranked in 1996 by descending order of region size:

- New York, New York–Northern New Jersey–Long Island, NY-NJ-CT-PA CMSA;
- Los Angeles, Los Angeles–Riverside–Orange County, CA CMSA;
- Chicago, Chicago-Gary-Kenosha, IL-IN-WI CMSA;
- Washington and Baltimore, Washington-Baltimore, DC-MD-VA-WV CMSA;
- San Francisco, San Francisco–Oakland–San Jose, CA CMSA;
- Philadelphia, Philadelphia–Wilmington–Atlantic City, PA-NJ-DE-MD CMSA;
- Boston, Boston-Worcester-Lawrence, MA-NH-ME-CT CMSA;
- Detroit, Detroit–Ann Arbor–Flint, MI CMSA;
- Dallas and Fort Worth, Dallas–Fort Worth, TX CMSA;
- Houston, Houston-Galveston-Brazoria, TX CMSA;

- Atlanta, Atlanta, GA MSA; and
- Miami, Miami–Fort Lauderdale, FL CMSA.

Nation's Largest Urban Regions

In 1996, the 12 largest urban regions contained 90.5 million inhabitants, or 34 percent of the nation's total population. Redefined by OMB on the basis of the 1990 census to encompass more geographic areas, the regions have grown by 4.75 million persons in the 1990s, or nearly 1 percent per year, from a revised decennial population of 85.8 inhabitants. As such, they have accommodated 3 of every 10 new persons and retain a stable one-third share of the nation's population. As Table 1 indicates, all regions experienced population growth since 1990, though the slowest rates, concentrated primarily in the Northeast, provide a sharp contrast from the rapid expansion of regions in the South and Southwest.

The geographic redefinition of metropolitan areas by OMB has resulted in increasingly "megalopolitan" patterns of settlement. Over the period 1970 to 1996, the gaps between metropolitan settlements have been closing, as the largest urban regions absorb not only smaller MSAs, but also rural counties, in their wake. To date, the Boston-to-Washington chain of settlement has nearly merged in four major urban regions, whereas in the other megalopolitan corridors—Los Angeles to San Francisco, Chicago to Detroit, and Houston to Dallas/Fort Worth—the major urban regions will eventually incorporate smaller intervening metropolitan areas as commutation flows increase. These dramatic changes give evidence of the strength of economic links at the highest levels of urban development. And, by inference, they underscore the importance of the central cities that anchor the major urban regions.

Other measures illustrate the relative importance of the 12 largest urban regions to the American economy and population. Because these indicators are measured on the basis of the prior OMB area definition used in the 1990 census statistical tape files, they should be inflated by several percentage points to reflect the recent geographic expansion in coverage. The measures indicate various strengths or significant attributes of the regions:

- *Race and ethnicity:* The population of the largest urban regions, characterized by a broad base of multiracial and multiethnic inhabitants, is more diverse than that of the nation as a whole. Fully 56 percent of all Hispanics, one of every two Asians/others, and three of every seven non-Hispanic blacks reside in these areas, compared with only 28 percent of all white non-Hispanics. Collectively, the largest urban regions are more than one-third minority in composition, whereas the nation as a whole is one-fourth.
- *Nativity:* A disproportionate share of foreign-born persons reside in the largest urban regions, or 67 percent of the nation's total, whereas even higher capture rates characterize the most recent immigrants (or 71 percent of all foreign-born arriving in the 1980s). By contrast, 30 percent of all native-born Americans live in these areas. On the average, in 1990, one of every six residents was foreign-born, whereas five of every six were native-born, with the ratio shifting toward more foreign-born representation ever since, as heavy foreign immigration flows continue and are directed toward the largest urban agglomerations.
- *Language spoken:* A high degree of linguistic isolation characterizes the foreign-born population of the largest urban regions. In the nation as a whole, 84 percent of all households speak English as their primary language, compared with only 75 percent in the 12 largest regions. In these areas, fully 64 percent of all Spanish-speaking, 65 percent of all Asian-language-speaking, and 54 percent of all other non-English-speaking households characterize themselves as linguistically isolated. On the whole, the 12 largest urban regions contain one of every two households in the nation speaking a language other than English as the primary language.
- *Educational attainment:* Among all residents 25 years of age or older, the largest urban regions attract the highest proportion of well-educated Americans. Fully 43 percent of those with graduate degrees or professional diplomas live in these areas, whereas only 29 percent of all high school graduates are residents. The duality of the areas' demographic character is,

TABLE 1 Population of the 12 Largest Urban Regions, 1990 and 1996

Region	1990 Census Population	Revised[a] Census Population	1996 Population Estimate[b]	1990–1996 Population Change	
				No.	Percent
New York-NNJ-Long Island CMSA	18,087,251	19,549,649	19,938,492	388,843	1.99
Los Angeles-Riverside-Orange Co CMSA	14,531,529	14,531,529	15,495,155	963,626	6.63
Chicago-Gary-Kenosha CMSA	8,065,633	8,239,820	8,599,774	359,954	4.37
Washington-Baltimore CMSA	6,305,746	6,726,395	7,164,519	438,124	6.51
San Francisco-Oakland-San Jose CMSA	6,253,311	6,249,881	6,605,428	355,547	5.69
Philadelphia-Wilmington-Atlantic City CMSA	5,899,345	5,893,019	5,973,463	80,444	1.37
Boston-Worcester-Lawrence CMSA	4,171,747	5,455,403	5,563,475	108,072	1.98
Detroit-Ann Arbor-Flint CMSA	4,665,236	5,187,171	5,284,171	97,000	1.87
Dallas-Fort Worth CMSA	3,885,415	4,037,282	4,574,561	537,279	13.31
Houston-Galveston-Brazoria CMSA	3,711,043	3,731,029	4,253,428	522,399	14.00
Atlanta MSA	2,833,511	2,959,500	3,541,230	581,730	19.66
Miami-Fort Lauderdale CMSA	3,192,582	3,192,725	3,514,403	321,678	10.08
12 Urban Region Total	81,602,349	85,753,403	90,508,099	4,754,696	5.54
United States	248,709,873	248,718,301	265,283,783	16,565,482	6.66
As % of United States	32.81%	34.48%	34.12%	–0.36%	

[a] Revision reflects geographic redefinition based on results of the 1990 Census and corrections of the 1990 Census enumeration.
[b] 1990 population estimates are prepared by the Population Estimates Division of the Census Bureau as part of the Federal State Cooperative Estimates Program.
Source: U.S. Bureau of the Census.

however, apparent in the higher proportion of high school dropouts or those with little or no education; among them, 31 percent of the nation's total inhabit the largest urban areas.

• *Household formation:* With 33 percent of the reported population in 1990, the regions contain 32 percent of all households in the nation. More nonfamily households are located in the regions (34 percent) than family households, particularly households composed of two or more unrelated individuals. Whereas their share of single-person households does not differ from the national norm, the largest urban regions contain a disproportionate number of large-sized households, especially six and seven-plus person households (respectively, 38 and 46 percent of the nation's total).

• *Household mobility:* The American population is highly mobile, with only 53 percent of all persons over 5 years of age in 1990 living in the same dwelling they inhabited in 1985. Roughly the same is true of the largest urban regions; however, these areas report a higher percentage of residents resettling within the same metropolitan areas during the 5-year period. Relatively few move in from smaller or nonmetropolitan areas, whereas relatively more relocate from abroad.

• *Labor force participation:* In 1990, the largest urban regions had a civilian labor force of 43 million persons, or 35 percent of the nation's total. With one of every two inhabitants employed in the civilian sector, these urban regions were marked by a far greater than national concentration of employment destinations. The heavy journey-to-work flows within these areas meant that more than one of every three work trips in the nation were confined to 3 percent of the entire U.S land area.

Role of Central Cities and Urban Regions in the Nation

The economic importance of the central cities in the largest urban regions is apparent from the fact that fully one-third of all metropolitan work trip destinations are to these places (Table 2), which in themselves account for less than 0.1 percent of U.S land area. Typically defined as places of 50,000 persons or more, the central cities that anchor the largest urban regions not only caused the initial urban settlement but also continue to spawn much of the economic development and population growth in these regions. Historically, the population base has spread more rapidly from the central cities than has the employment, but often the laws of land use succession have not had a comparable effect.

Demographic Trends and Conditions

In 1990, the 14 central cities of the 12 largest urban regions had a population of 22.7 million persons, or 28 percent of all urban region inhabitants. By 1996, the cities' population base had barely changed—declining by 1,400 persons overall in census-revised terms—while the regions' population had grown considerably. Thus, all of the gain of 4.8 million persons in the largest urban regions since 1990 has occurred outside the central cities, whose share of the regional population declined to 25 percent by 1996.

Yet the cities are changing in demographic structure. First and foremost, they are the most heterogeneous places in the nation, accounting for much of the regions' diversity, and their heterogeneity is growing in racial, ethnic, and immigrant terms. In 1990, fully 59 percent of the central cities' population was minority black, Asian/others, and Hispanic, whereas 41 percent was majority white non-Hispanic. Housing fewer than 1 of 10 persons in the nation, the 14 cities contain more than 1 of 4 foreign-born and drew fully 30 percent of the immigrants arriving in the 1980s. Since then, despite a lack of growth in population, they have attracted more than 1.3 million new immigrants of the nation's 4.8 million net foreign influx. New York City alone has averaged more than 100,000 new immigrants per year since 1990, while Los Angeles, Chicago, Houston, and San Francisco have each drawn tens of thousands of foreign-born annually. Among the 14, only Atlanta, Boston, and Detroit are characterized by relatively low levels of foreign immigration.

TABLE 2 Work Trips in the 12 Largest Urban Regions and 14 Central Cities in 1990

	Work Trip Destinations		
Region	Total Region	Central City	Rest of CMSA/MSA
New York-NNJ-Long Island CMSA	8,654,406	3,726,776	4,927,630
Los Angeles-Riverside-Orange Co CMSA	6,813,757	1,844,336	4,969,421
Chicago-Gary-Kenosha CMSA	3,831,789	1,385,981	2,445,808
Washington-Baltimore CMSA	3,498,141	1,126,808	2,371,333
San Francisco-Oakland-San Jose CMSA	3,153,201	567,112	2,586,089
Philadelphia-Wilmington-Atlantic City CMSA	2,433,682	761,244	1,672,438
Boston-Worcester-Lawrence CMSA	2,242,575	497,653	1,744,922
Detroit-Ann Arbor-Flint CMSA	2,091,608	366,424	1,725,184
Dallas-Fort Worth CMSA	2,009,838	1,025,158	984,680
Houston-Galveston-Brazoria CMSA	1,779,289	1,133,393	645,896
Atlanta MSA	1,528,470	403,224	1,125,246
Miami-Fort Lauderdale CMSA	1,474,523	342,841	1,131,682
12 Urban Region Total	39,511,279	13,180,950	26,330,329
United States	115,070,274		
As % of United States	34.3%	11.5%	22.9%

Note: Work trip destinations provide the only place of work measure of employment in the decennial census. In comparison to other employment measures by place of work—such as the Bureau of Economic Analysis "total employment" or the Bureau of Labor Statistics "non-farm payroll employment"—work trip destinations do not fully represent all jobs by place of work.
Source: U.S. Bureau of the Census, Census Transportation Planning Package (CTPP).

The implications of the heavy foreign settlement flows to the nation's major cities go beyond the sheer magnitude of numbers. Coincident with this influx are natural pressures for population growth (greater numbers of births than deaths in the resident population) that are occurring and are not reflected in an expansion of the central city population. Clearly, for the 14 cities to have absorbed more than 1.3 million new immigrants without population growth since 1990, the cities must have concurrently lost nearly 2 million residents, primarily white non-Hispanics, to the rest of the regions' environs in the 6-year period.

Increasing racial, ethnic, and immigrant diversity has imbued the central cities with other demographic characteristics that stand in sharp contrast to the surrounding regions and to the nation. On the positive side, compared with the United States as a whole, the 14 major cities have a more youthful population, many more multilingual and multicultural resources, a higher proportion of adults with college, graduate school, and professional diplomas, and a labor force relatively more skilled in white collar and service occupations. On the negative side, however, the cities report a significant degree of linguistic isolation with limited or no use of the English language among segments of the population, a pool of high school dropouts nearly half again greater than all adults with a college diploma (including postgraduate or professional education), relatively more persons of young-to-prime labor force ages yet lower employment among residents, and a greater degree of poverty across all ages. Table 3 summarizes the demographic indicators.

TABLE 3 Summary Demographic Indicators of Central Cities, Regions, and Suburbs,[a] 1990 (Thousands of Persons or Percent)

Demographic Indicator	14 Central Cities	12 Urban Regions	12 Region Suburbs[a]	Central Cities As % of Regions	Central Cities As % of Nation
Total population by race/ethnicity	22,684.1	81,602.3	58,918.2	27.8	9.1
White non-Hispanic	9,282.3	52,137.3	42,855.0	17.8	4.9
Black non-Hispanic	7,054.5	12,631.4	5,576.9	55.9	24.1
Asian/Other	1,432.9	4,492.8	3,059.9	31.9	15.8
Hispanic	4,914.3	12,340.9	7,426.6	39.8	22.4
Households by composition	8,565.2	29,590.0	21,024.8	29.0	9.3
Families	5,264.9	20,543.7	15,278.7	25.6	8.1
Single persons	2,737.5	7,350.2	4,612.7	37.2	12.2
2+ unrelated individuals	562.8	1,696.1	1,133.4	33.2	12.4
Population in group quarters	542.7	1,710.8	1,168.1	31.7	8.2
Native-born population	17,839.2	68,410.3	50,571.1	26.1	7.8
Foreign-born population	5,155.1	13,192.1	8,037.0	39.1	26.1
Immigrants arriving in 1980s	2,571.5	6,126.6	3,555.1	42.0	29.7
English-speaking households	5,790.4	22,336.6	16,546.2	25.9	7.5
Non-English-speaking households	2,774.8	7,253.3	4,478.5	38.3	19.3
Linguistically isolated households	860.2	1,802.1	941.9	47.7	29.3
Youthful population (<25 years)	8,036.5	28,816.5	20,780.0	27.9	9.0
Elderly population	11,918.1	43,614.9	31,696.8	27.3	9.3
Working-age population (25–64 years)	2,729.5	9,170.9	6,441.4	29.8	8.8
HS dropout	4,708.0	12,341.7	7,633.7	38.2	12.0
HS graduate or some college	6,672.1	27,146.7	20,474.6	24.6	7.7
College graduate or more	3,267.4	13,297.4	10,029.9	24.6	10.1
Population in poverty	4,505.9	9,065.9	4,560.0	49.7	14.2
Persons with mobility/self-care disabilities	1,816.7	4,531.3	2,714.6	40.1	13.8

[a] Denotes rest of urban region including suburbs, smaller cities, and rural areas.
Source: U.S. Bureau of the Census, STF 1a and 3a.

Economic Importance of Central Cities

The 14 major cities are the engines that power vast regional economies comprising more than one-third of the nation's productive capacity, earnings, and employment. Although the current levels of and past trends in regional employment are difficult to measure because of differences in spatial coverage and conceptual definition of employment at present and over time, it is probable that the 12 largest urban regions contained some 41 million payroll jobs, or 34 percent of the nation's nonfarm employment, excluding self-employment, in 1997. Given higher levels of productivity and profitability in these economies, affirmed by higher worker earnings and tax liabilities, it is likely that the 12 regions account for about 45 percent of the gross domestic product (GDP) in the nation's economy, or roughly $3.5 trillion in current dollars. (The leading region—New York–Northeastern New Jersey—alone represents 7 percent of national employment and 10 percent of GDP.) In this immense concentration of economic resources, the 14 central cities play a vital and irreplaceable role.

During the past quarter century, the major urban regions generated more than 11 million jobs, growing from 29.6 million payroll jobs in 1975 to some 41 million at present. Although employment grew faster in the rest of nation, the 12 regions' share of total nonfarm employment slipped only 5 points, from 39 to 34 percent. Rank ordered by size, the shares of the eight largest regions all diminished, whereas those of the four smallest and all southern regions—Dallas–Fort Worth, Houston, Atlanta, and Miami—increased.

In 1990, according to census journey-to-work data, the 14 central cities of the largest urban regions contained 13.2 million work trip destinations or 33 percent of urban region employment.[1] Thus, the economic importance of the major central cities is, at a minimum, shown in their one-third share of the most productive one-third of the nation's workforce. As Table 4 indicates, workers in the central cities of the 12 largest urban regions are more skilled, employed in more information-based sectors, and more highly paid than their regional counterparts. As subsequent data will show, the economic importance of the major central cities extends beyond these employment measures.

Fully two of every three jobs in the major central cities are white collar jobs, split almost evenly between high white collar occupations—executives, managers, and professional workers—and low white collar occupations—less skilled technical, sales, and administrative support jobs. The cities claim 36 percent of all high white collar work and 33 percent of all low white collar work. Service and blue collar jobs are less well represented in the 14 cities, with one-third of all service work and 30 percent of all blue collar work in the urban regions. By contrast, the suburbs or the rest of urban region areas claim the greatest share of high blue collar work (crafts), while accounting for the lowest share of high white collar work. The narrow difference in median earnings by place of work is explained in part by the concentration of well-paying high blue collar work in the suburbs and the broader distribution of white collar earnings in the cities, which are not fully reflected in a midpoint measure.

The attraction of the central cities for white collar, office-type work is also apparent in the industrial classification of employment by goods or services produced. The highest shares of regional jobs in central cities are found in government (public administration) and financial services, followed closely by transportation and utilities, and business and professional services, with the shares of all the cities ranging from 44 to 38 percent of the region's totals. Whereas not all jobs in these sectors are office jobs, the overwhelming majority are, suggesting that the 14 central cities may house as many as 5 million jobs in office buildings. The lowest shares of regional employment found in central cities occur in goods-handling activities that typically require larger footprints and lower-density locations. Collectively, manufacturing, wholesale and retail trade, and mining and construction (other) account for less employment in central cities than office employment, making up 25 to 28 percent of regional totals. Population-serving activities like personal, entertainment, health, and education services tend to represent the average share of regional jobs, at 35 to 37 percent, even though they attract more than the cities' share of regional inhabitants (28 percent).

In every major central city, the demand for workers outstrips the supply of the resident employed labor force, giving rise to a flow of daily commuters. Volumes are heaviest in New

TABLE 4 Summary Workplace Indicators of Central Cities, Regions, and Suburbs,[a] 1990 (Thousands of Jobs, 1990 Dollars, or Percent)

Workplace Indicator	14 Central Cities	12 Urban Regions	12 Region Suburbs[a]	Cities as % of Regions
Employment by occupation	13,181.0	39,511.3	26,330.3	33.4
High white collar	4,303.3	11,913.4	7,610.1	36.1
Low white collar	4,428.3	13,304.0	8,875.8	33.3
Service/other	1,823.2	5,463.6	3,640.4	33.4
High blue collar	1,146.2	4,042.8	2,896.7	28.4
Low blue collar	1,480.0	4,787.4	3,307.4	30.9
Employment by industry	13,181.0	39,511.3	26,330.3	33.4
Manufacturing	1,642.1	6,458.2	4,816.0	25.4
Transportation and utilities	1,221.3	3,076.3	1,855.0	39.7
Trade	2,288.0	8,046.1	5,758.1	28.4
Finance, insurance, real estate	1,436.1	3,384.3	1,948.1	42.4
Business and professional services	2,078.7	5,407.2	3,328.5	38.4
Personal and entertainment services	668.5	1,810.3	1,141.7	36.9
Health and education	2,149.3	6,146.5	3,997.1	35.0
Public administration	825.9	1,895.3	1,069.4	43.6
Other	870.9	3,287.2	2,416.3	26.5
Median earnings of workers	$22,703	$22,466	$22,348	101.1

[a] Denotes rest of urban region including suburbs, smaller cities, and rural areas.
Source: U.S. Bureau of the Census, CTPP.

York City and Washington, D.C., each exceeding a net influx of 400,000 workers in 1990. The relative share of commuters in total central city employment was greatest in Atlanta and Miami, as well as Washington, D.C., breaking above 50 percent of the total. In part, the need for daily commutation to central city work reflects the labor force status and characteristics of the central city residents. As Table 5 shows, 11.3 million city residents, comprising 50 percent of city population, were working or seeking work in 1990. Of them, 9.3 percent were unemployed, yielding 10.2 million resident workers. In the suburbs, the labor force participation rate was higher, averaging 53 percent, and the jobless rate was lower, at 5.2 percent. Whereas the 14 central cities had a net shortfall of 2.9 million workers for their job locations, the suburbs had a surplus of 3.5 million workers.[2]

As Table 5 indicates, the occupational characteristics and industry affiliations of central city resident workers did not correspond well with requirements of central city jobs. Although needs were manifest across all fields, these workers tended to be less skilled and less oriented toward information-based work. Blue collar and service occupations characterized 39 percent of the resident employed, whereas blue collar and service jobs accounted for 34 percent of city work. The largest influx of commuters occurred among workers with high white collar skills, with the city resident shortfall equal to one-third of city-based jobs. Even low white collar skills were in heavy demand with more than 1 million nonresidents supplementing some 3 million resident workers on a net basis. By industry classification, the office-type sectors—business and professional services, financial services, transportation, and utilities—drew the heaviest inflow, supplemented by health and educational institutions.

The daily flow of commutation represents the most visible, if not the most important, linkage between the economies of central cities and their urban regions. Commuters bring home billions of dollars of annual earnings from their central city jobs, stimulating the suburban housing markets, local economies, and tax bases. In 1995, as Table 6 indicates, the net commutation earnings outflows from the 14 central cities amounted to $159 billion, or 18 percent of central city employment earnings. Viewed from the suburban or rest-of-region perspective, the net commutation earnings inflow measured $148 billion, contributing 15

TABLE 5 Summary Labor Force Indicators of Central Cities, Regions, and Suburbs,[a] 1990 (Thousands of Resident Workers or Percent)

Labor Force Indicator	14 Central Cities	12 Urban Regions	12 Region Suburbs[a]	Cities as % of Regions	Net Flow into Cities
Resident labor force	11,302.8	42,760.9	31,458.1	26.4	n/a
Employed	10,249.5	40,066.1	29,816.6	25.6	2,931.5
Unemployment rate	9.3%	6.3%	5.2%	147.6	n/a
Employed residents by occupation	10,249.5	40,066.1	29,816.6	25.6	2,931.5
High white collar	2,890.6	12,135.7	9,245.1	23.8	1,412.7
Low white collar	3,387.0	13,598.1	10,211.1	24.9	1,041.3
Service/other	1,680.9	5,355.7	3,674.8	31.4	142.3
High blue collar	878.2	4,083.8	3,205.6	21.5	268.0
Low blue collar	1,412.8	4,892.8	3,480.0	28.9	67.2
Employment by industry	10,249.5	40,066.1	29,816.6	25.6	2,931.5
Manufacturing	1,425.5	6,565.6	5,140.1	21.7	216.6
Transportation and utilities	820.8	3,106.5	2,285.7	26.4	400.5
Trade	1,962.4	8,253.9	6,291.5	23.8	325.6
Finance, insurance, real estate	995.1	3,456.7	2,461.5	28.8	441.0
Business and professional services	1,579.4	5,518.2	3,938.8	28.6	499.3
Personal and entertainment services	619.3	1,875.6	1,256.3	33.0	49.2
Health and education	1,733.5	6,343.7	4,610.2	27.3	415.8
Public administration	509.5	1,920.4	1,410.9	26.5	316.4
Other	604.1	3,025.4	2,421.3	20.0	266.8
Average household income	$38,968	$47,515	$50,997	82.0	n/a

[a] Denotes rest of urban region including suburbs, smaller cities, and rural areas.
Source: U.S. Bureau of the Census, STF 1a and 3a.

TABLE 6 Illustrative Links: Commuter Income Flows Between Central Cities and Suburbs,[a] 1995 (*1*)

Central City and Urban Region	Aggregate Net Earnings of Commuters ($ Millions)		Central City Commuter Earnings as % of Earnings in	
	To Central City	From Rest of Region	Central City	Rest of of Region
New York City/NY-NENJ-LI CMSA	43.06	40.32	22.7	15.9
Los Angeles/LA-Riverside-Orange CMSA	16.48	16.61	9.7	16.5
Chicago/Chicago-Gary-Kenosha CMSA	15.47	14.32	13.5	21.9
Washington-Baltimore/Washington-Baltimore CMSA	26.25	24.54	52.7	21.9
San Francisco/San Francisco-Oakland-San Jose CMSA	10.01	7.91	34.5	8.3
Philadelphia/Philadelphia-Wilmington-Atlantic City CMSA	8.19	9.83	28.7	9.5
Boston/Boston-Worcester-Lawrence CMSA	0.56	(0.08)	1.6	0.6
Detroit/Detroit-Ann Arbor-Flint CMSA	5.31	4.65	13.6	8.1
Dallas-Fort Worth/Dallas-Fort Worth CMSA	11.54	10.62	14.3	53.2
Houston/Houston-Galveston-Brazoria CMSA	7.31	6.88	9.9	42.4
Atlanta/Atlanta MSA	11.00	9.71	37.3	22.4
Miami/Miami-Fort Lauderdale CMSA	4.01	2.70	12.3	18.9
14 central cities/12 urban regions total	159.19	148.01	18.3	15.4

[a] Denotes rest of urban region including suburbs, smaller cities, and rural areas.

percent to total earnings by place of residence. When one-sixth of a suburban work force relies on opportunities in the central city for gainful employment, as is the case for nine of the major urban regions, the relationship between suburbs and cities is clearly dependent.

Other links between central city economies and urban regions may be equally significant but are less measurable in effect than commutation. For example, where central city employment data are available, it has been noted that the rates of change in city and rest-of-region employment have been moving in tandem, with increasing frequency, over the business cycle. And where business births, deaths, and relocations are methodically measured—often by state administrative employment insurance records—central cities emerge as the major generators of business formation, by replenishing firm deaths with firm births and by spinning off as many or more firms through relocations to the suburbs. Manufacturing firms, corporate headquarters or back offices, and major retailers may serve as examples of suburban establishments that had their origins in the central city of the urban region. Often, suburban companies continue to use central city services after their relocation. A survey conducted in New York showed that firms with headquarters in the suburbs rely extensively on Manhattan for investment banking (93 percent), legal counsel (74 percent), and transfer agent (74 percent) and insurance brokerage (53 percent) services (2).

Role of Central Cities in the Global Economy

Beyond their role as engines of a regional economy, the major central cities play a significant part in the global economy. Though not all cities can claim these functions, collectively they serve as

- Command posts for multinational businesses;
- Sites of global financial markets;
- Providers of managerial and corporate services;
- Global centers of culture, arts, fashion, and entertainment;
- Global tourist destinations;
- World-class office centers; and
- Centers of world governments, intergovernmental organizations, and nongovernmental organizations.

The 14 central cities represent the greatest command post of corporate business in America. In 1997, fully 140 of the "Fortune 500" corporations were headquartered in these cities, reaping a combined $1.787 trillion in gross revenues and earning an average profit of 7 percent, as Table 7 indicates. Fortune 500, the gold standard of corporate rankings, draws from all sectors of the American economy—service as well as goods production—and represents the nation's largest corporations, including manufacturers, retailers, financial service firms, and software vendors. With 11 percent of U.S. employment, on the average, the 14 central cities were home to 28 percent of the largest U.S. corporations and 32 percent of their earnings. In rank descending order, the largest number of headquarters were located in New York (one-third of total), Chicago, Houston, Dallas–Fort Worth, and Atlanta. Among all central cities and suburban areas, the greatest earnings power was concentrated in New York, Detroit, Chicago, Atlanta, Houston, and San Francisco.

Forty percent of the Fortune 500 corporations headquartered in the major central cities also rank among the world's largest corporations, as measured by *Fortune Magazine*.[3] In 1996, the 14 cities were the headquarters of 57 global corporations, or 11 percent of the world's 500 largest corporations and one of every three of the 162 Global 500 located in the United States. Gross revenues amounted to $1.25 trillion, or 35 percent of the Global 500 earnings originating in the United States. Although every central city except Miami housed corporations on the Global 500 list, New York City dominated the profile with two of every five of the cities' total. Atlanta, San Francisco, Chicago, and Houston also had significant numbers of global front offices.

TABLE 7 Headquarters Location of Fortune 500 and Global 500 in Central Cities and Regions, 1996–1997

	Number of Top 500 Corporations		Corporate Revenues (Thousands of Current Dollars)		Profit as % of Revenue—
	Fortune	Global	Fortune	Global	Fortune
Headquartered in central cities					
New York City	47	23	694,025	500,821	8.3
Los Angeles	5	2	45,582	29,726	6.8
Chicago	16	4	175,549	76,384	6.9
Washington-Baltimore	6	3	69,012	99,950	5.9
San Francisco	8	5	115,036	93,679	8.3
Philadelphia	8	3	61,720	41,906	6.6
Boston	6	2	48,189	20,665	8.3
Detroit	3	1	185,113	168,369	3.2
Dallas-Fort Worth	12	3	95,634	47,219	4.5
Houston	15	4	134,217	56,713	4.3
Atlanta	11	7	150,137	115,327	8.2
Miami	3	0	13,246	0	2.7
14 central cities	140	57	1,787,460	1,250,758	6.9
Headquartered in urban regions					
NY-NNJ-Long Island CMSA	95	41	1,338,992	981,433	n/a
LA-Riverside-Orange CMSA	23	6	168,378	77,050	n/a
Chicago-Gary-Kenosha CMSA	34	10	328,120	177,804	n/a
Washington-Baltimore CMSA	16	6	206,370	211,208	n/a
San Francisco-Oakland-San Jose CMSA	25	10	294,732	198,787	n/a
Philadelphia-Wilmington-Atlantic City CMSA	14	5	132,920	93,926	n/a
Boston-Worcester-Lawrence CMSA	11	3	88,795	35,228	n/a
Detroit-Ann Arbor-Flint CMSA	10	4	451,813	408,194	n/a

(Continued on next page)

TABLE 7 *(continued)*

	Number of Top 500 Corporations		Corporate Revenues (Thousands of Current Dollars)		Profit as % of Revenue—
	Fortune	Global	Fortune	Global	Fortune
Dallas-Fort Worth CMSA	16	6	276,342	203,451	n/a
Houston-Galveston-Brazoria CMSA	15	4	134,217	56,713	n/a
Atlanta MSA	12	7	153,361	115,327	n/a
Miami-Fort Lauderdale CMSA	5	0	27,453	0	n/a
12 urban regions	275	102	3,601,493	2,559,121	n/a
Headquartered in United States	500	162	5,519,000	3,530,703	n/a

Note: "Fortune" headquarter locations and corporate revenues are based on 1997 annual reports; "Global" headquarter locations and corporate revenues, as well as "Fortune" profit percentages, are based on 1996 annual reports. The U.S. Post Office is included among "Global" corporations, but is excluded from "Fortune" corporations.

Source: *Fortune Magazine*, May 1998 and August 1997.

The central cities also ensure the appeal of their urban regions to Fortune 500 and Global 500 corporations. Over time, a significant number of these headquarters relocated to the suburbs from the central cities, often to campus-type locations that provided access to the suburban labor markets and the center city support services. As Table 7 indicates, collectively the central cities and suburban areas of the urban regions contain the headquarters of 275 of the Fortune 500, or 55 percent, and a remarkable 102 of the Global 500, or 63 percent of the 162 Global 500 located in the United States. From a financial perspective, with $3.6 trillion in gross revenues associated with the 275 Fortune 500 companies, the 12 urban regions house 65 percent of the corporate earnings power of the nation's elite businesses, and an even greater 72 percent of the global market revenues. On a regional scale, the most significant concentration of global corporations is in the New York Urban Region, the premier world class region, followed by Chicago and San Francisco.

Most of the 14 central cities serve as managers of domestic financial markets, though only New York and, to a lesser extent, Chicago play important roles in global financial markets. New York accounts for more than half of all securities traded on a global basis by the three world capital markets, leading London and Tokyo by a wide margin (3). In fact, more foreign companies are now traded on New York exchanges than in London, Frankfurt, Paris, and Tokyo combined. New York and, primarily, Chicago represent the United States in international commodity trading, futures, and options markets.

A significant share of commercial banking is concentrated in the 14 central cities, $1.37 trillion in 1995, representing 66 percent of deposits on account with the top 300 commercial banks in the United States and 45 percent of all commercial bank deposits (4). However, not all cities attract foreign banks. Ten of the 14 central cities lead the nation in foreign banking, but New York outweighs all other cities combined in the sheer number of its foreign bank offices.

Fiscal Relationship of Central Cities and the Federal Government

The vast wealth and productive resources concentrated in the nation's major central cities create a significant source of tax revenue for the federal and state governments. In turn, the cities receive intergovernmental transfers in the form of grant awards, direct loans, and other aid assistance and obligations. In addition, the presence of other government facilities results in the infusion of significant labor payments to employees working in central cities, and direct transfers are made to residents for retirement, disability, and other social insurance purposes, as well as contract awards to businesses that participate in procurement programs. Because of data reporting and apportionment issues, it is not possible to measure the value of federal tax revenues originating in cities or other substate jurisdictions. However, accurate accounting of direct federal expenditures and other assistance by locality is kept.

In FY 1996, the 12 major urban regions received $456 billion in direct federal expenditures, or 33 percent of $1.4 trillion expended by the government on grant awards, salaries, transfer payments, and procurement contracts (Table 8). Another $186 billion was received from federal sources for direct loans, guaranteed loans, and insurance purposes, forming 34 percent of the total. On a resident population and employment basis, this level of direct federal expenditure and other assistance was proportional to the 34 percent shares of U.S. population and employment located in the urban regions. However, on an earnings and asset basis, it was undoubtedly undervalued, since urban region households receive 40 percent of aggregate household income in the United States and urban region corporations generate a greater but unknown share of business income.

The 14 central cities or their host counties receive 46 percent of the direct federal expenditures flowing to the 12 urban regions, and 34 percent of other forms of federal assistance. This $211 billion in direct federal expenditures to the cities in FY 1996 represented 15 percent of the federal largesse, or significantly more than the cities' 9 percent share of the U.S. population and aggregate household income, as well as their 11.5 percent share of U.S. employment. However, this was probably very nearly on a par with the cities' contribution

TABLE 8 Federal Government Expenditures or Obligations in 12 Urban Regions, FY 1996 (5)

	Aggregate Expenditure ($ Thousands)			As % of United States		
Expenditures	Central City or County	Suburbs[a]	Urban Region	Central City or County	Suburbs[a]	Urban Region
Total direct expenditures or obligations	210,948	245,069	456,017	15.1	17.6	32.7
Grant awards	46,743	33,284	80,027	19.4	13.8	33.2
Salaries and wages	30,268	30,823	61,091	17.8	18.2	36.0
Direct payments for individuals	99,227	133,357	232,584	13.0	17.5	30.5
Procurement contract awards	33,537	46,920	80,457	16.8	23.6	40.4
Other obligations	1,173	685	1,858	4.6	2.7	7.3
Other federal assistance	63,182	122,845	186,027	11.5	22.4	33.9
Direct loans	853	887	1,741	4.2	4.4	8.6
Guaranteed loans and insurance	62,329	121,958	184,286	11.8	23.1	34.9
Total outlays	274,130	367,914	642,044	14.1	18.9	33.0

[a] Denotes rest of urban region including suburbs, smaller cities, and rural areas.

to GDP. Other federal assistance to the cities, valued at $63 billion in FY 1996, represented 11.5 percent of national outlays and was therefore on a par with the cities' share of U.S. employment, although markedly below that of its share in GDP. The combined federal expenditures or obligations to cities of $274 billion, at 14 percent, however, is not a true reflection of the economic importance of these cities to the national economy.

Still, the 14 cities fare exceptionally well, particularly in grant awards, federal employment, and procurement, though they fall short in direct loans and other federal obligations. On a per capita basis, they average $5,613 in direct federal expenditures per person, compared with $5,051 per capita in the 12 urban regions and $5,287 nationally. However, some major central cities fare far better than others in comparison with the national per capita outlay. At $22,825 per person in Washington-Baltimore, largely as a result of federal salaries, the nation's capital receives more than fourfold the national average. Atlanta, Philadelphia, San Francisco, Boston, and New York also rank above average, whereas, in descending order, Dallas–Fort Worth, Detroit, Chicago, Los Angeles, Miami, and Houston fall below average. Their differences are reinforced by the poor performance of suburban areas in most urban regions. Accounting for 25 percent of the nation's population, 23 percent of its employment, and more than one-fourth of the GDP, the urban region suburbs receive 19 percent of total federal outlays, including only 14 percent of grant awards.

How Economic Factors Will Change in Central Cities and Urban Regions

The pattern of federal expenditures, therefore, supports, if not strengthens, the nation's central cities. In this, federal policy is not counteracting trends but rather is making wise long-term investments. Clearly, economic factors have changed and will change central cities and their relationship to urban regions, the nation, and the global economy. Whereas long-term trends suggest further erosion in the cities' share of population and employment, the character of these attributes will likely continue to improve. Central cities have become nodes on the global network of the world economy, often overriding national boundaries and limitations as they function as command posts, innovation centers, consumer markets, and tourist destinations, and facilitate the transnational flow of ideas, capital, and people. Central cities are also evolving into 24-hour environments, expanding their residential areas and encouraging entertainment activities to draw inhabitants and visitors alike into the downtown, while broadening the range of other consumer activities. And central cities are the natural locale for nurturing entrepreneurship, technological development, and product innovation, because cities support the kinds of densities required for frequent face-to-face interaction. The growth in self-employment, work at home and teleconferencing, global travel, 24-hour activity, and downtown living that are associated with economic changes affecting central cities also have significant implications for meeting and managing travel demand, an essential prerequisite for continued growth.

Acknowledgments

The author would like to thank Elliot Sander, Robert Paaswell, and Henry Peyrebrune for the invitation to prepare and present this paper at the Conference on Transportation Issues in Large U.S. Cities, held in Detroit on June 28–30, 1998. Grateful acknowledgment is given to the Transportation Research Board for financial assistance.

Notes

1. Trip ends are the nearest approximation to a measure of "primary" jobs at work sites located in the central cities. Administrative records of employment for work sites in central

cities, compiled by state departments of labor for unemployment insurance purposes, do not conform to census data. They reflect private payroll employment in covered nonfarm establishments, while excluding noncovered (including public) establishments and all self-employed workers; whereas the Census Transportation Planning Package (CTPP) source excludes persons not at work during the reference week because of vacation, illness, or other reasons. From several perspectives, total employment at place of work is a difficult concept to measure, in part because multiestablishment firms may not separately report jobs by work site and a certain percentage of workers hold multiple jobs. The estimates contained herein use the 1990 CTPP base for central cities and urban regions, and benchmark any prior- or post-census trends on this base from Bureau of Labor Statistics nonagricultural employment data.

2. On balance, in 1990, some 555,000 employed residents of the 12 urban regions worked outside of the regions.

3. The Fortune 500 American corporations are released in an April or May issue of *Fortune Magazine,* followed by the Global 500 released in an August or September issue. All companies on the lists must publish financial data and report all or part of their figures to a government agency. Revenues include consolidated subsidiaries. Financial data are for fiscal years ending on or before March 31 of the reference year. Revenues for non-U.S. corporations have been converted to dollars at the average official exchange rate.

References

1. *Regional Economic Information System 1969–1996.* Bureau of Economic Analysis, U.S. Department of Commerce, May 1998.
2. Schwartz, A. *Cities and Suburbs as Corporate Service Centers.* Economic Development Administration, Technical Assistance and Research Division, U.S. Department of Commerce, Dec. 1994.
3. *Market Capitalization in 1995.* Morgan Stanley, 1995.
4. 1996 Ranking the Banks. *American Banker*, 1997.
5. *Consolidated Federal Funds Report.* U.S. Bureau of the Census, 1997.

Trends, Characteristics, and Patterns in Urban America

Peter Dreier, *Occidental College*

America's cities and metropolitan areas are quite diverse in terms of economic, social, demographic, cultural and political characteristics. For example, Detroit and Dallas are both large cities but they differ greatly in many ways. Still, it is possible to discuss major trends, characteristics, and patterns of major cities and urban areas without dismissing these variations.

Today, more than 6 years after the Los Angeles riots, our urban crisis remains marginal to the political debate in this country. No other major industrial nation has allowed its cities to face the type of fiscal and social troubles confronting America's cities. Other industrial nations do not permit the level of sheer destitution and decay found in America's cities. Canada, for example, has a similar economy and distribution of wealth, but its cities are much more livable than ours. We see the consequences of our urban conditions every day, from the deadly levels of crime and violence, to the Third World levels of infant mortality, to the growing army of homeless people sleeping on park benches and vacant buildings.

Despite this, conditions in our cities are considerably better than what one would learn from paying attention only to the mainstream media. The media's unrelenting focus on the negative characteristics of America's cities—as cesspools of crime, violence, and social pathology—is both misleading and detrimental to efforts to revitalize urban America.

Three major points are made in this paper. First, in terms of economic trends, it is argued that problems of urban America (including its largest cities and metropolitan areas) are primarily a geographic mirror image of the nation's growing economic disparities. Second, in terms of political and policy trends, it is suggested that the federal government has generally done more to undermine urban fiscal and social health than to improve it, primarily by policies that have promoted suburbanization, sprawl, and metropolitan fragmentation, and that the increased political isolation of cities portends poorly for reversing these trends. Third, in terms of civic and governance trends, however, there are two promising tendencies: growing interest in regional approaches to metropolitan problems and growing support for a variety of community-building efforts. The key dilemma is to find ways to connect the regional and community-building agendas and to get the federal government to provide support and encouragement for these efforts.

When people think about "urban problems," images from the nightly news are likely to come to mind: riots in Los Angeles, clashes between blacks and Latinos in Miami, or the death of an innocent bystander caught in a shoot-out between drug dealers in Washington, D.C. Stories on AIDS, homelessness, teenage pregnancy, school dropouts, lack of skills, and unemployment join those on drugs and crime. As a result, many people have a negative image of life in big cities and think crime and drugs are major problems in their own communities as well (*1*).[1]

Even so, a recent nationwide survey of people living in the suburbs of the 100 largest cities found that more than three-fourths gave a positive or highly positive rating to the city they lived near. Most relied on their central city for work, major medical services, higher education, and cultural activities; they understand that their property values are tied to the prosperity of the nearby central city. What is more, two-thirds or more of these suburbanites were willing to have higher taxes and spend more federal aid on programs to house the poor, prevent and treat AIDS, and improve public schools and health care for children in central cities (*2*).

This ambivalence reflects the conflicting reality of the urban experience. The media, and many scholars, have focused on the negative part of this reality, and they have been severe. Pushed by misguided public policies, urban decay and metropolitan polarization began during the suburbanization of the 1950s, grew during the racial turmoil of the 1960s, and worsened in the fiscal and economic crises of the 1970s. Urban problems continued to worsen in the 1980s, especially as cities struggled with recession, and have not significantly improved despite the economic recovery since the mid-1990s.

Despite these negative trends, observers have typically failed to appreciate some of the good news. Although the central city share of the national population declined steadily between 1950 and 1980, it increased significantly between 1980 and 1990. Twenty of the 30 largest central cities gained population (*3*, Table 6). Ten were sunbelt cities like Houston, Dallas, Phoenix, and Jacksonville, but the other 10 included international business cities like New York and Los Angeles, high technology centers like Seattle, San Francisco, San Jose, and Boston, and heartland cities like Indianapolis and Columbus. While 10 old cities with large black populations, like Detroit and Cleveland, continued to lose population, the rate was slower than in the 1970s, and four (Chicago, Philadelphia, Baltimore, and Washington) nevertheless gained in real household income. Meanwhile, the suburban population also grew, so that more than three-fourths of all Americans now live in metropolitan areas. Half live in metropolitan areas with more than 1 million residents, and more than one in five in metropolitan areas with more than 5 million residents (*4*, Figure 1 and Table 2).

Most important, real median household income grew substantially faster than the U.S. average in 12 of the 30 large central cities between 1980 and 1990. For example, it grew by 39 percent in Boston, 28.5 percent in New York City, 25.7 percent in San Francisco, 17.3 percent in Los Angeles, 11.5 percent in Philadelphia, and 8.9 percent in Columbus, Ohio. (Some old industrial cities like Detroit, Milwaukee, and Cleveland experienced substantial real income declines, while cities that depend on the energy industry, like Houston, Denver, New Orleans, and Oklahoma City, experienced lesser declines.) Even though central cities contain 60 percent of the nation's poverty population, this percentage decreased slightly in the 1980s. Real income grew in many cities because they house the advanced corporate services and high-level nonprofit services like hospitals and universities that are key sectors in the U.S. economy and support them with high levels of public service.

The dilemma facing national urban policy is this: central cities remain the key to regional and national productivity growth and competitiveness in the global economy, but their unresolved social problems threaten and may even destroy these strengths. Central cities house and support the key institutions that generate new ideas and knowledge, that support high-level business decision making and business transactions, and that provide the most sophisticated social services. But if federal and state policy and better-off suburbs continue to ignore and isolate themselves from the problems wrought by increasing urban inequality, they put these precious national resources at grave risk.

Moreover, since central city and suburban economies are highly interdependent, this is not only not in the national interest, it is also in the interest of suburban dwellers. If the nation does not confront and overcome this urban dilemma, its metropolitan regions will not prevail in the global competition with those of Japan or Germany, much less newcomers like Singapore. Part of addressing this dilemma, then, is finding ways to persuade some sectors of suburban America—and their representatives in Congress—that they have a stake, and a common fate, in the future of our cities.

Major Economic Trends

The restructuring of the nation's economy, demographic changes such as immigration, and the continued suburbanization of the country have shaped conditions in urban America.

Despite the prosperity of the 1980s and 1990s, poverty increased and became more concentrated in extremely poor neighborhoods within the nation's 100 largest central cities. As poverty became more concentrated, other problems like infant mortality, child abuse, drugs, youth crime, and violence also worsened. Where poor, female-headed families concentrated, other difficulties also worsened, including poor school performance, dropouts, and youth unemployment. Meanwhile, because suburban household incomes grew faster than those of the central cities and because racial segregation remained persistently high despite increased black suburbanization, metropolitan areas became more polarized. These negative trends hit hardest in cities that had a large manufacturing base and relatively small service sectors. These cities had also attracted the largest black and Hispanic populations in the postwar period, gained the fewest recent immigrants, and experienced the greatest white flight. Whereas the federal government adopted some programs that sought to counter these trends, many other federal policies promoted suburbanization, destroyed central city neighborhoods, and reinforced the racial and fiscal disparities emerging in America's large metropolitan areas. The key trends are described in the following subsections.

Widening Disparities of Income and Wealth

Our "winner take all" economy has blessed top earners with unprecedented gains, but it has made the middle more precarious, forcing it to cope with stagnating earnings and job volatility, and it has reduced the standard of living of the bottom end of the income distribution in absolute as well as relative terms (*5*). In a nation where three-quarters of the people believe that the government should ensure that everyone has adequate food and shelter (*6*, p. 47),[2] many people lack both. In the view of a former president of the Federal Reserve Bank of New York, these trends force us "to face the question of whether we will be able to go forward together as a unified society with a confident outlook or as a society of diverse economic groups suspicious of both the future and each other" (*7*).

In short, concentrated urban poverty and inequality are not simply statistical trends that trouble sensitive observers, they fundamentally violate the American ideal of equal opportunity and threaten the functioning of American democracy.

All indicators of nationwide economic disparities indicate that the gaps of income and wealth are growing wider. These inequalities have a geographic dimension, and this has profound implications for the condition of metropolitan areas. A 1994 *Business Week* cover story, "Inequality: How the Gap Between the Rich and the Poor Hurts the Economy," showed how most income growth and almost all wealth accumulation was being monopolized by the rich and super-rich. Median family income increased only 1.2 percent in 1996, for only the second time since 1989. The news for the bottom end of the distribution verged on the catastrophic: the poorest fifth of all households saw their real incomes drop 1.8 percent, whereas the richest fifth gained more than any other group (*8*).

Between 1950 and 1978, every income class of Americans benefited from economic growth. Those in the bottom 20 percent actually saw their incomes rise faster than those in

the top 20 percent over this period. In the early 1970s, however, this foundation of the American social contract crumbled. Harrison and Bluestone call this the "great U-turn," when the country suddenly changed directions on the long road of improving material conditions. Between 1979 and 1993, real family incomes for the bottom 60 percent of families actually fell, with those at the very bottom falling the furthest. On the other hand, the top 40 percent experienced rising incomes, with the "fortunate fifth," as Reich calls them, enjoying a healthy 18 percent real income jump (*9*).

As the middle class is gradually pulled apart, a lucky minority is moving into the upper class while the unlucky majority are being pushed down into the lower class. Between 1979 and 1993, the top 5 percent of U.S. earners increased their incomes by 29.1 percent after inflation to an average of $177,518. Between 1977 and 1989, the top 1 percent saw their incomes increase 102.2 percent. In the 1980s, the number of people reporting to IRS that their incomes exceeded $0.5 million rose from 19,881 to 183,240—an increase of 985 percent, the largest percentage increase in this century (*10*). According to IRS, the number of households reporting incomes in excess of $1 million (adjusting for inflation) increased from 13,505 in 1979 to 69,935 in 1994 (*11*). During the same period, the number of households reporting incomes below the poverty level (also adjusted for inflation) increased from 5,461 to 8,053 (*12*, p. 476). Compensation for corporate chief executive officers (CEOs) has increased much faster than for employees, rising from 42 times the pay of the average worker in 1980 to 141 times in 1995. A *Business Week* study of CEO compensation in 362 large companies found that their average total pay soared 30 percent in 1995 while factory employees only saw a 1 percent gain (*13*). A *Business Week* editorial, "Share the Wealth With the Workforce," was blunt: "Corporations exist in a social and political context where a sense of equity, as in fairness, is a key value that can be ignored only at their own peril."

Wealth inequality, already far wider than income inequality, has also increased greatly. A Twentieth Century Fund study found that the share of marketable net worth held by the top 1 percent, which had fallen by 10 percentage points from 1945 to 1976, rose from 34 to 39 percent between 1983 and 1989. Meanwhile, the share of total wealth held by the bottom 80 percent fell to only 15 percent of the total. During this period, the top 1 percent captured 62 percent of the gain in marketable wealth. The next 19 percent gained 37 percent, leaving the bottom 80 percent with only 1 percent of the gain. As the value of stocks on the stock market has soared over the last several years, this unequal division of wealth has worsened since 1989. The present period resembles the 1920s, when a soaring stock market exacerbated inequalities. In fact, the wealth gap is now greater than at any time since 1929 (*14*).[3]

Widening Economic Gaps Between the Nation's Metropolitan Regions

Differences among broad sections of the country are not due, for the most part, to residential moves, in which the rich and the poor sort themselves out geographically. Rather, they are caused by differential trends in job and wage growth. People move from one region to another primarily in search of job opportunities. Well into the 20th century, considerable concern was expressed over the backwardness of certain regions, especially the South. After the Great Depression, however, interregional inequalities began to decline, in part owing to national infrastructure investments in the South and West. The Reagan Administration's 1982 National Urban Policy Report observed with satisfaction that the gap in per capita income among different regions of the United States had significantly diminished between 1930 and 1977. The Southeast saw its relative income increase, whereas the advantage of the Northeast and Midwest declined (*15*, p. 28). In the past 20 years, however, this trend has reversed, and regional incomes have begun to diverge. As an economist for the Federal Reserve Bank of Boston put it: "After three decades of gentle convergence, regional per capita incomes diverged sharply in the 1980s" (*16*). In general, rich regions got richer while poor regions got poorer.

Though interregional inequalities remain smaller than they were earlier in the century, their reemergence is disturbing news for those who care about the issue of income inequal-

ity. In 1989, median household incomes varied by more than 100 percent across the 78 largest metropolitan areas, from a low of $24,442 (New Orleans, Louisiana MSA) to $49,891 (Bridgeport-Stamford-Norwalk-Danbury, Connecticut NECMA) (*17*). The difference does not just have to do with skill levels or job mixes. Secretaries living in San Francisco in 1989 earned 46 percent more than their counterparts in Baton Rouge, Louisiana ($25,735 compared with $17,577) (*18*). Whereas the cost of living also varies across these cities, this factor is not nearly large enough to wipe out the wage differentials.

Not only is there inequality among regions in average wages, but regions have widely different degrees of income inequality within them. Many scholars, notably William Julius Wilson, have blamed ghetto poverty on the process by which manufacturing jobs with decent salaries have moved away from cities, to be replaced by service-sector jobs with lower salaries. Regional economic restructuring varies significantly, however, in the ratio of low-wage jobs it produces. Between 1970 and 1990, only 35.5 percent of the new jobs created in the Boston metropolitan area paid less than $20,000 (in constant 1990 dollars) compared with 77.4 percent of the new jobs in Milwaukee and 72.7 percent in metropolitan Detroit. At the top end, about one-fourth of the net new jobs in the Boston area paid more than $40,000, compared with only about 9 percent in Detroit and Milwaukee (*19*).

We do not know exactly why regional incomes began to diverge in the 1970s after converging in the previous decades. Drennan et al. argue that regions specializing in producer services enjoyed faster-than-average real income growth because of strong national demand for these services. They argue that prosperity in these regions led to a decline in ghetto poverty (*20*). Several studies have shown that when regional economic growth creates tight labor markets, ghetto residents are drawn into the work force (*21–23*).

Other research suggests that the causal relation works in the opposite direction: inequality within a region hurts overall regional economic performance. Regions with greater inequality perform less well. Ledebur and Barnes (*24*) found that metropolitan areas with lower central city–suburban income disparity had higher metropolitan employment growth between 1988 and 1991. Savitch et al. found that per capita income in 59 central cities was highly correlated (.59) with that of their suburbs, suggesting that central city and suburban economic outcomes would rise or fall together (*25,26*). Correlations, however, do not prove causation (*27*). Much more work needs to be done before we can conclude that weak or increasingly polarized central cities will pull down their surrounding metropolitan regions. Nevertheless, such an account remains highly plausible: central cities with concentrated ghetto poverty will hasten capital flight and bear heightened costs; the resulting fiscal stress will drive out essential investment in infrastructure and damage the ability of central business and industrial districts to contribute to regional economic competitiveness. The final result will lower the overall efficiency of the regional economy, causing growth rates to wither (*27*, pp. 164–165).

Growth in Economic Residential Segregation Within Metropolitan Areas, Including "Mismatches" Between the Urban Labor Force and Suburban Jobs

In contrast to most other advanced countries, income rises the further one moves out from the city center. Middle- and upper-class households satisfy their housing needs not primarily by rehabilitating older housing near the city center, but by building new housing on the urban periphery. The housing they leave behind then filters down to lower-income households. Byrum, former director of city planning for Minneapolis, calls the American practice to house the poor in used and deteriorating housing near the city center a "de facto national housing policy" (*28*, p. 19). The pattern was so well established in the United States by the 1920s that it served as the basis of the "concentric zone theory" of urban development (*29*).

One way of tracking the separation of the rich and poor through metropolitan decentralization is by comparing central cities with their suburbs. State legislation drew arbitrary dividing lines between central cities and suburbs in the early 1920s to arrest the ability of older central cities to annex new suburban municipalities. Rusk (*30*) highlights the differ-

ences between elastic cities that expanded to encompass more of their metropolitan populations and inelastic cities. In 1990, the central city's proportion of its metropolitan area population varied from Boston's 15 percent to Albuquerque's 80 percent.

Much research has sought to trace the extent to which the poor have become concentrated in cities and the middle and upper classes in suburbs. For the 85 largest metropolitan areas, central city per-capita income as a percentage of suburban per-capita income fell from 105 percent in 1960 to 84 percent in 1989 (*24*, p. 2). Between 1970 and 1993, the poverty rate in cities rose 50 percent—from 14.2 percent to 21.5 percent (*31*, p. 5). During the same period, the poverty rate rose 45.1 percent in the suburbs, from 7.1 to 10.3 percent. These gaps between central cities and suburbs were created both by downward mobility for existing city residents and by outmigration of the better off (*32,33*).

Notwithstanding the media hype about gentrification, a careful analysis of migration trends in the 1970s showed that only a few of the central cities in the 40 metropolitan areas studied improved the class composition of their in-migrants, and these improvements did not increase their median incomes (*34*). More recent evidence suggests that middle-class households continue to migrate out of central cities. During the 1980s, the suburban population grew at 16.1 percent, triple the rate for central cities. Central city populations declined in the Northeast and Midwest. In 1996, for every middle- and higher-income family that moved from a Midwestern or Northeastern suburb to a central city anywhere in the nation, more than three families moved from a central city in this region to a suburb anywhere in the United States. Influencing the poverty of central cities compared with suburbs is the fact that two-parent households are moving to the suburbs, with single-parent, female-headed households concentrated in central cities (*35*).

A second reason for the income gap between central cities and suburbs is that the differential location of new employment in the suburbs has caused poverty to spread among central city residents. Manufacturing has continued to decline in central cities, and routine back office service functions as well as retail jobs continue to relocate to suburbs. Not only do central city residents have a hard time getting to such jobs, but their social networks do not provide information about suburban job opportunities (*36*, pp. 72–75).

Widening Economic and Fiscal Disparities Between Suburbs—Including the "Urbanization" of Many Older, Inner-Ring Suburbs

Economic segregation exists not just between central cities and suburbs but among suburbs themselves. Suburban municipalities tend to be more economically homogeneous than central cities, but average incomes range widely across suburbs. An early study of class segregation in suburbia based on 1970 census data found that the wealthy were the most segregated, living in homogeneous enclaves representing perhaps 15 to 20 percent of all suburbs. The poor were also concentrated in a relatively small number of suburbs (*37*). Evidence suggests that suburban class segregation is increasing. A study of the 30 largest metropolitan areas found that, between 1970 and 1980, the spatial concentration of poverty increased in 25 and affluence became more concentrated in all 30 (*38*, p. 306). A study covering the period 1970 to 1990 found that the poor became somewhat more segregated (*39*). (Both studies included central cities as well as suburbs.) In general, the rich, ensconced in exclusive suburban enclaves protected by zoning regulations, tend to be more isolated from other income groups than the poor.

In recent years, more attention has been paid to declining inner-ring suburbs that have many of the same problems as central cities (*40,41*). They are usually located close to concentrated minority poverty in central cities. In his study of the Minneapolis–St. Paul metropolitan area, Orfield contrasts conditions in inner-ring suburbs with those of the fast-developing eastern suburbs. Between 1979 and 1989, he finds that median household income went down 4.7 percent in the inner-ring suburbs of the Twin Cities, while it went up 8.4 percent in the outer-lying eastern suburbs. Whereas the eastern suburbs saw their properties values increase 75 percent between 1980 and 1994, property values only went up 2.5

percent in the inner-ring suburbs (property values declined 8.3 percent in the central cities) (*42*, p. 30).

Increasing Geographic Segregation of the Poor

Whereas the rich have always tried to insulate themselves from the poor, marked spatial segregation by class is a phenomenon of the industrial revolution. Zunz's careful study of Detroit showed that, whereas groups clustered by ethnicity in 1880, different occupational groups tended to live together. By 1920, however, the index of occupational segregation was as high as the index of ethnic segregation. Only in very tightknit communities of Jews and blacks did a wide range of occupations coexist on the same block (*43*, p. 342). Using census tract data and the index of dissimilarity, Duncan and Duncan (*44*) demonstrated that those at the top and the bottom of the occupational rankings were highly segregated residentially in Chicago in 1950.

Wilson's *Truly Disadvantaged* (*45*) stimulated the contemporary study of the segregation of the poor in American cities. The past decade has witnessed an outpouring of research in response to Wilson's thesis that deindustrialization, the paucity of "marriageable males," and the selective outmigration of better-off residents caused concentrated urban poverty. Wilson defined any community area in Chicago (a relatively large neighborhood) with a poverty rate exceeding 30 percent as an "underclass" or ghetto poverty area.[4] Since then, researchers have used census tracts as a unit of analysis and designated a threshold of 40 percent in poverty. Other researchers have adapted measures of racial segregation to study the segregation and isolation of the poor.[5] Wilson's approach has the virtue, however, of highlighting the intuitively satisfying idea that the spatial concentration of poor people magnifies the problems of poverty beyond the simple fact that people do not have enough money in their pockets. The 40 percent standard suggests that the geographical concentration of poverty has threshold effects and that beyond a certain point, these "concentration effects," as Wilson calls them, are highly destructive.

Regardless of method, researchers have found that the urban concentration of poverty has increased markedly since 1970. Using an index that measures the likelihood that poor families will share a census tract with other poor families, Massey and Eggers (*38*) found that the concentration of the poor increased overall and in 25 out of 30 metropolitan areas between 1970 and 1980. Abramson et al. (*39*) confirmed and updated the analysis using the index of dissimilarity, which measures how evenly the poor are distributed, and the isolation index, which measures to what extent the poor live with other poor people, for the 1970–1990 period. They found that the dissimilarity index increased 11 percent for the poor and their isolation increased by 9 percent in the 100 largest metropolitan areas. For the largest 100 central cities, Kasarda (*46*) found that the share of the poor living in 40 percent poverty tracts increased from 16 to 28 percent between 1970 and 1990.

The most comprehensive nationwide research on the concentration of poverty is reported by Jargowsky (*23*). Using the 40 percent standard for census tracts, Jargowsky found that poverty areas, or ghettos, grew in almost every possible way between 1970 and 1990: in the number of tracts, in total population, as a percentage of the overall population, in the percentage of poor persons in them, and in geographical extent. To cite just a few statistics, the number of high-poverty census tracts in all tracted metropolitan areas doubled and their population increased from 4.1 million to 8.0 million (while the national population grew only 28 percent). The likelihood that a person would live in a ghetto tract grew 50 percent, from 3.0 percent to 4.5 percent. The percentage of poor persons living in high-poverty areas increased from 12.4 to 17.9 percent. Nationwide, 3,745,000 poor persons lived in high-poverty areas in 1990. Whereas this is not a large number in a nation with 249 million residents, it is increasing rapidly. Areas of urban blight, or high poverty, are spreading out, more than doubling their land area between 1970 and 1990, though their total population declined 17 percent. To speak of the concentration of poverty, therefore, is somewhat misleading, because poor people are increasingly likely to live in areas with much vacant land and many abandoned houses and businesses.

The problem of concentrated poverty is mainly a metropolitan and central city problem: 84.5 percent of all high-poverty census tracts were located in metropolitan areas in 1990; two-thirds of the people living in such tracts were located in the 100 largest central cities (*23*, p. 11, p. 85). Indeed, more than one-third of all persons living in concentrated poverty tracts were located in just 10 cities, identified in Table 1.

Concentrated poverty also varies by region. It is concentrated in the Northeast and Midwest, especially in older industrial cities. Concentrated poverty fell in the South in the 1970s but increased in the 1980s, while the rate of increase fell dramatically in the Mid-Atlantic states in the 1980s. These surges and declines in concentrated poverty were closely related to the growth rates of the economies of these regions (*23*, p. 45). As Coulton et al. (*47*) found in research on the 100 largest metropolitan areas, the geographic concentration of poverty and affluence varies tremendously among different regions. Areas with high levels of concentrated poverty, for example, are not always associated with high levels of concentrated affluence.

TABLE 1 Persons Living in Poverty Census Tracts, Top 10 Cities, 1990

		Number of Persons
1.	New York	960,292
2.	Detroit	418,947
3.	Chicago	396,200
4.	Los Angeles	267,666
5.	McAllen, Texas	234,467
6.	New Orleans	165,571
7.	Houston	162,487
8.	Philadelphia	154,684
9.	San Antonio	152,936
10.	Miami	148,083
	Total	3,061,293

Persistence of Residential Racial Segregation

Most poor people do not live in neighborhoods characterized by concentrated poverty. In 1990, only 17.9 percent of all poor people (3.7 million individuals out of 20.9 million total poor) lived in census tracts where the poverty rate exceeded 40 percent. However, the figure is much higher for minorities, who tend to live in more segregated settings. One-third of all black people and 18.5 percent of all Hispanics lived in such tracts, whereas only 6.2 percent of all white poor did. For all three groups, however, the number and percentage living in tracts with 40 percent or more residents in poverty rose substantially for all groups between 1970 and 1990. For whites, the number increased by 145 percent (*23*, p. 41).

One burning issue in the debate on the so-called "underclass" is the role of racial discrimination compared with class segregation in producing and reproducing concentrated poverty. In Wilson's initial formulation, racial discrimination played a relatively minor role in the expansion of areas of concentrated poverty, whereas deindustrialization and the flight of middle-class blacks from high-poverty areas, made possible by the civil rights laws of the 1960s, played a major role. In contrast, Massey et al. (*48–50*) argue that housing discrimination is the key variable. Trapped in ghettos, African Americans are not able to follow jobs to the suburbs. The negative effects of deindustrialization are telescoped onto their communities. Attempts to suburbanize only lead to resegregation and reghettoization. The result is a spiral of decline in black neighborhoods.

This is not the place to sort out the complex interplay of class and race on poverty, but a few general observations are in order. As Jargowsky shows, there is no doubt that race is deeply implicated in fostering concentrated poverty in the United States. In 1990, only 6.3 percent of all white persons lived in areas of concentrated poverty, while 33.5 percent of

black persons and 22.1 percent of Hispanic persons lived in such areas (*23*, p. 41). In other words, a black person was five times more likely to grow up in an area of concentrated poverty than a white person. (It should be noted, however, that the white rate of poverty concentration doubled between 1970 and 1990, so a class phenomenon is clearly at work as well.) Blacks composed about half of the population of high-poverty census tracts in metropolitan areas in 1990, though they were only 12.6 percent of the population of metropolitan areas (*23*, p. 63). In short, racial segregation explains a good deal of class segregation.

Moreover, class has certainly not overcome race in the present period. High-income or well-educated blacks are just as residentially isolated from whites as blacks with low incomes and low educational attainments (*51*, p. 397). Compared with whites, the black middle and upper classes clearly have a much more difficult time separating themselves from the poor. Alba and Logan (*52*) and Logan et al. (*53,54*) demonstrate that blacks who move out of areas of concentrated poverty nevertheless end up in areas with lower average incomes and lower levels of home ownership than would otherwise be predicted given their individual characteristics. A study of residential attainment in the New York metropolitan area found that blacks located in areas with median incomes about $3,500 lower than the places where comparable non-Hispanic whites located (*52*). Blacks need higher incomes than whites to achieve comparable levels of social distance from the poor.

It is one thing to show that racial segregation plays a major role in concentrated poverty, but it is another to assert, as Massey and his colleagues do, that racial segregation alone, or interacting with rising black poverty, is the major cause of the increase in concentrated poverty from 1970 to 1990. For one thing, overall racial segregation declined during this period, though the reductions were small and residential segregation remains high by any standard. The argument that residential segregation interacted with increases in black poverty to raise levels of concentrated poverty also does not work well because, overall, poverty rates in metropolitan areas changed very little during this period (*23*, pp. 132–143). Jargowsky concludes that given the declining population of areas of concentrated poverty, movement by the nonpoor out of ghetto areas, including the flight of middle-class blacks, must have played a major role in rising levels of concentrated poverty. In other words, the alarming increase in concentrated poverty may be driven more by class divisions than by racial divisions.

Neighborhood Effects of Concentrated Poverty

The research on the extent of economic segregation is more developed than research on its effects. The reason is simple: economic segregation is purely descriptive, whereas understanding the effects of economic segregation requires a demonstration of causal connections. Causal inference in nonexperimental settings is difficult. A great deal of research has correlated concentrated poverty with various social and economic outcomes. (By contrast, there has been little research on the effects of concentrated wealth.) These studies usually make an effort to control for variables that might contaminate the relationship, but they cannot control for all relevant factors. Most of these studies run up against the ecological fallacy of trying to predict individual behavior from spatially aggregated characteristics. Rarely do researchers have access to the detailed information on individual respondents' neighborhoods needed for evaluating the possible contextual effects of living in a high-poverty area. One exception to this generalization is provided by the Gautreaux initiative in Chicago, in which former residents of the city's public housing projects who moved to white suburbs were tracked in comparison with those who remained in the inner city. Modest gains were noted for the former group, though the sample is small and may contain some selection bias (*55*).

The other weakness of studies of neighborhood effects is that they rarely specify the exact process by which context affects behavior. Because theory does not guide research, the result is the accumulation of correlation studies with little cumulative effect on knowledge. Moreover, it is also possible that not all the effects of the concentration of poverty are negative. For example, poor people living together might have more in common and therefore

might more readily develop certain forms of social capital or a stronger sense of community, enhancing their capacity for collective action. A particular outcome, say failure in the job market, might result from many different place-based processes, including networks that fail to provide information about jobs or lack of geographical access. In general, however, research has primarily examined the economic and social neighborhood effects of concentrated poverty.

Most of the research on neighborhood effects has examined economic outcomes, particularly workforce participation. The evidence strongly suggests that, after controlling for personal characteristics, people living in concentrated poverty areas have lower employment rates, shorter working hours, and lower wages. Three main reasons given for these effects are the geographical mismatch between residence and jobs, ineffective job networks, and the development of norms and values that are not conducive to work.

Kain (*56*) argued that residential segregation of blacks in central cities deprived them of access to job opportunities increasingly located in the suburbs. Following Kain's perspective, Kasarda argues that the movement of entry-level and other low-skill jobs to the suburbs and the expansion of high-skill information processing jobs in central cities has had a negative effect on the economic prospects of the central city poor; residential segregation worsens this effect by hampering them from moving to areas with job openings more suited to their educational level (*57–59*). Researchers have estimated that moving a person with the same human capital characteristics from a poor to a middle-income community in Los Angeles raises his or her wage by an average of 15 percent (*60*, pp. 4–17).

One problem with testing the spatial mismatch hypothesis is that the poor and minority people who move to middle-class suburbs may well differ in important ways from those who stay behind. The Gautreaux program in Chicago offered a good opportunity to test the spatial mismatch hypothesis. In a 1976 consent decree resolving a federal lawsuit alleging that the Chicago Housing Authority promoted racial segregation, Gautreaux enabled households in public housing or on the waiting list for public housing to move either to largely white suburbs or to more middle-class neighborhoods within the city of Chicago. Although people were not randomly chosen for the program (they must voluntarily pursue admission), they were nevertheless all low-income blacks. The results show that adult movers to the suburbs enjoyed higher rates of employment, though not higher wages or working hours. Non-college-going youths in these families were more likely to have jobs with good pay and benefits (*55*).

A recent review of research on the spatial mismatch hypothesis, which itself examines six other reviews of the literature, concludes that the empirical evidence "consistently supports" the spatial mismatch hypothesis (*61*). The spatial mismatch hypothesis has been formulated almost exclusively in terms of the effects of racial segregation in housing markets. In fact, some argue that the spatial mismatch effects are themselves not caused by physical distance but by racial discrimination in job markets (*62,63*). Needless to say, the spatial mismatch hypothesis could be formulated with regard to the concentration of the poor, as easily as the concentration of African Americans. Zoning laws and building codes make it difficult or impossible for low-income people to afford to move to the suburbs where the jobs are being created. If a spatial mismatch is occurring on the basis of income, this could be an important factor in widening income inequalities in the United States. Addressing this by opening up high-job-growth areas to low-income residents would be even more difficult than in the case of overcoming racial discrimination in housing markets. The courts have generally ruled that governments may discriminate on the basis of class. Unlike race, class is not a suspect classification. Local governments have the right to protect property values and tax base by excluding the poor. The courts have overturned local zoning ordinances for the most part only when there is direct evidence of intent to discriminate on the basis of race (*64*, Chapter 10).

Besides the spatial mismatch caused by concentrated poverty, the literature also supports the hypothesis that networks count. Research shows that job seekers find between 33 and 69 percent of all jobs through friends and relatives (*65*). Wilson documents the degree to which blacks in Chicago have more insular social networks and are less likely to have at least one employed friend (*66*, p. 65). There is clearly a contextual effect here. Research has shown

that poor people, the less educated, and youths tend to have spatially confined social networks (*67,68*). This is a problem if most jobs are located outside the immediate neighborhood, which is clearly the case for ghetto poverty areas. More important, the social connections of poor people in concentrated poverty are more likely to be with people who themselves are unemployed and therefore are less useful in finding jobs.

Another way concentrated poverty hurts labor market success is through the norms and values that are passed on in face-to-face interactions. This hypothesis, which is related to the "culture of poverty" debate, has been controversial. Conservatives, most prominently Edward Banfield and Charles Murray, argue that poor people adopt values different from those of mainstream middle-class society and would not respond to job opportunities even if offered them. Murray attributes the adoption of these countercultural values to perverse incentives in the welfare programs. Wilson, on the other hand, accepts the idea that residents of ghetto poverty areas have different norms, but attributes them to the structure of opportunities, not to government programs. The absence of neighbors with steady work who can serve as role models makes residents of high-poverty areas less willing to adapt to the rhythms and demands of the labor market. Wilson documents that black men are particularly likely to have attitudes and behaviors that make them less acceptable and successful in entry-level jobs, especially those that deal with the public. Wilson again stresses, however, that they are the product of the opportunity structure in ghetto poverty areas. For Wilson, the problem is not so much values as adaptive cultural styles. He concludes that "most workers in the inner city are ready, willing, able, and anxious to hold a job" (*66*, p. 238). This view is corroborated by the research of Osterman (*22*) and Freeman (*21*), which demonstrated that tight regional labor markets increase labor market participation by poor minorities. Contrary to the culture of poverty thesis, their behavior demonstrated that they valued work.

Evidence on whether poor people in high-poverty areas are "different" can vary from a focus on cultural values to styles of decision making and identities. Galster and Killen (*69*) argue, on the basis of the psychological literature on decision making, that people living in areas with limited opportunities will use less analytical styles of decision making with shorter time frames. Urban ethnographies suggest that ghetto residence undermines aspirations and ambitions. Kozol interviewed a teacher in the South Bronx who stated:

> Many of the ambitions of the children are locked-in at a level that suburban kids would scorn. It's as if the very possibilities of life have been scaled back. Boys who are doing well in school will tell me, "I would like to be a sanitation man." I have to guard my words and not say anything to indicate my sense of disappointment. In this neighborhood, a sanitation job is something to be longed for.

While few quantitative studies have been done of the effect of neighborhood poverty on aspirations and identities, the ethnographic literature suggests that race and residence can discourage people from even trying to succeed in our highly competitive market economy (*70–72*).

The economic effects of poverty concentration also manifest themselves in the realm of consumption. Most households accumulate wealth through home ownership. For obvious reasons, home ownership rates are low among the poor (*73*). Research suggests, however, that bank redlining has restricted the opportunity to own a home even for those residents of concentrated poverty neighborhoods who could afford it (*74*). Moreover, even when poor people do own their homes, they rarely appreciate in value. Contagious abandonment can wipe out the savings people have put in their homes (*75*). Discrimination in housing markets against minorities suggests that, confined to a submarket, they end up paying more than whites for equivalent housing.

Because the poor are also physically isolated from many retail markets, "the poor pay more," as the title of a prominent book put it, for a whole range of goods and services (*76*, Chapter 6). On the basis of surveys of four low-income housing projects in New York City, Caplovitz found that the poor paid higher prices than high-income people for basic durable

goods, such as washing machines and refrigerators. Their neighborhoods lack basic retail services. In 1986, North Lawndale, a poor area of Chicago with a population of 66,000, had only one bank and one supermarket (*66*, p. 35). Lacking a car, poor people often cannot comparison shop. Moreover, poor people are often forced to buy on credit at exorbitant interest rates.

While those who live in areas of concentrated poverty are isolated from opportunities to earn income, they are not isolated from the culture of consumption. The average American is bombarded by 3,000 commercial messages a day, approximately 38,000 TV commercials a year (*77*). Because television is a cheap form of entertainment, even poor single-parent households own TVs and are bombarded by commercial messages. Commodities are chosen not just for the material qualities or utilities but to enhance status. As Caplovitz noted, "Americans in all walks of life are trained to consume in order to win the respect of others and to maintain their self-respect" (*76*, p. 180).

Concentrated poverty also has a range of negative effects on social relations. These social relations in turn have negative effects on individual economic success and the fiscal well-being of local governments. Local social relations affect the quality of lives, as when neighbors take care of each other's children or look out for their houses. Neighborhoods also provide convivial social relations and a sense of identity. Logan and Molotch (*78*) call these nonmonetary values derived from place "use values." An extensive literature documents the negative effects of concentrated poverty, as well as racial isolation, on a wide range of behaviors and outcomes: crime, drug abuse, teen pregnancy and out-of-wedlock births, poor childhood intellectual development, low educational attainment, and poor health are all more common in ghetto poverty areas. In each case, negative individual behaviors or outcomes reduce the quality of life for others and make it more difficult for all residents to succeed. [A skeptical view of neighborhood effects is given by Jencks and Mayer (*79*). Galster and Killen (*69*) provide a review of the literature that upholds neighborhood effects.]

Areas of concentrated poverty have consistently higher crime rates than surrounding areas. The question is whether these higher crime rates are due to the characteristics of individuals or neighborhoods. Research has shown that neighborhoods can have an effect on the probability that crimes will be committed. Case and Katz (*80*) show that after controlling for individual characteristics, youth in relatively high-crime-rate areas were somewhat more likely to have committed crimes in the past year. Research has also shown that the social isolation of blacks and whites in urban areas is associated with high rates of violence in urban black communities (*81,82*).

Research on neighborhood effects is limited by the dearth of data sets with information on both individuals and their neighborhood contexts. However, a few data sets have enabled researchers to study the relative effects of individual and contextual characteristics. Crane (*83*) reviews the extensive literature on neighborhood effects on teenage child bearing and the smaller literature on dropping out of school and then conducts his own analysis using the 1970 Census Public Use Microdata Sample for 113,997 young persons (16 to 19 years old) identified by neighborhood. In each case, he found a sharp increase in the probability of dropping out of school and childbearing when the percentage of workers who held high-status jobs fell to about 4 percent of working adults. To explain this outcome, Crane uses an "epidemic theory" of social causation that posits that as certain behaviors become more common, peer influence kicks in powerfully and a kind of social epidemic sweeps though the population.

Research has also demonstrated that living in concentrated poverty neighborhoods has negative effects on health outcomes (*84–86*). There are many reasons for the poor health of residents of areas of concentrated poverty. They have poor access to health services. Medicaid does not pay as much as other forms of health insurance, and therefore poor areas tend to be underserved. In addition, the poor social conditions in ghetto poverty areas, including high crime rates, dissuade health care providers from locating there. The problem goes well beyond the availability and quality of health care services, however. Residents of ghetto poverty areas are exposed to many health care risks, including more frequent drug use, sexually transmitted diseases, injuries from firearms, lead paint poisoning, and exposure to environmental hazards. The rates of sexually transmitted diseases in poor inner-city areas

approach those of the Third World. People with sexually transmitted diseases are more likely to become infected with AIDS. Baltimore is in the midst of a syphilis epidemic that began in its lowest-income neighborhoods (*87*).

Wilson's detailed studies of Chicago argue that the withdrawal of work from the community promotes out-of-wedlock births and single-parent families. He finds that employed males in poor neighborhoods were eight times more likely than unemployed males to marry the mother of their child (*66*, p. 96). Wilson emphasizes that the dearth of successful role models weakens the norms against premarital sex and out-of-wedlock births.

We must interpret these results with modesty. Most research that purports to establish place-based effects on individual outcomes relies on ecological analysis of aggregate data, with some controls for individual-level variables. This sort of analysis faces some serious technical and theoretical challenges. When all is said and done, however, there is strong evidence that place has major effects on individual outcomes even after controlling for individual characteristics. Poor people who live with other poor people do worse in the job market, attain less education, have more babies during the teenage years and are less likely to marry the father, and pay more for lower-quality city services. If it were possible to quantify the effects of place, we believe that the geographical distribution of classes across space could be shown to amplify the effects of the widening income inequality in the United States—both in driving down the poor and in advantaging the well off. Some of these contextual effects show up in published income statistics, but many do not. They include higher costs for car insurance and housing, as well as higher costs of public services. It is hard to quantify the cost of living in constant fear of crime, but this is only one of the many pervasive burdens of living in ghetto poverty.

The Vast Majority of Poor Adults Work

One of the consequences of the changing economy is an increase in the number of people who live in poverty and work. The service economy is predominantly a low-wage economy, and most of its jobs offer no career ladder or upward mobility. The "working poor" is the fastest-growing sector of the nation's poverty population.

A Census Bureau study found that almost one-fifth of all full-time workers now earn poverty-level wages. In 1979, 12.1 percent of all full-time year-round workers earned poverty-level wages. By 1990, the percentage had grown to 18 percent, or 14.4 million workers. Among white workers, 17.1 percent received poverty wages; among black workers, 25.3 percent; among Hispanic workers, 31.4 percent. One-fourth of women workers (24.3 percent) and one-seventh (13.9 percent) of male workers earned wages below the poverty line (*88*). The percentage of full-time workers age 18 to 24 with poverty-level wages more than doubled—from 23 percent in 1979 to 47 percent in 1992 (*89*). Since the 1970s, the purchasing power of the minimum wage-level income has declined; even after the recent increase in the minimum wage, it remains below its purchasing power a decade earlier. Minimum wage earners have fallen further and further below the poverty line. In 1975 an employee earning the minimum wage earned 75.6 percent of the poverty-level income; by 1996, it was 56.7 percent (*90*) (poverty line income is calculated for a family of four). Moreover, it has been shown that a majority of the "welfare poor"—adults on public assistance—earn additional money in the informal economy (*91,92*).

Even Successful Efforts To Revitalize Downtown Areas Have Had Little Effect on Addressing Problems of Poverty

The electronics revolution has hastened the development of a global economy and footloose multinational corporations. Since the early 1970s, there has been a tremendous flight of previously high-wage (primarily manufacturing) industries from U.S. cities to locations with more "favorable" business conditions—low wages, weak or nonexistent unions, and lax environmental laws—found mainly in suburbs, rural areas, and Third World countries. For

example, the percentage of overall employment in manufacturing in major cities declined dramatically between 1953 and 1970 and again between 1970 and 1986 (*93*).[6]

According to Kasarda (*59,94*):

> The largest cities of the North spawned our industrial revolution in the late 19th and early 20th centuries, generating massive numbers of blue-collar jobs that served to attract and economically upgrade millions of disadvantaged migrants. More recently, these same cities were instrumental in transforming the U.S. economy from goods processing to basic services (during the 1950s and 1960s) and from a basic service economy to one of information processing and administrative control (during the 1970s and 1980s).

In the process, many blue-collar jobs that once constituted the economic backbone of cities and provided the employment opportunities for their poorly educated residents have either vanished or moved. These jobs have been replaced, at least in part, by knowledge-intensive white-collar jobs with educational requirements that exclude many with substandard educations (*94*). Since 1980, the Fortune 500 industrial companies have eliminated 3.9 million employees from their payrolls. Between 1978 and 1982 alone, Los Angeles lost about 70,000 high-paying manufacturing jobs, many of them concentrated in the predominantly black neighborhoods of south central Los Angeles. Firms like General Motors and Bethlehem Steel relocated or closed their plants. Textile sweatshops, employing undocumented immigrants at below minimum wages, represent the only growth in Los Angeles's manufacturing sector. At the same time, in Los Angeles and other metropolitan areas, employment growth areas emerged in outlying suburban areas, especially in the light manufacturing, high technology, and retail services sectors.

Three broad trajectories of urban development can be discerned: first, 19th century industrial cities, which in the postwar period gained large minority populations, experienced substantial deindustrialization, lost central city service-sector employment, and experienced growing metropolitan disparity and conflict, such as Detroit, Newark, Gary, and St. Louis; second, 18th and 19th century port cities and transport nodes, which also lost industrial jobs but gained employment in central city service sectors, including corporate services, public services, and nonprofit services, received a more mixed and less massive minority influx than in the first group of cities, and retained an elite commitment to living in the central city, such as New York, Chicago, Boston, and San Francisco; and third, 20th century cities based on corporate and social services, state government capitals, high technology, the defense industry, energy, and tourism, which had relatively low levels of black immigration and somewhat higher levels of Hispanic immigration, especially in those cities located near the Mexican border (Los Angeles, San Diego, Phoenix, Houston, Minneapolis–St. Paul, Columbus, Charlotte) (*95,96*). The immigrant influx received by the United States over the last several decades has tended to cluster in the latter two types of cities, with a resorting of native whites, and to some degree native blacks, away from immigrant-receiving cities toward newer, faster-growing cities with high proportions of native-born population (*97*).

The negative effect of concentrated urban poverty and metropolitan inequality varied across these city types and took distinct forms in each. The negative effect was most pronounced in the declining industrial cities and least pervasive in the growing, high-technology cities. Even in cities like San Jose or San Diego, however, significant pockets of poverty persist amid the generally high family incomes surrounding them, and all cities faced such problems as the central city's declining share of metropolitan employment. Thus the political development of cities and metropolitan areas shows not only commonalities resulting from facing similar problems, but variations depending on differences in the makeup of the three types of cities, the problems they faced, and the context in which they faced them. Commonalities included attempts to bolster investment in central business districts, slow or reverse neighborhood decline, assimilate changing populations, and manage the conflict between demand for services and limited ability to finance them. Differences included a bitter politics of racial transition in the older cities, exacerbating conflicts between the "chocolate city" and "vanilla suburbs" (*98*); a more complex politics of multiracial coalition

building that sought to balance downtown and neighborhood interests in the port city/corporate service centers; and the persistence of relatively conservative white elected officials in many new high-tech cities, which were nevertheless often divided by conflicts over limiting growth and preserving middle-class neighborhoods.

In a global economy, cities have little control over local economic conditions, but in the absence of any federal effort to help cities, American cities have to compete with each other for tax revenue. This has led to an unhealthy bidding war to attract private capital investment, allowing multinational firms to pit cities against cities, states against states, and even the United States against other countries to increase jobs and tax revenue. In many cases, local efforts to improve the local "business climate" often mean lowering wages, health and safety standards, and environmental safeguards.

To cope with disinvestment and fiscal crises, many city development officials became "entrepreneurs," competing with other cities for corporate investment. Some cities sought to lure businesses with tax breaks and other subsidies. Many economists claim that the bidding war has gone too far. They view these incentives and subsidies as unnecessary giveaways; this private investment, they argue, would have taken place anyway. One expert observed: "Corporations are playing cities like a piano. They understand the tune. But the cities don't" (*99,100*). But many city officials view these subsidies as important ammunition in the competitive war for new business and jobs. (This debate continues today over the effectiveness of urban "enterprise zones" for attracting jobs and businesses to inner cities.)

Of course, many cities could not compete on an equal footing because of the lack of either good locations or adequate resources. Cities were not equally successful in making the economic transition from producing goods to producing information. Many cities tried, without much success, to retain existing blue-collar jobs, or to lure new developers, tourists, and jobs. According to Frieden, "most large northeastern and midwestern cities lost manufacturing jobs faster than they gained white-collar ones" (*101*). As a result, many American cities still have not recovered from the loss of blue-collar industry and jobs. As factories closed down and waterfronts were left vacant, downtown department stores went out of business (*102–104*). Neighborhood business districts that had provided many retail stores and local jobs declined (*105*). The tax bases of many cities suffered, making it more difficult for local governments to provide municipal services. The devastation of Youngstown, Detroit, Flint, Newark, Camden, Bridgeport, and Gary is perhaps the most visible symbol of the decline of American manufacturing in the global economy.

Many cities sought to revitalize their downtowns with new office buildings, medical and educational complexes, hotels, urban shopping malls, convention centers, and sports complexes. For example, in 1970 only 15 cities could have handled a trade show for 20,000; by the late 1980s, some 150 cities could do so (*106*). However, even those cities that did successfully revitalize their downtown economies have not stemmed the growing tide of poverty only blocks away from the glittering glass and steel. Benefits from downtown development do not "trickle down" to the poor unless public policies steer them in that direction (*106–108*). [Leinberger (*109*) and Gordon and Richardson (*110*) present a different perspective.] In Boston, for example, the downtown office complex boom generated many professional-level jobs, most of them filled by suburbanites or by professionals who moved into revitalized neighborhoods close to downtown, displacing poor and working-class residents, who could not afford the rising rents on their incomes from low-paying service-sector jobs. During the first half of 1997, for example, New York City's economy added 21,900 new jobs, but employment among city residents fell by 23,900, suggesting that suburbanites filled most new jobs, while lesser-skilled city residents could not compete for jobs requiring advanced skills and education (*111*).

National Economic Recovery Has Generally Bypassed Urban America

Americans have enjoyed 6 years of economic expansion. Job growth and productivity are healthier and unemployment and inflation lower than at any other time since the 1960s. Real

household incomes are once again growing. Yet surveys show that most people remain pessimistic about the future of the country, making the electorate volatile (*112,113*).

The simplest explanation, discussed earlier, is that the benefits of economic growth are going to a small group at the top, whereas other families have not benefited proportionately. These trends are particularly problematic in the central cities. During this period of economic expansion, the overall poverty rate in central cities has not significantly changed. It was 20.9 percent in 1992 and 19.6 percent in 1996. Nor did the ratio of the central city poverty rate to the national poverty rate change. In 1992 the central city poverty rate was 141 percent of the national poverty rate; in 1996 it was 143 percent of the poverty rate (*90*).

The "home ownership boom" of 1993–1996 also bypassed the central cities. During that period, the number of home owners increased by 3.4 million—an increase of 5.5 percent. The national home ownership rate grew from 64.1 percent to 65.4 percent. The home ownership rate in central cities, however, did not increase during this period. In 1995, the home ownership rate in central cities was only 49 percent, whereas in suburbs it was 71.5 percent. This geographic home ownership gap is a result of both the demographic characteristics of central city residents and the persistence of mortgage discrimination ("redlining") by lenders. It is not entirely a result of income or even creditworthiness. Among low-income households, the home ownership rate in central cities was 45.6 percent, whereas in suburbs it was 63.8 percent. Among moderate-income households, the home ownership rate in central cities was 51.8 percent, whereas in suburbs it was 71.3 percent (*114*).

Major Political and Policy Trends

Federal Policies Have Exacerbated the Problems of Central Cities and Older Suburbs Since World War II

Federal policies since World War II, including the Federal Housing Administration (FHA) and Veterans Administration (VA) housing finance programs, the home mortgage interest deduction, the construction of the Interstate highway system, urban renewal, and the failure to develop federal support for middle-class rental housing production, have devastated many central city neighborhoods and strongly encouraged metropolitan polarization (*115,116*). During the 1980s, the shift of federal assistance toward entitlement grants and the rise of revenue bond financing promoted self-defeating, beggar-thy-neighbor approaches to economic development. As the need and demand for public spending have grown in central cities, but the capacity to pay for them has grown in the suburbs, public policy has exacerbated the fiscal disparities within metropolitan areas (*24*).

Housing, transportation, tax, and other policies have encouraged the migration of middle-class residents and businesses to suburban areas. Federal assistance to cities—whether people- or place-oriented aid—has been outweighed by federal subsidies that promote suburbanization, sprawl, and metropolitan fragmentation.

Whereas the foregoing discussion has suggested that trends like deindustrialization, growing wage disparities, and the stagnation of median family incomes have increased the concentration of poor people in large central cities, political factors have also given this trend a much stronger push than most people appreciate. In particular, the suburban, middle-class bias in federal urban policies has interacted with the competition among local jurisdictions to attract and retain better-off residents while excluding the poor in ways that have aggravated metropolitan inequality and class segregation. In the five and one-half decades since the onset of World War II, federal domestic programs and suburban zoning, housing, development, and tax policies have promoted the outward movement of better-off households while piling the poor up in central cities.

Since federal urban policy is typically associated with minority urban dwellers, the assertion that federal policy has tilted the metropolitan playing field toward better-off suburbs

may seem counterintuitive. Consider, however, that mobilization for World War II strongly affected the location of employment (with disproportionate shares of wartime investment being located outside the preexisting industrial base in the urban North) and population (prompting a northward flow of blacks and a westward and southward flow of whites). The Defense Department's support for the aerospace and electronics industries continued these shifts in the cold war era (*115*, pp. 102–109; *117*).

After World War II, federal domestic development programs had an explicit focus on enabling better-off residents to move away from central cities, promoting the modernization of central business districts, "protecting" important urban institutions from the threat of racial transition in surrounding blue-collar neighborhoods, and creating "new ghettos" for those who were displaced (*115*, Chapters 2 and 3; *118,119*). Pent up by depression and war and then unleashed by postwar prosperity, demand for housing new families exploded in the 1950s and 1960s. Returning World War II veterans sought to move away from their immigrant parents' and grandparents' neighborhoods. As a practical matter, they would find the least costly new housing in the suburban periphery, which was also removed from the growing minority populations in many older central city neighborhoods. This demand could also have been satisfied within the existing city boundaries, for example, in the garden apartment complexes constructed on the outer boundaries of the prewar city. In the Truman administration, however, federal legislation to promote this sort of middle income rental housing in cities did not win enactment. Instead, the VA and FHA home loan programs, the home mortgage deduction from federal income taxes, radial freeway construction, cheap energy, and disinvestment in urban mass transit combined to speed the differential outward migration of the white middle class out of the older central cities. Yet when blacks wished to move to suburbs like Levittown, and could afford to do so, they were not allowed (*49*, pp. 42–57; *116*, pp.196–213).

The primary aim of federal domestic policy with regard to central cities was to encourage private investment in central business districts (CBDs) and clear away neighboring "slums," which local elites and planners thought threatened the viability of CBDs and important urban institutions like hospitals and universities. Even public housing was funded only on the condition that cities tear down one "slum" dwelling for every new public housing unit built. Public housing served as reservoirs for those displaced by urban renewal and freeway construction, which were busily destabilizing blue-collar neighborhoods (*115,120*). Between 1956 and 1972, urban renewal and urban freeway construction displaced an estimated 3.8 million persons (*115*). In some cities, entire neighborhoods were razed or split down the middle by new highways and convention centers (*121–124*). Some called the federal program "Negro removal" because of its focus on black neighborhoods. People were pushed out of their homes and local businesses, destroying social ties and dispersing residents, without adequately compensating for their economic and emotional losses. Up to one-fifth of the entire population of New Haven was displaced by public projects during this period.

Only in the late 1960s, after a wave of urban rioting and protest, did the federal government begin to build housing designed to strengthen urban neighborhoods and promote neighborhood-based social service delivery. But these efforts were comparatively short-lived: new assisted housing production grew rapidly between 1969 and the mid-1970s, but leveled off during the 1980s and ended in the 1990s. Recent trends in federal policy, such as the end of federal revenue sharing for cities in the 1970s, the decline of AFDC benefits and the decreasing value of the minimum wage that began in the 1970s, and the devolution of welfare programs to state governments in the mid-1990s, exacerbated this trend (*125,126*). Meanwhile, funding for mobility away from cities, whether direct spending on freeways or indirect spending on the home mortgage tax deduction, continued to expand. In truth, federal domestic development programs and tax policies fostered suburban growth, disinvestment from older urban neighborhoods, and the sorting of income, ethnic, and racial groups and the jobs they held across metropolitan regions.

Political fragmentation and competition among local jurisdictions within metropolitan areas strongly exacerbated these trends. Whereas municipalities are legally subordinate to

state legislatures, they enjoy substantial, largely unfettered powers to tax, spend, and regulate land use. State legislatures have been reluctant to override these powers to promote racial or economic integration. In a context of little or no federal or state oversight, this political fragmentation led to a high degree of competition among suburban jurisdictions to attract better-off residents and exclude those with incomes below the median. Although some cities (mostly in the South and West) have had the legal authority to expand by annexing suburban areas (*30*), most are trapped within their political boundaries. The United States is highly unusual in this regard. In other Organization for Economic Cooperation and Development nations, urban areas are governed by metropolitanwide governments, and the national government encourages regional approaches to governance and policy. In the United States, in contrast, cities are unable to tax the income and wealth that they generate within their borders and unable to tax the wealthy of the surrounding region. The political fragmentation of metropolitan areas results in uneven fiscal capacities of central cities, inner suburbs, and outer suburbs (*127*). This dynamic strongly reinforced the trend toward spatial segregation by race and class.

At the top end of the metropolitan "food chain," exclusive and expensive suburbs provide their residents with excellent public services at a relatively small tax cost in relation to housing values and resident incomes. At the bottom, central cities provide housing of last resort for all those whom suburban jurisdictions can exclude through lack of income, lack of mobility, or discrimination. Over time, this put the locational advantages that central cities have for economic activity at increasing risk. Between these two poles, suburbs are arrayed according to the incomes and preferences of their residents and their varying ability to enforce them. [Businesses have also sought out, and sometimes created, suburban jurisdictions that would provide them with a tax haven and a supportive regulatory environment (*128*).]

In the competition for favored residents and investments, each jurisdiction has a strong incentive to adopt zoning and development policies that exclude potential residents with incomes below the median for their jurisdiction or who require more costly services. The better-off may view the latter as "free riders." Widespread discriminatory practices in the rental, sales, and financing of housing reinforce price exclusion (*49*, pp. 96–114, pp. 187–212; *129*). Some suburban governments have also chased private investments that generate more tax revenues than service costs, as long as they do not erode the quality of life of their residents. In this way, some suburbs can "privatize" the tax benefits of developments that the whole metropolitan area makes profitable. While the situation remains dynamic because some older, inner suburbs decline as newer, outer suburbs grow, the end result is heightened spatial segregation of income and ethnic groups.

Some observers view the competition among local jurisdictions in a positive light. They think that the ability of households with sufficient income to choose among jurisdictions to find one that provides the amenities they want at a tax price they are willing to pay constitutes a marketplace in public services. According to Tiebout and those influenced by his argument (*130–134*), such a market results in the efficient and responsive production of local public services, though "rent seeking" behavior by bureaucrats and other special interests may undermine this impulse.

Though this position contains an important element of truth, it does not acknowledge the significant costs that these institutional arrangements impose. As desirable jurisdictions become more homogeneous and "market segmentation" increases, metropolitan areas become more sharply segregated by income, race, and the hierarchy of taste and discrimination. This erodes the sense of metropolitan community, increases the disparities between central cities and suburbs, promotes more dispersed development, heightens local parochialism, and introduces invidious distinctions associated with space and place (*135,136*).

From the 1940s to the 1990s, these forces encouraged much of the mobile white middle class, and more recently the black middle class, to live in suburbs. Those whom discrimination and lack of income rendered the least mobile, the minority poor, were consigned to live in expanding urban ghettos. At some distance from them, yet still within city limits,

could be found households that, depending on local circumstances, chose to ignore the fiscally rational exit strategy. They ranged from gradually shrinking white ethnic neighborhoods, to emerging immigrant enclaves, zones where young people sought to start their careers, and the defended enclaves of the urban elite. As we have seen, however, the real median household income in cities declined relative to that of the surrounding suburbs and income inequality increased within metropolitan areas and within central cities. These trends set off a painful racial, ethnic, and class succession in neighborhoods, schools, and urban politics.

Federal Programs, Policies, and Funds for Addressing the Problems of Urban America Have Declined in Real Terms Since the Late 1970s

The national debate over the proper direction for urban policy was opportune because, after decades of oscillation between Democratic attempts to expand these programs and Republican efforts to reform and contract them, the edifice of urban programs had begun to experience serious structural faults. These programs stretched across several cabinet agencies, notably Housing and Urban Development, Health and Human Services, and the Department of Transportation, and addressed a plethora of objectives, including promoting investment in central cities, aiding poor urban families, and attempting to coordinate urban programs across cabinet agencies and across functions at the local level to operate more effectively. Between 1965 and 1978, these programs had grown in scope and, as block grants were enacted, had gradually become less targeted on poor, inner-city neighborhoods. Subsequently, however, the urban aid programs came under increasingly severe pressure and were clearly in trouble (*137–139*).

Table 2 describes trends in real federal outlays on the various components of urban policy between FY 1978, the year that federal aid to localities peaked, and FY 1994, reflecting the final budget proposed by the Bush administration. It shows that spending on programs that provided infrastructural investment, fiscal assistance, and social services in cities contracted sharply in real and relative terms, while spending on poor individuals in cities grew rapidly (*125,140*). The Reagan administration was particularly effective in reducing federal domestic discretionary programs that benefited urban constituencies (*141*). Congressional Democrats sought to compensate by finding points of bipartisan agreement and off-budget methods of encouraging urban investment. They succeeded in enacting the Low Income Housing Tax Credit in 1986, adopting President Bush's HOME housing block grant in 1990, and making federal transportation funds more flexible and requiring metropolitan transportation planning through the Intermodal Surface Transportation Efficiency Act (ISTEA) in 1991. Community groups also pursued the avenues opened up by the Community Reinvestment Act of 1975 (CRA) and the Home Mortgage Disclosure Act of 1977. But the overall pattern remained one of dramatic reduction in federal spending on urban programs. As a result, federal aid became a much less important factor in city budgets, which exposed them to greater fiscal strain. In the 24 largest central cities, the federal share of local government expenditures fell from 11.9 percent in FY 1980 to 3.4 percent in FY 1990 and its real value declined by 38 percent (*142*, p. 17). At the same time, the suburban share of federal aid to local governments increased (*143*, p. 195).

By withdrawing federal funds, Washington was telling local governments to do more with less. Washington's "fend-for-yourself federalism" simply meant that financially strapped localities had to cut programs and services during a time of growing needs (144). The impact of these cuts has been devastating to local governments' ability to deliver services and to urban residents' capacity to cope with poverty and the various health, housing, and other problems associated with poverty. According to one expert, "If New York City had held on to the same percentage of its general expenditures funded by federal and state aid in 1989 as in 1980, it would have had some $4 billion more to spend and not had a budget crisis in 1990 and 1991, when it was forced to cut services and raise local taxes" (*125*).

TABLE 2 Federal Urban Program Outlays, Fiscal Years 1978–1994, Thousands of 1994 Dollars

Program Category	1978	1994	Real change, 1978–1994 (%)
To or Through City Governments and Local Agencies			
Infrastructure			
Community development block grants	6,204	3,684	–40.6
Urban Mass Transit Administration	4,502	3,267	–27.4
Local public works	6,596	0	–100
Public housing authorities	1,467	2,584	76.1
Highways	12,325	18,139	47.2
Airports	1,193	1,620	35.8
Water and sewer	6,764	1,962	–71.0
Subtotal	39,051	31,256	–20.0
Subtotal minus highways	26,726	13,117	–50.9
Fiscal assistance			
Antirecessionary fiscal assistance	2,821	0	–100
General revenue sharing	14,481	0	–100
Subtotal	17,802	0	–100
Social service			
Community Service Administration	1,140	0	–100
Legal Services	333	375	12.5
Education title I	5,658	6,819	20.5
Special education	480	2,748	472.9
Vocational education	1,467	1,292	–11.9
Social services block grants	5,962	2,728	–54.3
HHS children and family services	2,375	3,998	68.3
HHS foster care	0	3,030	
HHS substance abuse and mental health	1,284	2,132	66
DOL training and employment	9,022	3,310	–63.3
Comprehensive Employment and Training Act	10,122	0	–100
Subtotal	37,842	26,412	–30.2
To Individuals Concentrated in Cities			
Medicaid	22,667	82,034	261.9
Supplemental security disability	11,206	23,700	111.5
Aid to families with dependent children	13,562	16,508	21.7
Food stamps	11,671	25,441	118.0
Child nutrition	5,656	7,044	24.5
Women, infants and children	787	3,249	312.6
Housing assistance (Section 8)	6,369	19,861	186.4
Earned income tax credit	1,870	10,950	485.6
Subtotal	73,789	188,787	155.8

Source: *Budget of the United States Government. Fiscal Year 1996,* Historical Tables, Tables 10.1, 11.3, and 12.2.

Urban Fiscal Conditions Have Not Improved During the Economic Recovery

The fiscal condition of America's cities has worsened over the past 50 years, particularly the past 25 years, as the income of their residents declined relative to those of the suburbs and employers shifted jobs and tax base to the suburbs. City officials are often reluctant to increase taxes on the remaining businesses, fearing that they, too, might join the suburban exodus (*133*). Middle-class and wealthy suburbanites often commute into the cities during the day, but spend their incomes and pay their taxes when they return home.[7] These fiscal constraints make it difficult for urban political leaders to govern effectively, because the demand for services far outstrips available resources (*127,145–149*). Cities face chronic fiscal crises, leading some social scientists to consider cities "ungovernable."

As a result of the trends cited, municipal officials, regardless of their race, preside over cities that are extremely difficult to govern effectively. Economic disparities and concentrated poverty have exacerbated the fiscal problems of major cities and older suburbs. Cities lack the resources to address the problems of infrastructure, housing, public health, crime, and related concerns.

In modern society, our well-being depends crucially on the quality, availability, and cost of public services. Our private-sector wage is supplemented by the "social wage" of public goods we consume. The evidence suggests that people who live in jurisdictions that contain areas of concentrated poverty pay more for public services and that those services are less available and of lower quality. Setting aside the question of whether people living in areas of concentrated poverty have less access to federal and state programs, the evidence clearly shows that concentrated poverty places a disproportionate cost burden on central city governments. In 1993, local governments spent $685 billion, or 26.6 percent of all government spending in the United States (*12*, p. 298). Because poor people live disproportionately in poorer central city jurisdictions and school districts, they (and other nonpoor central city residents) must pay higher tax rates to support the same level of government services as wealthier suburban municipalities and school districts. Moreover, there is some evidence that local governments discriminate against areas of concentrated poverty in the provision of municipal services.

Political scientists have generally found that the distribution of services in large cities is determined by professional administrators using bureaucratic-rational criteria rather than political criteria. Studies of city service distribution in Chicago and Detroit found that governments did not discriminate against low-income neighborhoods (*150,151*). Although this may be true of routine housekeeping services, there is evidence local governments practice discrimination in areas where they have more discretion. The federal Community Development Block Grant (CDBG) Act (Public Law 93-383) specifies that local programs must give "maximum feasible priority to activities which will benefit low- or moderate-income families or aid in the prevention or elimination of slums and blight." At the same time, however, many cities adopted a triage approach, deliberately shunning areas of concentrated poverty (*64*, p. 230). Rich's detailed study of CDBG programs in metropolitan Chicago found that weak federal controls enabled local administrators to shift resources away from the poor but that jurisdictions with strong benefits coalitions were able to target programs on needy neighborhoods (*152*). Goetz argues that further devolution of federal programs to local administration, together with reduced funding, will shift housing policy benefits from poor to moderate-income households and from renters to home owners (*153*). A study of neighborhood organizing in an upstate New York metropolitan area found that these organizations were able to prevent displacement in a service-oriented city, but could not effectively address the problems of low-income neighborhoods in a declining industrial city because of weak social networks and lack of connection to power centers in government or private industry (*154*).

The concentration of poverty within central cities increases the cost of governmental services and decreases access to them. According to data compiled by the Advisory Commission on Intergovernmental Relations in 1981, the central city tax burden relative to income was 50 percent higher than in suburbs (*127*, p. 297). A study of the Washington,

D.C., area found that central city residents pay about 15 percent more in taxes because of metropolitan fragmentation but that institution of a metropolitan government would have only a small effect on the after-tax distribution of income. Replacing local taxes with an areawide income tax would increase the incomes of those households making less than $10,000 by 20 percent (*155*). Pack found that high-poverty cities spent more on primary poverty functions, consistent with the hypothesis that concentrated poverty has negative social consequences. She also examined city expenditures on non-poverty-related services, such as police, fire, courts, and general administrative functions, and found that cities spent an additional $27.75 per capita on non-poverty-related services for every 1 percentage point increase in their poverty rates (*156*).

The fact that government is more expensive in cities with concentrated poverty begs the question of whether this is due to objective needs, to pressure from low-income people to spend more, or to inefficient and unresponsive big-city bureaucracies. Ladd and Yinger argue that the cause lies in structural pressures, decisively influenced by concentrated poverty: "Poor fiscal health is not caused by poor management, corruption, or profligate spending, but by a city government's inability to alter its city's fiscal health" (*127*, p. 291). Concentrated poverty drives up the cost of government services in innumerable ways. The low population densities of ghetto areas can increase the per-capita cost of providing some city services, whereas the negative social effects of concentrated poverty, such as higher rates of teen pregnancy, crime, and drug use, increase the cost of others.

Education is the most important local government service that is strongly affected by concentrated poverty. In recent decades, the returns to human capital investments in education have increased significantly, so that education now appears to play a much more significant role in income inequality than it did 20 years ago. In 1977, for example, a male college graduate earned 49 percent more than his high school–educated counterpart. By 1992, the college graduate earned 83 percent more. The literature documenting the effects of concentrated poverty on the quality of public education is voluminous and can only be touched upon here. Notwithstanding substantial state funding and intervention by the courts, expenditures per pupil vary significantly. In the New York metropolitan area in 1987, expenditures per pupil varied from $5,500 in New York City to over $11,000 in the wealthiest suburbs (*157*). But even if central city and suburban school districts had equal resources, the quality of the education received by the students would not be equal. One study estimated that Arizona school districts with relatively high levels of at-risk students (students with limited English proficiency or eligible for subsidized lunches) would have had to receive $257 million in additional funding to achieve the same educational output as more advantaged districts (*158*).

The education example illustrates that the quality of governmental services depends crucially not just on the characteristics of the individuals who receive them but on the social context in which they are produced. Public services are "coproduced." Successful public schools require active involvement by the parents. In areas of concentrated poverty, this involvement is more difficult. To use Coleman's term, the "social capital" of low-income neighborhoods is depleted. High crime rates, for example, make it difficult for parents to go to evening meetings of the PTA. Children do not have contacts with people with postsecondary educations and therefore get less information about educational opportunities. The social effects of concentrated poverty that have both direct and indirect effects on economic well-being can now be discussed.

Urban Voters as a Percentage of the National Electorate Have Declined Steadily Since the Early 1960s

Since the 1930s, the U.S. Conference of Mayors, the National League of Cities, and allied organizations have pressured the federal government to provide resources to help cities address their problems. Despite its overall bias in favor of the suburbs, federal aid to central cities has ebbed and flowed since the Depression, depending on the political influence of

urban voters and urban leaders and the overall "mood" of the country about addressing economic and social problems. During this period, there has been a steady decline in the voting power of large central cities. Their influence on national politics peaked in the late 1940s. In 1944, the 32 major central cities cast 27 percent of the national vote in presidential elections. Subsequently, their share declined to only 14 percent of the national vote in 1992. Not only did their population decline as a share of the nation's total, but their voter turnout also declined relative to that of the rest of the nation. Nationwide voter turnout peaked in 1960 at 64 percent of the voting age population; that year, the turnout in the 32 major central cities was 62 percent, close to the national average. While turnout in these cities exceeded the national average in two presidential years (1976 and 1984), more often it has fallen well below the national level. In 1992, overall turnout was 55 percent, but it had fallen to 47 percent in the major cities (*159*). A study of 12 large older cities found that they cast 21.8 percent of the national vote in 1948, but contributed 13.3 percent in 1968 and only 6.5 percent in 1992 (*160*, Table 2). According to national exit polls, residents of all cities with populations over 500,000 cast only 11 percent of the vote in 1992 and 10 percent in 1996 (*161,162*).

Candidates for president calculate where and how to campaign on the basis of the relative size and partisanship of the likely voters in each state and focus on close states to maximize the number of electoral votes they receive. An analysis of the major cities' share of votes in key states illustrates why urban concerns are fading in national politics. In the 1948 presidential election, New York City cast 50 percent of the votes in New York State. Chicago cast 46.5 percent of the votes in Illinois. Baltimore had 42.3 percent of Maryland's vote, and Detroit had 31.8 percent of Michigan's. Los Angeles and San Francisco combined for 51.3 percent of the California vote, whereas Philadelphia and Pittsburgh formed 30.7 percent of Pennsylvania's electorate. Thus to the extent that these key states were in play in national elections, the relative mobilization of their big-city vote could be decisive. By 1992, however, New York City cast only 30.9 percent of the votes for president in New York State. Similarly, the shares of Chicago (22.3 percent), Baltimore (13 percent), Detroit (7.9 percent), Los Angeles and San Francisco (12.9 percent), and Philadelphia and Pittsburgh (16.1 percent) had also declined precipitously (*160*).

Conversely, the suburban vote has grown steadily. Suburbanites surged to 55 percent of the total according to a 1994 exit poll, then subsided to 49 percent in 1996 (*161*). In the 1980s, suburbanites gave Republican candidates between 55 and 61 percent of their votes. It was hardly surprising, therefore, that Democratic candidate Bill Clinton and his strategists identified Northern, white, ethnic, suburban "Democratic defectors" as pivotal to their project of realigning national politics in 1992. Clinton's 1992 campaign pollster, Stanley Greenberg, spent the 1980s studying this population and argued that the Democratic party's focus on urban blacks had "crowded out" the "forgotten middle class" of white suburbanites. He found that these descendants of New Deal supporters had decided that the urban poor lacked basic values and got an unwarranted share of federal aid. By playing on these themes during the 1980s, Republicans created many "Reagan Democrats." Along with the gradual and perhaps more permanent loss of Southern whites to the Republicans, Greenberg argued that suburban defection was a key ingredient of Republican national presidential majorities (*163*, pp. 278–283). Winning them back was the key task of the 1992 Clinton campaign.

Another way to look at this phenomenon is to calculate cities' share of the national vote in relationship to their share of eligible voters.[8] Starting in the Depression, urban political machines and labor unions mobilized urban voters. The 1936 presidential election was the first in history in which the large cities' share of the national vote equaled their share of the national electorate. Their relative propensity to vote peaked in 1944 at 1.13 and remained above 1 through 1952. By 1992, it had fallen to 0.82, the lowest level in the postwar period. According to Nardulli et al. (*159*, p. 484), "This drop in the relative propensity to vote accounts for almost 40 percent of the loss in voting power experienced by these cities between 1944 and 1992. Based on a drop in the cities' share of the national electorate, they should have dropped only 8 points (from 27 percent to 19 percent) rather than 13 points."

Urban voters tend to favor Democrats. In 1996, for example, voters in cities with populations exceeding 500,000 gave Clinton 67.5 percent of their votes, a significantly higher margin than Clinton received in the national vote. Urban residence has an effect on voting behavior independent of other factors. Whites, blacks, Hispanics, and Asians living in big cities were all more likely to vote for Clinton than their racial counterparts living in middle-size cities, small cities, suburbs, or rural areas.

Changing patterns of electoral participation and representation do not explain all of the decline in cities' influence on national politics. Even members of Congress who represent cities have weaker ties to their voters. The skyrocketing cost of campaigns has profoundly shaped the way elected officials behave. The demise of urban political machines is clearly linked to the emergence of big money. During the first half of the 20th century, urban political machines provided the electoral foundation of the national Democratic party. They helped to enfranchise several generations of immigrants. When they delivered the vote for presidential and congressional candidates, they could expect more in return than mayors can today.

Starting in the 1970s, national corporate campaign contributors and national political action committees began to dominate campaign fund-raising. Their financial backing increasingly influenced the priorities of Washington officials. Whereas big business has no single policy agenda, powerful business contributors influence tax, spending, and regulatory policies that undermine healthy cities. The defeat of Clinton's health care reform plan, which would have greatly benefited the working poor in central cities and improved their fiscal condition, is but one example (*164–167*).

Weir found that these dynamics also operate at the state level. State legislatures are increasingly dominated by suburban legislators. The decline of political parties and the increasing influence of big-money special interests have also made it more difficult for urban legislators to cut deals (or "logroll") with rural legislators at the expense of suburbanites. Weir quotes a Republican leader of the Illinois state senate, who argued that suburbanites have "always been paying for Chicago, they've been doing it forever. . . . The day of the free ride is over" (*168*).

The isolation of cities in state politics is reflected in the failure of many big-city mayors to win statewide office. In recent decades, Kevin White of Boston, Ed Koch of New York City, Andrew Young of Atlanta, Tom Bradley of Los Angeles, Diane Feinstein of San Francisco, and Stephen Goldsmith of Indianapolis have all lost gubernatorial bids, in part because of the voting strength of suburban interests and partly because mayors are associated with the problems of big cities. Exceptions include William Schaefer of Baltimore, Neil Goldschmidt of Portland, Oregon, George Voinovich of Cleveland, and Pete Wilson of San Diego (who served in the U.S. Senate before being elected governor).

Edsall and Edsall argue that "suburbanization has permitted whites to satisfy liberal ideals revolving around activist government, while keeping to a minimum the number of blacks and the poor who share in government largess" (*169*, p. 228). They concluded that "the nation is moving steadily toward a national politics that will be dominated by the suburban vote" (*169*, pp. 229, 231). Schneider echoed this view in an *Atlantic* cover story timed to coincide with the 1992 nominating conventions. He noted that the 1992 election would be the first in which a majority of the voters lived in the suburbs. He argued that changing demographics are moving American politics away from the concerns of city residents toward more private, familial issues. In this "suburban century," Schneider wrote, candidates for national office and a majority of congressional seats can ignore urban America without paying a political price (*170*).

The dilemmas of cities in national politics are reflected in the electoral strategies and policy agenda used by President Clinton. During the 1992 presidential campaign, both candidates focused on the suburban vote. Although Clinton campaigned in many inner-city neighborhoods, and although the Democrats launched a small-scale voter registration drive in inner cities, he defined the key battleground as the suburbs. To reach out to that vote while holding on to the Democrats' urban base, he sought to develop a "common ground" message. Twice in May, 1992, with the Los Angeles riot embers still smoldering, Bill Clinton

campaigned in the Republican California suburbs of Orange and San Diego Counties, linking the problems of suburbanites with those of the inner cities (*171,172*).

Clinton could not ignore urban problems in 1992 (*173*). The 1992 Los Angeles riot and urban unrest in New York and Miami had captured national attention and led many to call for renewed federal attention to urban problems (*174*). The continuing importance of central city voters within the Democratic electorate reinforced this case. In many key 1992 primary states, central city voters gave Clinton the edge over his competitors. In the general election, the constituencies that were most likely to favor Clinton, namely blacks, Hispanics, Jews, white liberals, union households, and senior citizens, were all concentrated in central cities (*161*, pp. 138–139). As a Southern Democrat elected governor by a biracial coalition, Clinton knew he needed black votes and was comfortable campaigning in black venues. Big-city party organizations and public employee unions also provided the bulk of the Clinton campaign's field operations. In his search for suburban votes, he could not abandon or antagonize his urban base.

Republicans had a reciprocal challenge. Except for Gerald Ford's loss to Jimmy Carter in 1976, Republican presidential candidates used the "subtractive" politics of metropolitan cleavage to win every presidential election between 1964 and 1992. Republican presidential and congressional candidates did best in rural constituencies and white, predominantly Protestant suburbs. But to extend their presidential victories into control of Congress, Republicans would have to improve their position in suburban districts, especially Catholic districts. During the 1980s, Republican presidents had not found the issues to enable Republican candidates to defeat a sufficient number of suburban House Democrats.

To broaden suburban support, Republican congressional leaders sought to capitalize on suburban resentment over paying taxes for programs that benefited urban constituencies. In so doing, they were not hampered by the cleavages that divided central city and suburban Democrats. White, Catholic suburbs were socially closer to the white, Protestant rural and small town base of the Republicans than they were to central cities. Republicans could seek the moral high ground by asserting that the welfare state fostered urban dependency. Republican conservatives could argue for terminating failing programs and getting the government out of the taxpayers' wallets, whereas Republican progressives could stress using targeted tax credits and deregulation to encourage private investment in central cities to expand the Republicans' urban base. For the moment, at least, the Republicans have gotten the better part of this competition, and many federal programs important to central cities have been fundamentally challenged. Indeed, key pieces of New Deal legislation have been repealed.

Urban Representation in Congress Has Declined Steadily Since the Early 1960s

Suburban districts far exceed urban districts. This is exacerbated by racial gerrymandering, which promoted creation of "majority minority" congressional districts, further concentrating urban voters in fewer districts, resulting in a growing number of (more conservative) suburban districts with few if any ties to the urban core. (Recent U.S. Supreme Court decisions have nullified some but not all of this gerrymandering.)

Similar trends have affected the urban delegation in Congress. Between the early 1970s and the early 1990s, the number of central city districts in the U.S. House of Representatives fell from 121 to 93, a decline of 23 percent, while suburban districts rose from 160 to 239, a 49 percent gain. Excluding the relatively conservative, central cities of the South and West, urban House districts fell even more sharply, from 62 to 40 (*175*, Tables 1 and 3). Wolman and Marckini found that the number of congressional districts in which a *plurality* of residents lived in central cities declined from 110 in 1963 to 93 in 1993, or from 25 percent to 21 percent of all districts. Rural districts fell from 203 to 103, or from 47 percent to 24 percent of all districts. Districts with suburban pluralities increased from 122 to 239. For congressional districts with a *majority* of central city, suburban, and rural residents, Marckini and Wolman found the decline to be even more striking: such districts increased from 94 to

103 between 1963 and 1973, then fell to 84 in 1993. During that period, rural-majority districts declined from 181 to 83. Meanwhile, suburban-majority districts increased steadily from 94 to 214 (*175*).

Although to the author's knowledge segregation indices have not been computed for central city and suburban congressional districts, it is likely that they have become economically and racially more segregated. Increasingly, urban congresspersons represent areas with high concentrations of poor and minority households, whereas those from suburban districts tend to represent more affluent areas with relatively few minority households. That the political isolation of racial minorities has increased and coalition building has become more difficult are suggested by research on the "racial gerrymandering" of recent decades in response to voting rights litigation. The creation of "majority minority" districts has dramatically increased black and Latino membership in Congress, but some scholars have argued that increased "descriptive" representation has come at the cost of substantive representation or political influence (*176–181*). In this view, concentrating blacks and Latinos in safe majority-minority districts had led to the election of more conservative (and Republican) legislators and fewer moderate Democrats in the remaining districts. This may "make the House less likely to adopt policies favored by blacks even if individual members from black majority districts demonstrate unusually high levels of responsiveness to African Americans" (*178*, p. 1). Some have even argued that recent Supreme Court decisions banning racial gerrymandering could lead to more coalition building across racial (and, some might argue, spatial) lines (*182,183*).

These studies suggest that the space for legislative and ideological common ground between urban and suburban legislators had narrowed. Wolman and Marckini found that members of Congress from central city districts have considerably more liberal voting records than those from suburban districts, although the gap remained about the same between 1963 and 1993. Not surprisingly, the voting records of congresspersons from "all central city" districts was even more liberal than those in majority central city districts, and the voting records of congresspersons from "all suburban" districts was more conservative than those representing majority suburban districts. Moreover, the ideological divide between purely urban and suburban districts grew substantially over the 30-year period.[9]

The Number of Minority Elected Officials, Including Mayors, of Major Cities Has Increased Steadily Since the Late 1960s

Minorities came to attain political power in American cities just as the fiscal conditions of these cities were worsening. This had led some urban observers to view minority attainment of urban political power as a "hollow prize," but of course the reality is more complex.

In 1989, four of the nation's five largest cities—New York, Los Angeles, Chicago, and Philadelphia—had black mayors. Four years later, New York and Los Angeles had conservative white Republican mayors; moderate white Democrats held office in Chicago and Philadelphia.[10] The replacement of prominent black mayors by whites generated much comment and led some analysts to see a significant political trend. Do these white mayoral victories portend what Sleeper (*184*) has called the end of the urban rainbow coalition?

Beginning in the late 1960s, emerging from the civil rights movement, a new generation of African-American (and then Latino) leaders won office in many cities around the country. Until 1967, not a single African American had ever been elected mayor of a major American city. That year, Richard Hatcher was elected mayor of Gary, Indiana, and Carl Stokes became mayor of Cleveland. Subsequently, the number of African-American mayors of cities over 50,000 increased steadily, reaching 28 by 1988 and 38 five years later. The total number of black municipal elected officials increased from 715 in 1970 to 4,819 by 1993. Likewise, the number of Latino municipal officeholders increased from 1,304 in 1984 to 2,048 in 1994 (*185*) (these figures do not include individuals elected to local school boards or special district boards). When Kurt Schmoke was elected the first black mayor of Baltimore in 1987, every city of more than 100,000 people that had a majority black population had elected an African-American mayor. Dramatic breakthroughs took place in the South, where civil rights

activism and voting rights laws led to black mayoral victories in Atlanta, New Orleans, Richmond, Savannah, Memphis, and Birmingham, all of which had black population majorities, as well as Charlotte. At various points in the 1980s, blacks were also elected mayor of four of the nation's five largest cities—David Dinkins in New York City, Tom Bradley in Los Angeles, Harold Washington in Chicago, and Wilson Goode in Philadelphia—though none had a black majority, while Lee Brown was elected mayor of Houston, the fifth city in this group, in December 1997.

The number of minority mayors in the 76 largest American cities (with populations over 200,000 in 1990) reached an all-time peak of 25 in 1997 and 1998. Of these cities, 20 had African-American mayors (*186*, Table 46). Another five (Miami, El Paso, Albuquerque, Sacramento, and Santa Ana) had Hispanic mayors. In other words, black or Hispanic mayors headed one-third of the nation's largest cities. Moreover, many of these mayors were elected in cities where the electorate is predominantly white, or where one racial minority group (black or Hispanic) does not constitute a majority. This suggests that there is some potential for "deracialized" urban politics.

While white mayors succeeded black mayors in Los Angeles, Chicago, New York, and Philadelphia and replaced a Latino mayor in San Antonio, elsewhere, in Dallas, Houston, San Francisco, Seattle, Kansas City, Baltimore, Memphis, St. Louis, Minneapolis, Rochester, Sacramento, and Birmingham, voters elected their first black or Hispanic mayor, while Detroit, Washington, New Orleans, Cleveland, Atlanta, Oakland, Newark, Albuquerque, Miami, and Denver all elected their second or third black or Hispanic mayor.

In short, a growing number of blacks and Hispanics have become the chief executives of the nation's major cities. In terms of politics and policy, however, this trend raises a number of important questions dealing with their electoral coalitions, their governing coalitions, and their policy agendas. Is the increasing number of minority mayors simply a reflection of changing demographics? Have minority candidates for mayor been able not only to mobilize support from their own racial group, but to attract crossover support from other racial groups as well? As American cities become increasingly multiracial, can minority candidates build electoral coalitions across racial boundaries? In many cities, it is impossible for minority mayors to win office without gaining substantial support from other racial groups. Many minority candidates have been successful in doing so. Some minority candidates, in fact, received a majority of white votes.

Among current black mayors, for example, Ron Kirk leads Dallas, where 29.5 percent of the population is black, 20.9 percent is Hispanic, and 2.2 percent is Asian. Lee Brown leads Houston, where 28.1 percent of the population is black, with 27.6 percent Hispanic and 4.1 percent Asian.[11] Black mayors Willie Brown of San Francisco (10.9 percent black, 13.9 percent Hispanic, and 29.1 percent Asian), Norman Rice of Seattle (10.1 percent black, 3.6 percent Hispanic, and 11.8 percent Asian), Wellington Webb of Denver (12.8 percent black, 23 percent Hispanic, and 2.4 percent Asian), Sharon Belton of Minneapolis (13 percent black, 3.1 percent Hispanic, and 4.3 percent Asian), Emanuel Cleaver of Kansas City (29.6 percent black, 3.9 percent Hispanic, and 1.2 percent Asian), Elzie Odom of Arlington, Texas (8.4 percent black, 8.9 percent Hispanic, and 3.9 percent Asian), and William Johnson of Rochester (31.5 percent black, 8.7 percent Hispanic, and 1.8 percent Asian) all lead large cities where blacks do not make up the majority of the population or electorate, and indeed where blacks are not always the largest minority group.

In 1993, voters in Albuquerque, a majority white city of 385,000 (3 percent black, 34.5 percent Hispanic, and 1.7 percent Asian), elected Martin Chavez, a Hispanic, as mayor. Voters in Sacramento, a majority of whose 369,000 residents are white (15.3 percent black, 16.2 percent Hispanic, and 15 percent Asian), elected Joseph Serna, a Hispanic, as their mayor in 1992 and 1996. Many other smaller cities, including those with white majorities, have also elected black and Hispanic mayors (*187–190*). Clearly, multiracial coalition building is alive and well in urban America, despite the underlying possibilities for intergroup competition.

How do these minority mayors govern once in office? Much depends, as noted earlier, on the composition of their governing coalition—the composition of the city council, the mobi-

lization of community and labor constituencies, and the nature of the business community and its participation in local politics. From the 1960s through the 1990s, most (though not all) minority mayors could be identified as heading liberal regimes, whereas a few could be designated as progressive regimes.

It is possible, however, that the current wave of big-city mayors is becoming more conservative in political outlook, policy agenda, and governing coalitions, regardless of race. If so, the racial composition of urban leaders may be less critical to urban politics than the structural forces impinging on the capacity of local governments to address urban needs. As the federal government began to cut aid to cities in 1978 and the private economies of many large central cities surged in the 1980s, mayors began to rely increasingly on the private sector to generate jobs and incomes for their constituents, which revived the emphasis on public support for private investment, albeit in new forms (*191,192*). Since cities with large minority populations also tend to be among the poorest in the country, their minority mayors need to find new ways to address the problems associated with poverty. Unable to increase federal or state support, many have adopted a more accommodating approach to business and the surrounding suburbs. Whether this reflects ideology or necessity is difficult to discern.

The steady increase in minority mayors thus may no longer represent a concurrent trend toward liberal or progressive urban regimes. Like white mayors, minority mayors must face changing economic and demographic realities. Some minority mayors who entered office as liberals, such as Detroit's Coleman Young or Atlanta's Maynard Jackson, shifted toward a more conservative approach. Their successors, such as Detroit's Dennis Archer and Atlanta's Bill Campbell, along with Michael White in Cleveland and Sharpe James in Newark, have been labeled a "new breed" or "post–civil rights" generation of minority mayors, who focus more attention on downtown economic development than on racial equity (*184,193*). Ironically, majority white cities that have elected minority mayors, such as Seattle, Minneapolis, or San Francisco, tend to be better off and can adopt modestly redistributive policies without triggering capital flight or white backlash.

Major Trends in Civic Life and Governance

During the past decade, scholars, policy makers, practitioners, and journalists have paid increasing attention to the problems of America's cities and metropolitan areas. This growing concern with urban problems has come from two very different directions: "community building" and "regionalism." Like ships passing in the night, the regionalists and the community builders look at urban problems from distinct perspectives, rarely stopping to talk to each other about their common concerns.

Community Building

Since the 1980s, the major response to the economic trends described above (particularly the growing concentration of poverty) by government officials, private philanthropy, community activists, and some sectors of business has been the support for "community building." This phrase incorporates a variety of approaches: the physical improvement of poor neighborhoods [often called "community development" and typically sponsored by neighborhood-based community development corporations (CDCs)]; effort to expand social networks and strengthen neighborhood institutions (often called improving the community's "social capital"); and efforts to expand the political influence of poor neighborhoods, particularly by mobilizing and organizing residents and building strategic alliances with institutions and people outside the community (often referred to as empowering the poor). All three types of community-building activities fall under the rubric of place-oriented approaches.

Government policy toward cities during the past two decades has generally emphasized the revitalization of urban neighborhoods. These place-based (as opposed to people-based)

strategies include enterprise zones, community development banks, the Community Reinvestment Act, and other federal policies. CDCs have become the favored vehicle for achieving these goals.

The community-building movement starts from the pressing problems of the inner city. In the past two decades, a large infrastructure of community-based organizations has emerged to tackle such problems as inadequate housing, access to credit, persistent crime, and related issues. Rooted in churches, neighborhood protest groups, and social agencies, with support from foundations, business, and government, there are now more than 2,000 CDCs working in urban neighborhoods with increasing skill and sophistication.

The most recent wave of community-building efforts goes well beyond the traditional community development strategy of revitalizing housing and retail services. The emphasis instead is on the relationships between people: the notion is that one must help build the social capital of poor communities, recognizing that improving this capital will, like improving access to physical capital (machines), financial capital (credit), or human capital (education), enhance individual economic outcomes.

The successes of this community-building approach are just now being realized. Places like Baltimore's Sandtown-Winchester neighborhood have been revitalized through the patient work of both organizers and public-private community partnerships. Such efforts almost naturally tend to have a geographically concentrated focus, partly because a neighborhood base is necessary to build community groups and community fabric.

Unfortunately, these efforts rarely go beyond this place-based approach. Most community development groups have tended to favor a neighborhood focus because it fits their size, administrative capacity, and political base. The new challenges of persistent poverty, economic restructuring, and demographic transition now require that communities reach out to a regional level of decision-making—and CDCs are probably the best-placed vehicle in terms of expertise and credibility to lead this shift in policy paradigms. Community builders also have ample reason to "think and link" their efforts to trends and institutions at the regional level. Otherwise, CDCs risk becoming, in Nowak's phrase, "managers of decline," fighting uphill battles against large-scale economic forces beyond their control (*194*). As noted earlier, Jargowsky found that surges and declines in concentrated poverty are closely correlated with the rates of regional economic performance (*23*). Harrison (*195*) has found that CDCs with better access to regional actors and opportunities tend to do better, particularly at placing low-income residents in jobs, than those who remain disconnected.

Regionalism

Regionalism is an old idea. During the 1930s, 1940s, and 1950s, city planners and political scientists (such as Lewis Mumford and New York's Regional Plan Association) promoted the notions of regional planning and metropolitanwide government, either to promote government efficiency or to promote a sound environment (such as greenbelts surrounding cities). In the 1960s, scholars lamented the multiplicity of local governments. Metropolitan areas were overwhelmed by the fragmentation of jurisdictions—cities, townships, villages, boroughs, counties, and special districts for everything from parks to water to transportation. Wood (*196*) made a compelling case that this fragmentation was irrational and inefficient. He and others proposed streamlining the governance of metropolitan areas by forming regional governments and planning entities. A number of studies by the Advisory Commission on Intergovernmental Relations, a federal agency, recommended ways to broaden the tax and service base of cities (*197,198*). Most of these ideas fell on deaf ears, since local politicians preferred to exercise their influence within the narrower boundaries of their own municipalities. As the proportion of Americans living in suburbs grew, in part because people sought to "escape" troubled cities, asking suburbanites to share their local taxes, schools, and other public services with central city residents was a hard sell indeed.

The revival of regional thinking during the 1990s involves several factors. It is partly a legacy of the earlier notions of scientific and rational planning as envisioned by the earlier

advocates. It is also the result of a new wave of environmentalism and opposition to urban sprawl. But it is primarily a creature of hard-headed pragmatism—partly the response of business leaders, municipal officials, and others to the demographic changes, fiscal limits, and bureaucratic inefficiencies that have made it difficult if not impossible to govern cities effectively and partly the growing realization of suburbanites that the problems confronting cities inevitably spill over and affect suburbs to their detriment.

Indeed, the past decades have seen growing interest in the relationship of cities, suburbs, and regions. Peirce et al. (199) argue that the key economic entities in the competitive global economy are "citistates"—a new moniker for metropolitan regions. Regions, they argue, are in a better position to attract businesses and streamline government services. Regions can "market" their areas to outside businesses in ways that municipalities cannot. They can identify sites for job creation, help train the workforce, and help devise ways to plan future growth that minimizes traffic gridlock, pollution, ugly sprawl, and environmental devastation. In fact, according to a new study by Barnes and Ledebur, one can look at the United States economy as one composed of "local economic regions" that compete with each other as with regions in other parts of the world.

Social scientists and practitioners have examined whether (or to what extent) cities and suburbs in the same region are interdependent. Do regions where cities and suburbs cooperate do better than regions where they do not? Can suburbs prosper if their central cities are plagued with the problems associated with concentrated poverty? Are central cities doomed to decay (or reach the "point of no return" in Rusk's words) if they do not work with surrounding suburbs to deconcentrate and reduce poverty?

There are many obstacles to greater regional cooperation. The proponents have different motives for supporting regionalism and thus support different approaches to regional cooperation. Business leaders (particularly those with facilities in different parts of a metropolitan area) tend to support regionalism because they believe it is more *efficient*. They believe that public services can be delivered more cost-effectively if they take advantage of economies of scale; also they argue that allowing each municipality to have different regulations, fees, zoning laws, and tax rates makes it difficult to do business in a region. (The resistance to regionalism is often couched as opposition to "big government.") Environmentalists view regionalism primarily in terms of its ability to foster *rational planning* and to deter ugly and costly urban sprawl. This is a version of the efficiency argument, but it focuses on quality-of-life issues—such as pollution, transportation, and land use—rather than on cost-effectiveness. In contrast, many big-city political leaders and advocates for the poor view regionalism in terms of *equity* and *redistribution*. For them, greater regional cooperation can promote a broader tax base and a more equitable distribution of resources for schools and other public services.

Implications for National Action

The future of America's cities and metropolitan areas cannot be left to localities alone. Federal policy during the past five decades has had a big effect on the current conditions of urban America. Federal policy needs to address these conditions in part by recognizing the vital link between the fate of cities and their neighborhoods, on the one hand, and the fate of metropolitan regions and the nation as a whole. At the same time, there is much to learn from innovations that have taken place at the community, city, and regional levels. Federal policy needs to learn from and build on these success stories. Key goals and approaches are discussed in the following subsections.

National Policies To Promote a Level Playing Field

As noted earlier, there is wide disparity in the economic fortunes of different metropolitan areas within the nation. Thus, policies to promote metropolitan cooperation will not have

the same effect in regions with vastly different per-capita incomes. For example, tax-base sharing in poor metropolitan areas will not address low per-student school spending compared with tax-base sharing in wealthier metropolitan areas. The huge differences in AFDC spending by states was not primarily due to differences in costs of living, but in states' ability to pay.

Federal policy has both widened and narrowed these regional differences. Federal programs like the Tennessee Valley Authority, rural electrification, and the creation of national parks played a key role in improving economic conditions in poor rural areas. Perhaps the most obvious example is federal military spending, which during the post–World War II period has played a major role in advancing the economic well-being of some areas while hurting the economic conditions of other regions. The Pentagon's decisions to locate military facilities and to grant defense contracts has greatly influenced the growth and decline of geographic areas. It has served as America's de facto "industrial policy" (*200,201*).

It thus makes sense for the federal government to take some responsibility for helping to level the economic playing field, not simply by redistributing income from wealthy regions to poor regions, but by helping poor regions to improve their economic well-being. Washington could, for example, reduce the "bidding wars" to lure private investment—tax abatements and other incentives—that take place between cities and regions and that create a "race to the bottom," undermining the fiscal and social health of all. The federal government could, for example, deter local jurisdictions from using tax abatements and private-benefit financing or capital investments to attract new investment by declaring their value subject to federal taxation. It should discourage jurisdictions from raiding each other's economic base by subjecting the value of all local economic development incentives to federal taxation. A general discussion of how the federal government can limit bidding wars is given by Burstein and Rolnick (*202*).

The federal government should seek to create full employment at livable wages. Given the uneven nature of the economy across regions, Washington could create formulas for targeting federal resources—such as fiscal assistance to cities and public works/infrastructure programs to metropolitan areas—on the basis of needs-oriented formulas.

National Policies To Promote Metropolitan Cooperation and Strengthen Ties Between Regional Development and Community Building

National policy makers must also take a number of critical steps to undo the antiurban bias of existing policies and to strengthen the capacity of metropolitan areas to address their own problems (*203–208*). In particular, we must begin to think of federalism not just in terms of cities and states, but in terms of metropolitan regions. These regions should be, but are not, the natural unit for domestic social policies and economic development. Federal initiatives can play a key role in promoting regional cooperation while retaining the benefits of local jurisdictional innovation and responsiveness. The goals of federal action should be to remove the perverse incentives at play in the current system, to prevent a few local jurisdictions from privately appropriating the public values that are created by metropolitan regions as a whole, to strengthen the institutional framework within which local jurisdictions can debate and decide how best to utilize federal and local resources to address the challenges their regions face, and to equalize resources across regions.

Working toward these goals would foster a healthy balance between competition and cooperation within and across regions. As the public choice economists have argued, competition among local jurisdictions can produce benefits. But our fragmented nonsystem of metropolitan governance has also produced unhealthy tendencies. Cumulative inequalities mean that the competition among suburbs and central cities is not in equilibrium; the rules of the game work against central cities and many inner-ring suburbs while advantaging outer-ring suburbs. Since all jurisdictions are dependent on the net taxes generated by new investment, localities are led to erode the quality of life of their inhabitants or undercut their neighbors in the chase for tax ratables. A new regionalism would not take away local auton-

omy, but bolster the ability of all local jurisdictions to realize their goals. As Salins (*209*, p. 164) has written:

> Federal, state, and local politics should focus on creating a level metropolitan playing field. No longer should the well-being and service capabilities of metropolitan localities, central city or suburban, be hostage to their economic, social, or demographic profiles, nor should they be harmed by the beggar-thy-neighbor scramble of their sister municipalities for regional economic advantage.

To remove the perverse incentives in the current system, the federal government should foster state and metropolitan regulation of growth on the suburban fringe and promote metropolitan tax-base sharing.

Portland, Oregon, stands as a national symbol of how strong regional land use planning can promote a more livable metropolitan environment. Some states have adopted frameworks for metropolitan land use planning, while litigation has sometimes led to statewide plans for the fair distribution of subsidized housing, most notably in New Jersey. Similarly, the Minneapolis–St. Paul metropolitan area has provided a national example of how regions could go about sharing the tax benefits of growth on the suburban fringe (*42*). The federal government could encourage other states and metropolitan regions to emulate these models by making supplemental federal grant allocations to states that adopt measures to control development on the suburban fringe, establish statewide fair share mechanisms, and pool regional tax bases.

Whereas such steps would have the effect of undoing the perverse incentives built into the current system of metropolitan political fragmentation and competition, they would not provide the institutional base through which metropolitan regions can define their problems, debate ways to respond to them, and craft coalitions around solutions to them. One obvious initial step toward this end would be to have all federal domestic grant programs require that planning, resource allocation, reporting, and evaluation be undertaken on a metropolitan basis. Building on the regional approach taken in transportation policy through ISTEA, it is particularly important for programs to be administered on a metropolitan basis in such areas as housing (i.e., administration and use of Section 8 certificates and vouchers), workforce development (i.e., training and job placement), welfare reform (i.e., job search for employable recipients), and land use planning and infrastructure investments (i.e., regulating development on the urban fringe and creating a cohesive regional transportation system). The natural unit for policies aimed at the labor market or the local economy is the region, not the municipality. In recent years, officials at the Office of Management and Budget and an intercabinet working group have crafted ideas about how portions of various federal grant programs could be set aside as a bonus pool to reward regions that showed initiative in fashioning metropolitan solutions to urban problems (*210*). These efforts should be pushed forward through a federal requirement that states create metropolitan bodies to generate and approve plans for the relevant domestic programs.

Metropolitan jurisdictions seem to find it easier to share the provision of "neutral" public services like sanitation, parks, and transportation than to agree to share their tax base, coordinate land use planning (especially with regard to housing and development), or consolidate public education. In other words, regional efforts to promote efficiency are the least difficult to enact, and efforts to contain urban sprawl and unplanned development are more problematic. Efforts to address concentrated poverty and economic inequality are the most difficult. While Rusk may be correct that the concentration of poverty cannot be addressed without a regional approach, there is no guarantee that regionalism will, on its own, resolve this issue.

The two issues that bear most directly on poverty and inequality, schools and housing, are among the biggest obstacles to regional cooperation. Suburbanites seek to protect control over and funding of their public schools. Since schools are largely funded by property taxes, wide disparities in real estate values generate great regional variation in per-capita funding for public education (*157*). Efforts to equalize funding usually require litigation or the threat

of litigation (*211–214*). Courts have required state governments to use state aid to narrow these spending gaps. New Jersey Governor James Florio lost a re-election bid in 1993 in part for supporting a tax plan to generate funds for schools in poor cities, which cost him suburban votes. In exceptional circumstances, cities and suburbs have unified their school systems to promote efficiency or equity goals. But economic and racial inequities remain even in these districts because schools serve neighborhoods that remain economically and racially segregated (*215*).

Similarly, middle-class suburbs use zoning laws to restrict the construction of low-income housing, avoid racial integration, and stop "threats" to property values. Here, too, litigation is required to overcome suburban resistance to scattering assisted housing across regions. The Mt. Laurel decision in New Jersey and the Gautreaux decision in metropolitan Chicago reflect two efforts at promoting regional housing mobility. The first involves constructing low-income housing in suburbs, the second provision of Section 8 housing vouchers so low-income inner-city families can move to market-rate housing in the suburbs. In only a few instances, such as Montgomery County, Maryland (which has a county housing "fair share" program), and Massachusetts (where the legislature enacted an anti–"snob zoning" law), governments have sought to encourage the siting of low-income housing in suburban areas (*55,216–230*).

Yet, as discussed earlier, suburbs are not all the same. It may be possible, therefore, to forge a political coalition between the central city and many suburbs to create tax-sharing plans that prevent the "favored quarter" from appropriating all the benefits of regional growth.

With few exceptions, federal mandates have been necessary to get localities in the same region to work together toward a common goal. For example, neither metropolitan Los Angeles's success at reducing pollution nor the Twin Cities' creation of a regional sewage treatment system would have occurred without federal mandates. If regionalism is a precondition for addressing questions of concentrated poverty, and metropolitan regions are unlikely to do so without federal sticks and carrots, then the key question for tackling this problem is how to forge a political constituency to promote common ground between the nation's central cities and some component of suburban America that can mobilize a majoritarian political coalition.

In doing so, the United States can also draw on the experience of other countries with far longer experiences with regional government, including that of the Ile de France region in France, the Tokyo metropolitan government in Japan, the creation of a new government for the London metropolitan region in the United Kingdom, and the current debate about regional government for Toronto.

National Policies To Reduce Inequality and Deconcentrate Poverty

The debate about what steps the federal government can or should take to reduce poverty is extensive and complex, reflecting the variety of the diagnoses of the problem. Some even say that the problem is more apparent than real. When the New York Times ran its seven-part series on the "Downsizing of America" in March 1996, for example, conservative economists and commentators responded with encomiums to overall job growth, the flexibility introduced by being able to lay off workers, and the upswing of the 1990s, while dismissing a lifetime job as "more nostalgic myth than historic reality" (*231*). One conservative commentator argues that Americans' expectation that they should enjoy continuous economic growth and social betterment is a dangerous illusion of entitlement (*232*). Pointing out that some good things have happened to the U.S. economy, however, does not mean that we should ignore the bad things that are also happening, or resign ourselves to the position that nothing can or need be done about them.

From a comparative point of view, many studies have shown that centralized wage setting, strong labor unions, and unitary welfare states, especially social support for working women, make a difference in the overall pattern of income distribution and the extent of poverty

(*233*). The United States is at the wrong end of each of these scales: it has highly decentralized wage-setting mechanisms, weak and declining labor unions, a patchwork of labor regulation, and highly decentralized and variable social welfare policies (*234*). Whereas the recent emphasis in national welfare on moving recipients from dependency to work is potentially extremely important, the early evidence suggests that we have a long way to go to ensure that welfare recipients actually find and learn how to hold decent jobs with a future. Moreover, many states have used significant portions of the fiscal windfall for tax relief rather than the expansion of programs to promote work and support working mothers (*235–237*).

At the national level, legislation is clearly needed that strengthens labor law, promotes unionization, provides more social support for working women, and takes further steps (beyond the expansion of the earned income tax credit) to make low-wage work pay wages that will support a family. Such legislation would have two virtues: it would benefit a wide variety of working families, as opposed to being targeted on "unworthy" groups, and it would focus on the central American value, work. County and local governments could launch a program to educate community members about the earned income tax credit, ensuring that working poor families are aware of, and utilize, what amounts to an extra incentive to stay in the labor force.

From a historical point of view, the facts that the labor market has been disproportionately rewarding those with higher levels of education over the last quarter century and that those in the labor force have fared better than those outside it suggest that federal policy should focus strongly on helping more people get through school, and especially on helping them attain a college degree. McMurrer and Sawhill argue that, whereas poverty and inequality have grown, inherited advantages are playing less of a role in determining an individual's chances for upward mobility, and educational attainment is playing a much larger role. They therefore urge policy makers to make decent local schooling an entitlement independent of local fiscal capacity, to set national standards for the performance of inner-city schools, and to expand early childhood education (*238*). Orfield et al. have shown that the increasing resegregation and political isolation of inner-city schools has contributed to their poor performance (*239,240*). Giving society a stake in improving inner-city schools will probably require the creation of metropolitan school districts. Equalizing school financing and ending the balkanization and isolation of urban school districts would have the added benefit of eliminating major factors in local fiscal zoning.

Given the critical importance of a college education to individual outcomes, broader support for public higher education must complement support for, and better performance by, primary and secondary education in the central cities. In recent decades, many states have disinvested in their public universities, shifting the burden onto students and their parents and reducing access for urban high school graduates. If central city high school graduates are to have an equal chance to realize the American dream, this trend must be reversed.

Whereas better educations must be provided to inner-city school children and their access to college educations must be promoted, more of their parents must be brought into the labor force and further steps must be taken to make (low-wage) work pay wages that will sustain a family above the poverty level. Recent increases in the earned income tax credit and the minimum wage are positive steps, but universal health insurance, increased availability of child care, and new steps toward creating family-friendly workplaces (for fathers as well as mothers) are also needed. Bergmann has recently designed a "Help for Working Parents" program that would provide $60 billion for child care and $30 billion for health insurance (*241*). This program would enable all parents working at the minimum wage to reach a "basic needs budget" and drastically reduce the child poverty that has become epidemic in recent years (*242*).

Another category of policies aims to deconcentrate or disperse low-income families to enhance their ability to take advantage of educational and job opportunities in suburban areas. In recent years the federal government has created several small pilot mobility programs, operating in a few metropolitan areas. These include housing policies (such as the federal Moving to Opportunity program, modeled on the successful Gautreaux program in

Chicago) and transportation policies (such the federal Bridges to Work program, modeled on several local "reverse community" programs). Providing low-income individuals with information about and access to jobs in emerging industries will also necessitate the integration of referral networks and job training programs as well as improvement in transportation connections to employment centers. Residential mobility could also be improved by easing portability restrictions on Section 8 renters (who receive a federal subsidy to their rent but who are generally locked into a particular geographic or jurisdictional area). Occupational mobility could be helped by the enhancement of community college training programs, particularly those designed to help working individuals advance up a career ladder. And social mobility could be helped by more vigorous enforcement of antidiscrimination laws and continued implementation of affirmative action guidelines.

Renewed efforts within the large central cities to address the problems associated with concentrated urban poverty must match the strong measures needed from the national and state governments to combat poverty and foster new regional approaches to urban problems. In the name of devolution and decentralization, the federal and state governments have taken steps to dump responsibility for a national problem, concentrated poverty, on central cities, without providing them with commensurate means to solve that problem. Whether they want to or not, whether new federal, state, and regional initiatives help them or not, central cities must cope with the consequences.

Some cities have performed well coming out of the last recession, and their buoyant economies provide leverage for them to address distributional issues within their own borders. The simple truth, however, is that many cities lack the means to alter structural forces that have increased the number of poor within their boundaries. Cities with a shrinking job base, like Detroit or St. Louis, cannot simply create an "incumbent upgrading" among their resident poor within their own boundaries. For most poor in these cities, opportunity lies in the suburbs or in other metropolitan areas. Harsh as it may sound, it is in the interest of these individuals and families, as well as in the interest of the cities in which they live, to move to another place with more opportunities. Federal, state, and local policy ought to promote this mobility, whether in the form of relocation assistance or in the form of help in gaining access to and keeping suburban jobs. The administrations of these cities should also diversify their poor neighborhoods by seeking to attract working families into them with affordable housing, good schools, and other amenities. Even the poor families who remain in the deconcentrating poor neighborhoods would benefit from the political clout that working families would exert on behalf of neighborhood schools and services.

National Policies To Improve Physical and Social Conditions in Urban and Inner-Suburban Neighborhoods

The federal government should support the comprehensive revitalization of their poor neighborhoods, the strategy described above as "community-building." It is doubted that, in the absence of changes in the larger matrix of forces working on urban poverty, comprehensive community development initiatives of the sort currently being funded by many national foundations can succeed on their own (*243*). In conjunction with the measures described above, however, such efforts become essential to breaking down concentrated poverty within urban areas. Seen in this way, place-oriented community development complements people-oriented mobility strategies. It is not a matter of choosing one over the other, but putting both in place. There is strong evidence that the functional fragmentation of the current top-down urban service delivery system should be, and can be, replaced with more holistic, neighborhood- and family-based bottom-up systems.

The federal government has promoted several strategies for helping community-based organizations and public-private partnerships. Both the federal HOME program and the low-income housing tax credit require a threshold of participation by community-based groups. The Community Reinvestment Act has helped to galvanize partnerships between lenders and community organizations, especially in the housing area. The federal govern-

ment needs to play a larger role in strengthening the capacity of community-based organizations to address neighborhood problems, especially the need for CDCs to diversify their activities beyond housing and into such areas as commercial development, economic development, and the delivery of social services. Expanding the CRA to incorporate commercial loans would be helpful. Local governments can contribute to this mission by enacting "linked deposit" policies, shifting their own deposits from banks with inadequate lending records.

National Policies To Reduce the Political Isolation of Cities and Urban Constituencies

Given the demographic realities, any success at forging a federal urban policy will necessitate appealing to some segment of the suburban electorate and their representatives in Congress. This poses a key strategic question. Put bluntly, why should suburbanites care about cities? How can we build political and policy coalitions between cities and the inner-ring suburbs? More specifically, how can we persuade a suburban congressperson to vote for an urban policy agenda?

Members of Congress who represent "suburban" areas may be personally sympathetic to the plight of the central cities. But that does not mean that they will vote to spend their constituents' tax dollars to alleviate urban problems. Thus, marshalling a congressional majority for an urban agenda has become increasingly difficult.

Some people appeal to compassion or what cynics might call "do-gooderism" or charity. Much of the early War on Poverty effort invoked this spirit. But while this sentiment may yield results during economic good times, it is not likely to last when a majority of Americans feel economically insecure. Suburbanites might also be lured to support urban policy by what might be called "riot insurance." Compared with a generation ago, fewer people now live, work, or shop in our cities, but many suburbanites still use their nearby cities and want to know that they will be safe. But this notion views cities as dangerous war zones that need to be contained before the problems spread. It leads to harsh and punitive policies.

A more compelling answer is that the fate of cities and their suburbs is inextricably intertwined. A spate of recent studies indicates that urban decay contributes to suburban decline, just as healthy cities and robust suburbs go hand in hand. Federal efforts to revitalize cities, in other words, should not be premised on charity, compassion, or even "riot insurance," but on the recognition that cities and suburbs within the same metropolitan region are in the same boat. If one end of the boat springs a leak and starts filling up with water, pretty soon the other end will, too, and, sooner or later, the whole vessel and its passengers will drown.

One key reform involves *expanding the urban electorate.* Cities generally have much lower voter participation than their suburban counterparts. Urban interest groups were a key force in the successful campaign to pass the federal "motor voter" law, designed to remove obstacles to voter registration and to expand the electorate. State governments were required to start implementing it in January 1995, a mandate upheld by the Supreme Court over the resistance of some Republican governors. Since poor and minority (i.e., urban) citizens have low levels of voter registration and turnout, motor voter advocates assumed that increasing registration will expand political participation among these groups, thus helping tilt the political balance toward the poor and minorities and, thus, cities.

The real test of the motor voter law, especially for urban concerns, is whether these new voters vote—and whom they vote for. That will depend on whether the mayors, community and labor organizations, church groups, and the Democratic Party seek to mobilize potential urban voters around issues that give them a reason to go to the polls.

A second key reform involves *improving our nation's labor laws.* Cities and inner-ring suburbs have increasingly become the location of low-wage service-sector employment, the vast majority of which is not unionized. A key goal of urban policy should be to increase the incomes of the growing sector of the working poor concentrated in central cities and inner suburbs. This requires a stronger labor movement, able to use its political clout to elect progressive Democrats and change our national priorities.

Since the Depression, the labor movement has been the backbone of progressive urban policy, including the original public housing program, public works and jobs, public education, and mass transit. But especially during the last 15 years, working people have been disenfranchised by the federal government's cold war against labor unions, which has weakened the constituency for federal urban policy. The United States has some of the most regressive labor laws among advanced democracies. As a result, only 11 percent of the private-sector workforce (and 16 percent of all workers) are union members.

John Sweeny, the AFL-CIO's new president, has pledged to dramatically expand union organizing. But as Rothstein recently explained, unions are not likely to win many victories unless the nation's one-sided labor laws are reformed (*244*). Labor law reform will help level the playing field between America's working people and business and help improve the political influence, and standard of living, of working people.

A third mobilizing reform involves *congressional redistricting*. As noted earlier, since the Voting Rights Act in 1965, civil rights groups have understandably adopted a strategy based on congressional redistricting. The main thrust of these efforts has been to reshape congressional districts that will give African-American (and, more recently, Latino) voters a stronger voice—and will increase the odds of electing persons of color to legislative bodies. This typically means that more urban districts will be represented by minorities.

Several recent Supreme Court decisions, which nullify this "racial redistricting," now make this a moot question. But the dilemma will not simply disappear. Urban advocates need a redistricting strategy that gives poor and minority voters a strong voice without overconcentrating them in so few districts that suburban politicians can ignore their concerns with impunity. Black progressive candidates will need to attract more white voters, just as white progressives will need to win black voters. This will mean finding common ground across racial and urban-suburban boundaries.

A fourth reform involves *campaign finance*. Political demographics and congressional redistricting alone do not explain the reluctance of our national leaders to push an urban agenda. Even those members of Congress who represent cities have weaker ties to organized voters. The skyrocketing costs of elections have profoundly shaped the way elected officials behave. During the 1930s and 1940s, the urban vote was the backbone of the New Deal coalition. Through the 1960s, even Democrats from suburban districts joined their urban colleagues in voting for many urban programs. The demise of urban political influence is clearly linked to the emergence of big money in politics.

Starting in the 1970s, national corporate campaign contributors, and national political action committees, began to dominate campaign fund-raising. Their financial backing increasingly influenced the priorities and votes of elected officials in Washington. While big business has no single policy agenda, powerful sectors within the business community influence tax, spending, and regulatory policies that undermine healthy cities.

We need to remove the legalized bribery system that currently makes it impossible to deal constructively with urban problems. This involves placing limits on the amounts individuals and organizations can donate to candidates and parties. This will require public financing of campaigns and free access to broadcast media. To ultimately fix this corrupting influence on our democracy, we need to appoint members of the Supreme Court who will vote to overturn Buckley v. Valeo (1976), which, by defining money as a form of "free speech," prohibits Congress from limiting the amount of money candidates can spend on their campaigns.

Conclusion

It has been almost 30 years since the Kerner Commission, formed by President Johnson in the wake of ghetto riots to recommend ways to address the nation's urban crisis, warned of America splitting into "two societies, one black one white—separate and unequal." Our cities are worse now than they were then, not because government policy has failed, but because it has been half-hearted or misguided by corporate priorities. We are a suburban nation, but we cannot prosper if our cities are decaying.

Around the world—in South Africa, Germany, Northern Ireland, and the Middle East—walls that have long separated people are coming down. The invisible walls that separate cities and suburbs in the United States also need to come down. Our nation's future depends on how well, and how soon, it tears down these walls and replaces them with bridges of cooperation and solidarity. Our task as progressive planners, activists, organizers, scholars, and teachers is to help build a political movement—and strong political organizations—that can turn our vision of humane communities into reality.

ACKNOWLEDGMENTS

This paper draws heavily on a report, *Rethinking the Urban Agenda*, coauthored by Peter Dreier, John Mollenkopf, and Todd Swanstrom, published in 1998 by the American Sociological Association's Spivack Program in Applied Social Research and Social Policy. The author is indebted to Mollenkopf and Swanstrom and has drawn on their contributions to this report.

NOTES

1. It has been reported (*1*) that 46 percent of the population name crime a fairly or very serious issue where they live, the fourth-strongest concern after drugs, the recession, and the cost of living. In recent years, the proportion naming crime as the country's most important problem jumped from 6 to 16 percent, 86 percent feel there is more violence in society as a whole compared with 5 years ago, 43 percent feel crime has worsened in their own neighborhood, and 55 percent worry about being a victim of a crime. Yet victimization surveys show that only 6 percent had their homes burglarized in the last year, and only 3 percent had been mugged. About 14 percent said that they had ever been the victim of a violent crime. Victimization surveys show a decline of the rate of household larceny, theft, and household burglary per 1,000 persons, a stable violent crime rate (with a very slight rise in the latter 1980s), and a slightly rising motor vehicle theft rate. This suggests that the fear of crime is every bit as much a problem as the actual experience of crime.

2. Almost half of all respondents to a survey (*6*, p. 47) support government efforts to ensure adequate food and shelter even if it drives the country further into debt.

3. At a seminar on "The Great Divide: Income Inequality in the New York Region" at the Twentieth Century Foundation on Dec. 4, 1997, Wolff distributed updated figures to his report (*14*) indicating that the concentration of wealth had increased slightly between 1989 and 1995.

4. In *When Work Disappears*, Wilson substitutes the term ghetto poverty for the term underclass, apparently taking to heart the criticism that the word underclass was used to stereotype the residents of poor neighborhoods as the undeserving poor.

5. A third method is to classify an area as a so-called "underclass" area if it has especially high levels of certain behaviors, such as high school dropouts, unemployed young males, welfare recipients, and female-headed households. This method is not treated here because the concern is not with the causes and effects of concentrated poverty, and it is not assumed that there is any necessary relationship with a culture of poverty or pathological behaviors.

6. The respective figures for 1953, 1970, and 1986 in the following cities are New York City, 35.9 percent, 25.8 percent, 14.8 percent; Philadelphia, 45.5 percent, 33.3 percent, 16.7 percent; Boston, 28.4 percent, 18.1 percent, 9.0 percent; Baltimore, 38.1 percent, 28.6 percent, 17.1 percent; St. Louis, 44.9 percent, 35.3 percent, 23.0 percent; Atlanta, 27.4 percent, 19.4 percent, 12.8 percent; Houston, 26.8 percent, 23.1 percent, 14.0 percent; Denver, 24.7 percent, 19.0 percent, 11.3 percent; and San Francisco, 20.3 percent, 14.7 percent, 9.4 percent (*93*).

7. During the past decade, the number of suburban commuters to cities declined, while the number of suburbanites who commute to work in other suburbs has grown—a trend that is likely to continue.

8. In 1980, for example, the 32 major cities had 17 percent of the nation's electorate but only 15 percent of the national voters; their relative propensity to vote was 0.88. That year, the suburbs of these cities had 21 percent of the national electorate but 23 percent of the national vote, or a relative propensity to vote of 1.10.

9. Liberalism was measured by congresspersons' rankings by the Americans for Democratic Action (ADA), a liberal group. The issues ADA chooses are not entirely urban oriented, however. Wolman and Marckini did not differentiate inner suburbs and outer suburbs—which typically have different demographic characteristics. Orfield and others argue that central cities and inner-ring suburbs have more in common than often believed and that this forms the basis for political and legislative coalition building. Wolman and Marckini's finding that the ADA scores of congresspersons from predominantly suburban districts where the remainder was mostly central city were consistently higher than those where the remainder was mostly rural is consistent with this position.

10. On the other hand, in December 1997, Houston, the fourth-largest city, elected its first African-America mayor, Lee Brown, former police commissioner in Houston and New York City and former "drug czar" in the Clinton administration.

11. Hispanics can be black or white, so the total percentage of racial minorities is smaller than the combination of black and Hispanic population.

REFERENCES

1. Crime Concerns. Public Opinion and Demographic Report. *American Enterprise*, Nov–Dec. 1993, pp. 77–82.
2. Goldberg, A. S. Americans and Their Cities: Solicitude and Support. In *In the National Interest: The 1990 Urban Summit* (R. Berkman, J. Brown, B. Goldberg, and T. Mijanovich, eds.), Twentieth Century Fund, New York, 1992.
3. Frey, W., and E. Fielding. *Changing Urban Populations, Regional Restructuring, Racial Polarization, and Poverty Concentration*. Population Studies Center, University of Michigan, Ann Arbor, Feb. 1994.
4. Metropolitan Areas and Cities. *1990 Census Profile 3*. U.S. Census Bureau, Sept. 1991.
5. Frank, R. H., and P. J. Cook. *The Winner Take All Society*. Free Press, New York, 1995.
6. *Deconstructing Distrust: How Americans View Government*. Pew Research Center for the People and the Press, Washington, D.C., March 1998.
7. *The New Yorker*, Oct. 16, 1995, p. 83.
8. Holmes, S. A. New Reports Say Minorities Benefit in Fiscal Recovery. *New York Times*, Sept. 30, 1997.
9. Reich, R. B. *The Work of Nations*. Random House, New York, 1991.
10. Barlett, D. L., and J. B. Steele. *America: What Went Wrong?* Andrew and McMeel, Kansas City, Mo., 1992.
11. Thomas, R., et al. The New Rich. *Newsweek*, Aug. 4, 1997, p. 53.
12. *Statistical Abstract of the United States: 1996*. U.S. Bureau of the Census, 1996.
13. Byrne, J. A. How High Can CEO Pay Go? *Business Week*, April 22, 1996, pp. 100–122.
14. Wolff, E. N. *Top Heavy: A Study of the Increasing Inequality of Wealth in America*. Twentieth Century Fund Press, New York, 1995.
15. *The President's National Urban Policy Report*. U.S. Department of Housing and Urban Development, 1982.
16. Browne, L. E. Shifting Regional Fortunes: The Wheel Turns. *New England Economic Review*, May–June 1989, pp. 27–40.
17. Ledebur, L. C., and W. R. Barnes. *All In It Together—Cities, Suburbs, and Local Economic Regions*. National League of Cities, Washington, D.C., Feb. 1993.
18. *Statistical Brief: How Much We Earn—Factors That Make a Difference*. U.S. Bureau of the Census, June 1995.
19. Levine, M. V. Globalization and Wage Polarization in U.S. and Canadian Cities: Does Public Policy Make a Difference? In *Cities in a Global Society* (R. V. Knight and G. Gappert, eds.), Sage Publications, Newbury Park, Calif., 1990.

20. Drennan, M., E. Tobier, and J. Lewis. The Interruption of Income Convergence and Income Growth in Large Cities in the 1980s. *Urban Studies*, Vol. 33, No. 1, 1996, pp. 63–82.
21. Freeman, R. B. Employment and Earnings of Disadvantaged Young Men in a Labor Shortage Economy. In *The Urban Underclass* (C. Jencks and P. Peterson, eds.), Brookings Institution, Washington, D.C., 1991.
22. Osterman, P. Gains from Growth? The Impact of Full Employment on Poverty in Boston. In *The Urban Underclass* (C. Jencks and P. Peterson, eds.), Brookings Institution, Washington, D.C., 1991.
23. Jargowsky, P. *Poverty and Place: Ghettos, Barrios, and the American City*. Russell Sage Foundation, New York, 1997.
24. Ledebur, L. C., and W. R. Barnes. *City Distress, Metropolitan Disparities and Economic Growth*. National League of Cities, Washington, D.C., 1992.
25. Savitch, H. V., et al. Ties That Bind: Central Cities, Suburbs, and the New Metropolitan Region. *Economic Development Quarterly*, Vol. 7, No. 4, 1993, pp. 341–358.
26. Voith, R. City and Suburban Growth: Substitutes or Complements. *Business Review* (Federal Reserve Bank of Philadelphia), Sept.–Oct. 1992, pp. 21–33.
27. Hill, E. W., H. W. Wolman, and C. C. Ford III. Can Suburbs Survive Without Their Central Cities? Examining the Suburban Dependence Hypothesis. *Urban Affairs Review*, Vol. 31, No. 2, 1995, pp. 147–174.
28. Byrum, O. E. *Old Problems in New Times*. American Planning Association, Chicago, Ill., 1992.
29. Burgess, E. W. The Growth of the City. In *The City* (R. E. Park, E. W. Burgess, and R. McKenzie, eds.), University of Chicago Press, Chicago, Ill., 1925.
30. Rusk, D. *Cities Without Suburbs* (2nd edition). Woodrow Wilson Center Press, Washington, D.C., 1995.
31. *The State of the Cities*. U.S. Department of Housing and Urban Development, June 1997.
32. Hill, E., and H. Wolman. Accounting for the Change in Income Disparities Between U.S. Central Cities and Their Suburbs from 1980 to 1990. *Urban Studies*, Vol. 34, No. 1, 1997, pp. 43–60.
33. Madden, J. Changes in the Distribution of Poverty Across and Within the U.S. Metropolitan Areas, 1979–1989. *Urban Studies*, Vol. 33, No. 9, 1996.
34. Nelson, K. P. *Gentrification and Distressed Cities: An Assessment of Trends in Intrametropolitan Migration*. University of Wisconsin Press, Madison, 1988.
35. Kasarda, J. D., S. J. Appold, S. Sweeney, and E. Sieff. Central City and Suburban Migration Patterns: Is a Turnaround on the Horizon? *Housing Policy Debate*, Vol. 8, No. 2, 1997.
36. Blank, R. M. *It Takes a Nation: A New Agenda for Fighting Poverty*. Russell Sage Foundation, New York, 1997.
37. Schneider, M., and J. R. Logan. Fiscal Implications of Class Segregation: Inequalities in the Distribution of Public Goods and Services in Suburban Municipalities. *Urban Affairs Quarterly*, Vol. 17, No. 1, 1981, pp. 23–36.
38. Massey, D. S., and M. L. Eggers. The Spatial Concentration of Affluence and Poverty During the 1970s. *Urban Affairs Quarterly*, Vol. 29, No. 2, Dec. 1993.
39. Abramson, A. J., M. S. Tobin, and M. R. VanderGoot. The Changing Geography of Metropolitan Opportunity: The Segregation of the Poor in U.S. Metropolitan Areas, 1970 to 1990. *Housing Policy Debate*, Vol. 6, No. 1, 1995, pp. 45–72.
40. McCormick, J., and P. McKillop. The Other Suburbia: An Ugly Secret in America's Suburbs: Poverty. *Newsweek*, June 26, 1989, pp. 22–24.
41. Minerbrook, S. A Tale of Two Suburbias: The Decline of Blue-Collar Suburbs and Growth of "Edge Cities" Create a New Kind of Isolation. *U.S. News and World Report*, Nov. 9, 1992, pp. 32–40.
42. Orfield, M. *Metropolitics: A Regional Agenda for Community and Stability*. The Brookings Institution, Washington, D.C., 1997.
43. Zunz, O. *The Changing Face of Inequality: Urbanization, Industrial Development, and Immigration in Detroit, 1880–1920*. University of Chicago Press, Chicago, Ill., 1982.
44. Duncan, O. D., and B. Duncan. *The Negro Population of Chicago: A Study of Residential Succession*. University of Chicago Press, Chicago, Ill., 1957, as reported by R. Farley, Residential Segregation of Social and Economic Groups Among Blacks, 1970–1980, in *The Urban Underclass* (C. Jencks and P. E. Peterson, eds.), Brookings Institution, Washington, D.C., 1991.

45. Wilson, W. J. *The Truly Disadvantaged.* University of Chicago Press, Chicago, Ill., 1987.
46. Kasarda, J. D. Inner-City Concentrated Poverty and Neighborhood Distress: 1970–1990. *Housing Policy Debate*, Vol. 4, No. 3, 1993, pp. 253–302.
47. Coulton, C. J., et al. Geographic Concentration of Affluence and Poverty in 100 Metropolitan Areas, 1990. *Urban Affairs Review*, Vol. 32, No. 2, Nov. 1996, pp. 186–216.
48. Massey, D. S., and M. L. Eggers. The Ecology of Inequality: Minorities and the Concentration of Poverty, 1970–1980. *American Journal of Sociology*, Vol. 95, 1990, pp. 1153–1188.
49. Massey, D. S., and N. A. Denton. *American Apartheid: Segregation and the Making of the Underclass.* Harvard University Press, Cambridge, Mass., 1993.
50. Massey, D. S., A. B. Gross, and K. Shibuya. Migration, Segregation, and the Geographic Concentration of Poverty. *American Sociological Review*, Vol. 59, 1994, pp. 424–445.
51. Fainstein, N. Race, Class and Segregation: Discourses About African Americans. *International Journal of Urban and Regional Research*, Sept. 1993.
52. Alba, R. D., and J. R. Logan. Analyzing Locational Attainments. *Sociological Methods and Research*, Vol. 20, No. 3, Feb. 1992, p. 386.
53. Logan, J. R., R. D. Alba, and S.-Y. Leung. Minority Access to White Suburbs: A Multiregional Comparison. *Social Forces*, Vol. 74, No. 3, March 1996, pp. 851–881.
54. Logan, J. R., R. D. Alba, T. McNulty, and B. Fisher. Making a Place in the Metropolis: Locational Attainment in Cities and Suburbs. *Demography*, Vol. 33, No. 4, Nov. 1996, pp. 443–453.
55. Rosenbaum, J. E. Changing the Geography of Opportunity by Expanding Residential Choice: Lessons from the Gautreaux Program. *Housing Policy Debate*, Vol. 6, No. 1, 1995, pp. 231–269.
56. Kain, J. F. Housing Segregation, Negro Employment, and Metropolitan Decentralization. *Quarterly Journal of Economics*, Vol. 82, No. 2, 1968, pp. 175–197.
57. Kasarda, J. D. Entry-Level Jobs, Mobility, and Urban Minority Unemployment. *Urban Affairs Quarterly*, Vol. 19, 1983, pp. 21–40.
58. Kasarda, J. D. Urban Change and Minority Opportunities. In *The New Urban Reality* (P. E. Peterson, ed.), Brookings Institution, Washington, D.C., 1985.
59. Kasarda, J. D. Urban Industrial Transition and the Underclass. *Annals of the American Academy of Political and Social Science*, 1989, pp. 26–47.
60. Pastor, M., P. Dreier, E. Grigsby, and M. Lopez-Garcia. *Growing Together: Linking Regional and Community Development in a Changing Economy.* International and Public Affairs Center, Occidental College, Los Angeles, Calif., April 1997.
61. Ihlanfeldt, K. The Spatial Mismatch Between Jobs and Residential Locations Within Urban Areas. *Cityscape*, Vol. 1, No. 1, 1994, p. 224.
62. Ellwood, D. T. The Spatial Mismatch Hypothesis: Are There Teenage Jobs Missing in the Ghetto? In *The Black Youth Employment Crisis* (R. B. Freeman and H. J. Holzer, eds.), University of Chicago Press, Chicago, Ill., 1986, pp. 147–187.
63. Fainstein, N. The Underclass/Mismatch Hypothesis as an Explanation for Black Economic Deprivation. *Politics and Society*, Vol. 15, 1986, pp. 403–451.
64. Judd, D. R., and T. Swanstrom. *City Politics: Private Power and Public Policy* (2nd edition). Addison-Wesley, New York, 1998.
65. O'Regan, K. M. The Effect of Social Networks and Concentrated Poverty on Black and Hispanic Youth Unemployment. *Annals of Regional Science*, Vol. 27, 1993.
66. Wilson, W. J. *When Work Disappears.* Alfred A. Knopf, New York, 1996.
67. Fischer, C. S. *To Dwell Among Friends: Personal Networks in Town and City.* University of Chicago Press, Chicago, Ill., 1982.
68. Pastor, M., and A. R. Adams. Keeping Down with the Joneses: Neighbors, Networks, and Wages. *Review of Regional Economics*, Vol. 26, No. 2, 1996.
69. Galster, G. C., and S. P. Killen. The Geography of Metropolitan Opportunity: A Reconnaissance and Conceptual Framework. *Housing Policy Debate*, Vol. 6, No. 1, 1995, pp. 7–43.
70. MacLeod, J. *Ain't No Makin' It: Leveled Aspirations in a Low-Income Neighborhood.* Westview Press, Boulder, Colo., 1987.
71. Anderson, E. *Streetwise: Race, Class, and Change in an Urban Community.* University of Chicago Press, Chicago, Ill., 1990.

72. Kotlowitz, A. *There Are No Children Here: The Story of Two Boys Growing Up in the Other America*. Doubleday, New York, 1991.
73. Oliver, M. L., and T. M. Shapiro. *Black Wealth, White Wealth: A New Perspective on Racial Inequality*. Routledge, New York, 1995.
74. Squires, G. D. (ed.). *From Redlining to Reinvestment: Community Responses to Urban Disinvestment*. Temple University Press, Philadelphia, Pa., 1992.
75. Odland, J., and B. Balzer. Localized Externalities, Contagious Processes and the Deterioration of Urban Housing: An Empirical Analysis. *Socio-Economic Planning Science*, Vol. 13, 1979, pp. 87–93.
76. Caplovitz, D. *The Poor Pay More: Consumer Practices of Low-Income Families*. Free Press, Glencoe, Ill., 1963.
77. Kakatuni, M. Bananas for Rent. *New York Times Magazine*, Nov. 9, 1997, p. 32.
78. Logan, J., and H. Molotch. *Urban Fortunes: The Political Economy of Place*. University of California Press, Berkeley, 1987.
79. Jencks, C., and S. Mayer. The Social Consequences of Growing Up in Poor Neighborhoods: A Review. In *Concentrated Poverty in America* (M. McGeary and L. Lynn, eds.), National Academy Press, Washington, D.C., 1990.
80. Case, A., and L. Katz. *The Company You Keep: The Effects of Family and Neighborhood on Disadvantaged Youths*. National Bureau of Economic Research, Cambridge, Mass., 1991.
81. Shihadeh, E. S., and N. Flynn. Segregation and Crime: The Effect of Black Social Isolation on the Rates of Urban Black Violence. *Social Forces*, Vol. 74, No. 4, June 1996, pp. 1325–1352.
82. Peterson, G., and A. Harris (eds.). *Drugs, Crime and Social Isolation*. Urban Institute Press, Washington, D.C., 1992.
83. Crane, J. The Epidemic Theory of Ghettos and Neighborhood Effects on Dropping Out and Teenage Childbearing. *American Journal of Sociology*, Vol. 96, No. 5, March 1991, pp. 126–129.
84. Fossett, J. W., and J. D. Perloff. *The New Health Reform and Access to Care: The Problem of the Inner City*. Kaiser Commission on the Future of Medicaid, Washington, D.C., 1995.
85. Polednak, A. P. *Segregation, Poverty, and Mortality in Urban African Americans*. Oxford University Press, New York, 1997.
86. Gortmaker, S. L., and P. H. Wise. The First Injustice: Socioeconomic Disparities, Health Services Technology, and Infant Mortality. In *Annual Review of Sociology 23* (J. Hagan and K. S. Cook, eds.), Annual Reviews, Inc., Palo Alto, Calif., 1997.
87. Stolberg, S. G. U.S. Wakes to Epidemic of Sexual Diseases. *New York Times*, March 9, 1998.
88. *New Census Report Shows Dramatic Rise Since 1979 in Workers with Low Earnings*. Center on Budget and Policy Priorities, Washington, D.C., May 11, 1992.
89. DeParle, J. Sharp Increase Along the Borders of Poverty. *New York Times*, March 31, 1994.
90. Rawlings, L. *Poverty and Income Trends: 1996*. Center on Budget and Policy Priorities, Washington, D.C., March 1998.
91. Jencks, C., and K. Edin. The Real Welfare Problem. *The American Prospect*, Spring 1990.
92. Edin, K., and L. Lein. *Making Ends Meet: How Single Mothers Survive Welfare and Low-Wage Work*. Russell Sage Foundation, New York, 1997.
93. Kasarda, J. D. Structural Factors Affecting the Location and Timing of Urban Underclass Growth. *Urban Geography*, 1990.
94. Kasarda, J. D. City Jobs and Residents on a Collision Course: The Urban Underclass Dilemma. *Economic Development Quarterly*, Vol. 4, 1990.
95. Kasarda, J. D. Industrial Restructuring and the Changing Location of Jobs. In *The State of the Union: America in the 1980s* (R. Farley, ed.), Vol. 1, Russell Sage Foundation, New York, 1995, pp. 215–267.
96. Frey, W. H. The New Geography of Population Shifts. In *The State of the Union: America in the 1980s* (R. Farley, ed.), Vol. 2, Russell Sage Foundation, New York, 1995, pp. 271–336.
97. Frey, W. Immigration, Domestic Migration, and Demographic Balkanization in America: New Evidence for the 1990s. *Population and Development Review*, Vol. 22, No. 4, Dec. 1996, pp. 741–763.
98. Farley, R. Chocolate City and Vanilla Suburb Revisited. *Items* (bulletin of the Social Science Research Council).

99. Guskind, R. Games Cities Play. *National Journal*, March 18, 1989.
100. Schwartz, J., et al. Can You Top This? *Newsweek*, Feb. 17, 1992
101. Frieden, B. J. The Downtown Job Puzzle. *The Public Interest*, Fall 1989.
102. Lyall, S. In Downtown Syracuse, the Streets Get Emptier. *New York Times*, Aug. 21, 1992.
103. Strom, S. Macy Says It Will Close 8 Stores, Including 4 in the New York Area. *New York Times*, May 21, 1992.
104. Strum, C. No Miracle on Market Street for Final Retail Holdout. Newark Journal. *New York Times*, May 21, 1992.
105. Turque, B., et al. Where the Food Isn't: Supermarkets Have Fled the Inner Cities, Leaving the Poor to Pay More for Less. *Newsweek*, Feb. 24, 1992.
106. Frieden, B., and L. Sagalyn. *Downtown, Inc.* MIT Press, Cambridge, Mass., 1989.
107. Feagin, J. *Free Enterprise City: Houston in Political and Economic Perspective*. Rutgers University Press, New Brunswick, N.J., 1988.
108. Dreier, P., and W. D. Keating. Linking Downtown Development to Broader Community Goals: An Analysis of Linkage Policy in Three Cities. *Journal of the American Planning Association*, Vol. 52, No. 2, 1986.
109. Leinberger, C. The Coming Revival of American Downtowns. *Lusk Review*, Fall 1997.
110. Gordon, P., and H. Richardson. The Destiny of Downtowns: Doom or Dazzle? *Lusk Review*, Fall 1997.
111. Lueck, T. J. A Boom in Jobs in New York City Excludes City Residents. *New York Times*, Aug. 15, 1997.
112. Cobb, C., T. Halstead, and J. Rowe. If the GDP is Up, Why Is America Down? *The Atlantic Monthly*, Oct. 1995, pp. 59–78.
113. Phillips, K. *Boiling Point: Democrats, Republicans, and the Decline of Middle-Class Prosperity*. Random House, New York, 1993.
114. *The State of the Nation's Housing: 1997*. Harvard University Joint Center for Housing Studies, Cambridge, Mass., 1997.
115. Mollenkopf, J. *The Contested City*. Princeton University Press, Princeton, N.J., 1983.
116. Jackson, K. T. *The Crabgrass Frontier*. Oxford University Press, New York, 1985.
117. Markusen, A., P. Hall, S. Campbell, and S. Deitrick. *The Rise of the Gunbelt: The Military Remapping of Industrial America*. Oxford University Press, New York, 1991.
118. Bauman, J. *Public Housing, Race, and Renewal: Urban Planning in Philadelphia*. Temple University Press, Philadelphia, Pa., 1987.
119. Hirsch, A. *Making the Second Ghetto: Race and Housing in Chicago, 1940–1960*. Cambridge University Press, New York, 1983.
120. Caro, R. *The Powerbroker*. Vintage, New York, 1975.
121. Gans, H. *The Urban Villagers*. The Free Press, New York, 1965.
122. Hines, T. Housing, Baseball, and Creeping Socialism: The Battle of Chavez Ravine, Los Angeles. *Journal of Urban History*, Feb. 1982.
123. Hartman, C. *Yerba Buena: Land Grab and Community Resistance in San Francisco*. Glide Publications, San Francisco, Calif., 1974.
124. Lupo, A., F. Colcord, and E. Fowler. *Rites of Way*. Little, Brown, Boston, Mass., 1971.
125. Caraley, D. J. Washington Abandons the Cities. *Political Science Quarterly*, Vol. 107, No. 1, Spring 1992.
126. Caraley, D. J. Dismantling the Federal Safety Net: Fictions Versus Realities. *Political Science Quarterly*, Vol. 111, No. 2, Summer 1996.
127. Ladd, H. F., and J. Yinger. *America's Ailing Cities: Fiscal Health and the Design of Urban Policy*. Johns Hopkins University Press, Baltimore, Md., 1991.
128. Miller, G. J. *Cities by Contract: The Politics of Incorporation*. MIT Press, Cambridge, Mass., 1981.
129. Turner, M. A., and R. Wienk. The Persistence of Segregation in Urban Areas: Contributing Causes. In *Housing Markets and Residential Mobility* (G. T. Kingsley and M. A. Turner, eds.), Urban Institute Press, Washington, D.C., 1993, pp. 193–216.
130. Tiebout, C. A Pure Theory of Public Expenditure. *Journal of Political Economy*, Vol. 64, 1956, pp. 416–424.

131. Ostrom, V., C. Tiebout, and R. Warren. The Organization of Government in Metropolitan Areas. *American Political Science Review*, Vol. 55, 1961, pp. 835–842.
132. Ostrom, V., R. Bish, and E. Ostrom. *Local Government in the United States*. Institute for Contemporary Analysis, San Francisco, Calif., 1988.
133. Peterson, P. *City Limits*. University of Chicago Press, Chicago, Ill., 1981.
134. Schneider, M. *The Competitive City: The Political Economy of Suburbia*. University of Pittsburgh Press, Pittsburgh, Pa., 1989.
135. Weiher, G. R. *The Fractured Metropolis: Political Fragmentation and Metropolitan Segregation*. State University of New York Press, Albany, 1991.
136. Lewis, P. G. *Shaping Suburbia: How Political Institutions Organize Urban Development*. University of Pittsburgh Press, Pittsburgh, Pa., 1996.
137. Wolman, H. L., and E. J. Agius (eds.). *National Urban Policy: Problems and Prospects*. Wayne State University Press, Detroit, Mich., 1996.
138. Kleinberg, B. *Urban America in Transformation: Perspectives on Urban Policy and Development*. Sage Publications, Thousand Oaks, Calif., 1995.
139. Galster, G. (ed.). *Reality and Research: Social Science and U.S. Urban Policy Since 1960*. Urban Institute Press, Washington, D.C., 1996.
140. Bickers, K. Federal Domestic Outlays: Trends and Issues for State and Local Governments. *LaFollette Policy Report*, Vol. 5, No. 1, Fall 1992, pp. 6–17.
141. Wolman, H. The Reagan Urban Policy and Its Impacts. *Urban Affairs Quarterly*, Vol. 21, No. 3, March 1986, pp. 311–335.
142. Chernick, H., and A. Reschovsky. Urban Fiscal Problems: Coordinating Actions Among Governments. *LaFollette Issues*, LaFollette Institute, University of Wisconsin, Madison, 1995.
143. Parker, R. A. Patterns of Federal Urban Spending: Cities and Their Suburbs, 1983–1992. *Urban Affairs Review*, Vol. 31, No. 2, Nov. 1995.
144. Hill, R. Federalism and Urban Policy: The Intergovernmental Dialectic. In *The Changing Face of Fiscal Federalism* (T. R. Swartz and J. E. Peck, eds.), M.E. Sharpe Publishers, Armonk, N.Y., 1990.
145. Chernick, H., and A. Reschovsky. Urban Fiscal Problems: Coordinating Actions Among Governments. In *The Urban Crisis: Linking Research to Action* (B. Weisbrod and J. Worthy, eds.), Northwestern University Press, Evanston, Ill., 1997.
146. Bahl, R. Metropolitan Fiscal Disparities. *Cityscape*, Vol. 1, No. 1, 1994, pp. 293–306.
147. Bahl, R., J. Martinez-Vazquez, and D. Sjoquist. Central City-Suburban Fiscal Disparities. *Public Finance Quarterly*, Vol. 20, No. 4, Oct. 1992, pp. 420–432.
148. Ladd, H., and J. Yinger. The Case for Equalizing Aid. *National Tax Journal*, Vol. 47, No. 1, March 1994, pp. 211–224.
149. Yinger, J. *The Fiscal Outlook for Central Cities*. House Budget Committee, June 13, 1991.
150. Jones, B. D., et al. Service Delivery Rules and the Distribution of Local Government Services: Three Detroit Bureaucracies. *Journal of Politics*, Vol. 40, 1978, pp. 334–368.
151. Mladenka, K. R. The Urban Bureaucracy and the Chicago Political Machine: Who Gets What and Limits to Political Reform. *American Political Science Review*, Vol. 74, 1980, pp. 991–998.
152. Rich, M. J. *Federal Policymaking and the Poor: National Goals, Local Choices, and Distributional Outcomes*. Princeton University Press, Princeton, N.J., 1993.
153. Goetz, E. G. Potential Effects of Federal Policy Devolution on Local Housing Policy Expenditures. *Publius*, Vol. 25, No. 3, 1995, pp. 99–116.
154. Rabrenovic, G. *Community Builders: A Tale of Neighborhood Mobilization in Two Cities*. Temple University Press, Philadelphia, Pa., 1996.
155. Sacher, S. B. Fiscal Fragmentation and the Distribution of Metropolitan Area Resources: A Case Study. *Urban Studies*, Vol. 30, No. 7, 1993, pp. 1225–1239.
156. Pack, J. R. Poverty and Urban Public Expenditures. *Urban Studies* (forthcoming).
157. Kozol, J. *Savage Inequalities: Children in America's Schools*. HarperCollins, New York, 1991.
158. Downes, T. A., and T. F. Pogue. Adjusting School Aid Formulas for the Higher Cost of Educating Disadvantaged Students. *National Tax Journal*, Vol. 47, 1994, pp. 89–110.
159. Nardulli, P., J. Dalager, and D. Greco. Voter Turnout in U.S. Presidential Elections: An Historical View and Some Speculation. *PS*, Vol. 29, No. 3, Sept. 1996.

160. Sauerzopf, R., and T. Swanstrom. The Urban Electorate in Presidential Elections, 1920–1992: Challenging the Conventional Wisdom. Presented at the Annual Meeting of the Urban Affairs Association, Indianapolis, Ind., April 22–25, 1993.
161. Pomper, G. M. The Presidential Election. In *The Elections of 1992* (M. Nelson, ed.), CQ Press, Washington, D.C., 1993.
162. Portrait of the Electorate. *New York Times*, Nov. 10, 1996, p. 28.
163. Greenberg, S. B. *Middle Class Dreams: The Politics and Power of the New American Majority*. Times Books, New York, 1995.
164. Skocpol, T. *Boomerang*. W.W. Norton, New York, 1996.
165. Judis, J. Abandoned Surgery: Business and the Failure of Health Care Reform. *American Prospect*, Spring 1995.
166. Domhoff, G. W. Who Killed Health Care Reform in Congress? Presented at the Annual Meeting of the American Sociological Association, Aug. 1995.
167. Martin, C. J. Nature or Nurture? Sources of Firm Preference for National Health Reform. *American Political Science Review*, Vol. 89, No. 4, Dec. 1995.
168. Weir, M. Central Cities' Loss of Power in State Politics. *Cityscape*, Vol. 2, No. 2, May 1996.
169. Edsall, T. B., and M. D. Edsall. *Chain Reaction: The Impact of Race, Rights, and Taxes on American Politics*. W. W. Norton and Company, Aug. 1992.
170. Schneider, W. The Suburban Century Begins. *Atlantic*, July 1992.
171. Black, C. Clinton Links Suburbanites to Solutions for Urban Ills. *Boston Globe*, May 10, 1992, p. 9
172. Lauter, D. Clinton Tells Orange County Not To Ignore Cities. *Los Angeles Times*, May 31, 1992, p. A1.
173. Mollenkopf, J. Urban Policy at the Crossroads. In *The Social Divide* (M. Weir, ed.), Brookings Institution and Russell Sage Foundation, Washington, D.C., 1998.
174. Rich, M. J. Riot and Reason: Crafting an Urban Policy Response. *Publius*, Vol. 23, Summer 1993, pp. 115–134.
175. Wolman, H., and L. Marckini. Changes in Central City Representation and Influence in Congress Presented at the Annual Meeting of the Urban Affairs Association, Toronto, Ontario, Canada, April 17, 1997.
176. Cameron, C., D. Epstein, and S. O'Halloran. Do Majority-Minority Districts Maximize Substantive Black Representation in Congress? *American Political Science Review*, Dec. 1996.
177. Lublin, D. The Election of African Americans and Latinos to the U.S. House of Representatives, 1972–1994. *American Politics Quarterly*, July 1997.
178. Lublin, D. Racial Redistricting and Public Policy in the U.S. House of Representatives. Presented at the Annual Meeting of the American Political Science Association, Aug. 1997.
179. Lublin, D., and D. S. Voss. Boll Weevil Blues: The Partisan Impact of Voting Rights Law in the 1990s. Presented at the Annual Meeting of the American Political Science Association, Aug. 1997.
180. Swain, C. *Black Faces, Black Interests: The Representation of African Americans in Congress*. Harvard University Press, Cambridge, Mass., 1995.
181. Swain, C. The Future of Black Representation. *American Prospect*, Fall 1995.
182. Schneider, W. Why Democrats Gain from Redistricting Decision. *Los Angeles Times*, July 2, 1995.
183. Sack, K. Victory of 5 Redistricted Blacks Recasts Gerrymandering Dispute. *New York Times*, Nov. 23, 1996.
184. Sleeper, J. The End of the Rainbow? America's Changing Urban Politics. *New Republic*, Nov. 1, 1993.
185. *1994 National Roster of Hispanic Elected Officials*. National Association of Latino Elected and Appointed Officials, Los Angeles, Calif., 1994.
186. *Statistical Abstract of the United States*. U.S. Bureau of the Census, 1994.
187. *Black Mayors Representing Cities with Populations of 50,000 or More*. National Conference of Black Mayors.
188. *Roster of Black Elected and Appointed Offices* (annual publication). Joint Center for Political and Economic Studies.

189. *Mayors at a Glance*. United States Conference of Mayors, Washington, D.C., 1997.
190. *National Roster of Hispanic Elected Officials* (annual). National Association of Latino Elected Officials.
191. Clarke, S. E., and G. L. Gaile. The Next Wave: Postfederal Local Economic Development Strategies. *Economic Development Quarterly*, Vol. 6, No. 2, 1992.
192. Pagano, M. A., and A. Bowman. *Cityscapes and Capital*. Johns Hopkins University Press, Baltimore, Md., 1995.
193. Beinart, P. The Pride of the Cities. *New Republic*, June 30, 1997.
194. Nowak, J. Neighborhood Initiative and the Regional Economy. *Economic Development Quarterly*, Vol. 11, No. 1, Feb. 1997.
195. Harrison, B. *Building Bridges: Community Development Corporations and the World of Employment Training*. Ford Foundation, New York, Jan. 1995.
196. Wood, R. *1400 Governments*. Harvard University Press, Cambridge, Mass., 1961.
197. *Fiscal Balance in the American Federal System*. Advisory Commission on Intergovernmental Relations, Washington, D.C., 1967.
198. *Urban America and the Federal System*. Advisory Commission on Intergovernmental Relations, Washington, D.C., 1969.
199. Peirce, N. R., C. W. Johnson, and J. S. Hall. *Citistates: How Urban America Can Prosper in a Competitive World*. Dec. 1994.
200. Markusen, A., P. Hall, S. Campbell, and S. Deitrick. *The Rise of the Gunbelt: The Military Remapping of Industrial America*. Oxford University Press, New York, 1991.
201. Greenhouse, S. Study Says Big Cities Don't Get Fair Share of Military Spending. *New York Times*, May 12, 1992.
202. Burstein, M., and A. Rolnick. Congress Should End the Economic War for Sports and Other Business. *The Region*, Federal Reserve Bank of Minneapolis, Minneapolis, Minn., June 1996.
203. Katz, B. *The Limits of Urban Revival: The Case for Metropolitan Solutions to Urban Problems*. Center on Urban and Metropolitan Problems, Urban Institute, Washington, D.C., March 1998.
204. Forum on Forging Metropolitan Solutions to Urban and Regional Problems. May 28, 1997. www.brook.edu/es/urbancen/metnif.htm.
205. Hiss, T. Outlining the New Metropolitan Initiative. Center for Neighborhood Technology, Chicago, Ill., March 1997. www.cnt.org/mi.
206. Dinsmore, C. The Federal Role in Metropolitan Cooperation. Center for Neighborhood Technology, Chicago, Ill., March 1997. www.cnt.org/mi.
207. John, D., et al. Building Stronger Communities and Regions: Can the Federal Government Help? National Academy of Public Administration, Washington D.C., April 1998. www.napawash.org.
208. Peirce, N., and C. Johnson. *Boundary Crossers: Community Leadership for a Global Age*. The Academy of Leadership, University of Maryland, College Park, 1997.
209. Salins, P. B. Metropolitan Areas: Cities, Suburbs, and the Ties That Bind. In *Interwoven Destinies: Cities and the Nation* (H. G. Cisneros, ed.), W. W. Norton and Company, 1993.
210. Edley, C. *The Next Phase of the Clinton Urban Policy: Metropolitan Empowerment Zones*. Draft memorandum. Office of Management and Budget, Executive Office of the President, Oct. 1993.
211. Celis, W. Michigan Votes for Revolution in Financing Its Public Schools. *New York Times*, March 17, 1994.
212. Krauss, C. Clinton Aims To Redirect School Aid to the Poor from Wealthy Districts. *New York Times*, Sept. 15, 1993.
213. Preston, J. Told They Spend Too Much, Wealthier Districts Protest. *New York Times*, Aug. 12, 1996.
214. Judson, G. Civil Rights Lawyers Hope To Use Hartford Schools Case as Model. *New York Times*, Aug. 15, 1996.
215. Orfield, G. *The Growth of Segregation in American Schools: Changing Patterns of Segregation and Poverty Since 1968*. National School Boards Association, Washington, D.C., 1993.
216. Peterson, G., and K. Williams. *Housing Mobility: What Has It Accomplished and What Is Its Promise?* Urban Institute, Washington, D.C., Oct. 1994.
217. Polikoff, A. (ed.). *Housing Mobility: Promise or Illusion?* Urban Institute, Washington, D.C., 1995.

218. *Residential Mobility Programs.* U.S. Department of Housing and Urban Development, Office of Policy Development and Research, Sept. 1994.
219. *Promoting Housing Choice in HUD's Rental Assistance Programs: A Report to Congress.* U.S. Department of Housing and Urban Development, Office of Policy Development and Research, April 1995.
220. *Regional Housing Mobility Opportunities for Lower Income Households: A Resource Guide to Affordable Housing and Regional Mobility Strategies.* U.S. Department of Housing and Urban Development, Office of Policy Development and Research, March 1994.
221. *State and Metropolitan Administration of Section 8: Current Models and Potential Resources: Final Report.* U.S. Department of Housing and Urban Development, Office of Policy Development and Research, April 1997.
222. Roisman, F., and H. Botein. Housing Mobility and Life Opportunities. *Clearinghouse Review*, Special Issue, 1993.
223. Dreier, P., and D. Moberg. Moving from the 'Hood: The Mixed Success of Integrating Suburbia. *The American Prospect*, Winter 1996.
224. Atlas, J., and P. Dreier. Courting Racial Justice. *Tikkun*, Vol. 12, No. 1, Jan.–Feb. 1997.
225. Kirp, D., J. Dwyer, and L. Rosenthal. *Our Town: Race, Housing and the Soul of Suburbia.* Rutgers University Press, New Brunswick, N.J., 1996.
226. Haar, C. *Suburbia Under Siege.* Princeton University Press, Princeton, N.J., 1996.
227. Mallach, A. *Inclusionary Housing Programs: Policies and Practices.* Rutgers University Center for Urban Policy Research, New Brunswick, N.J., 1984.
228. Calavita, N., K. Grimes, and A. Mallach. Inclusionary Housing in California and New Jersey: A Comparative Analysis. *Housing Policy Debate*, Vol. 8, No. 1, 1997.
229. Keating, W. D. *The Suburban Racial Dilemma: Housing and Neighborhoods.* Temple University Press, Philadelphia, Pa., 1994.
230. Ehrenhalt, A. The Underclass and the Suburban Solution. *Governing*, July 1993.
231. Is America's Economy Really Failing: The Backlash Against the *New York Times* Scare. *The American Enterprise*, July–Aug. 1996, pp. 26–31.
232. Samuelson, R. J. *The Good Life and Its Discontents: The American Dream in the Age of Entitlement, 1945–1995.* Times Books, New York, 1995.
233. Gottschalk, P., and T. M. Smeeding. *Cross-National Comparisons of Levels and Trends in Inequality.* Luxembourg Income Study Working Paper 126. Maxwell School, Syracuse University, Syracuse, N.Y., July 1995.
234. Gornick, J. C., M. K. Meyers, and K. E. Ross. Supporting the Employment of Mothers: Policy Variation Across Fourteen Welfare States. *Journal of European Social Policy*, Vol. 7, No. 1, 1997, pp. 45–70.
235. Finder, A. Evidence Is Scant that Workfare Leads to Full-Time Jobs. *New York Times*, April 12, 1998.
236. Swarns, R. Mothers Poised for Workfare Face Acute Lack of Day Care. *New York Times*, April 14, 1998.
237. Toy, V. Tough Workfare Rules Used as a Way To Cut Welfare Rolls. *New York Times*, April 15, 1998.
238. McMurrer, D. P., and I. V. Sawhill. *Getting Ahead: Economic and Social Mobility in America.* University Press of America, Lanham, Md., 1998.
239. Orfield, G., S. Eaton, and the Harvard Project on School Desegregation. *Dismantling Desegregation.* The New Press, New York, 1996.
240. Orfield, G., J. Arenson, T. Jackson, C. Bohrer, D. Gavin, and E. Kalejs. *City-Suburban Desegregation: Parent and Student Perspectives in Metropolitan Boston.* Report of a research conference sponsored by the Harvard Civil Rights Project, Sept. 1997.
241. Bergmann, B. R. *Reducing Poverty Among American Children Through a "Help for Working Parents" Program.* Foundation for Child Development Working Paper Series, Nov. 1997.
242. Center for the Future of Children, David and Lucile Packard Foundation. Children and Poverty. *Future of Children*, Vol. 7, No. 2, Summer–Fall 1997.
243. Walsh, J. Community Building and the Future of Urban America. The Rockefeller Foundation, New York, Jan. 1997. www.Rockfound.Org/Reports/community/renewal.html.
244. Rothstein, R. Toward a More Perfect Union: New Labor's Hard Road. *The American Prospect*, May–June 1996.

Best Practices

I. Policy and Planning

1. *How to Make MPOs Work for Central City*, Mid-Ohio RPC
2. *Making MPOs Work*, New Jersey Transportation Planning Authority
3. *Long Range Plan Development/Update*, Southwest Pennsylvania Regional Planning Commission
4. *TIP Development*, Delaware Valley Regional Planning Commission
5. *Multistate MPO Committee Organization and Function*, Kentuckiana Regional Planning
6. *Project Steering Committee*, Florida Department of Transportation
7. *Regional Vanpool Program*, Houston-Galveston Area Council
8. *Dallas Regional Mobility Coalition*, Dallas Regional Mobility Coalition
9. *Improving Transportation for Increased Livability*, University of Pennsylvania
10. *States' Representation on MPOs*, California Department of Transportation
11. *Location Efficient Mortgage*, Natural Resources Defense Council
12. *Transportation Commission/MPO/RTPA Coordination*, Chicago Transportation Commission
13. *State/MPO Coordination*, California Department of Transportation
14. *State Authority to MPO*, California Department of Transportation
15. *Dallas CBD TMA*, Central Dallas Association
16. *Seamless Fare/Transfer Structure for Transit Service*, San Diego Metropolitan Transit Development Board
17. *Land Use Control*, Minneapolis, Minnesota; Portland, Oregon
18. *Smart Fare Cards*, Ann Arbor Transportation Authority
19. *MPO*, Southwest Michigan Council of Governments
20. *Monroe SIDDS/Illinois LRT Station Retail Development*, DART
21. *Transportation Improvement Project Selection Program*, Puget Sound Regional Council, Seattle
22. *Transportation Review Advisory Council (TRAC)*, Ohio Department of Transportation

23. *San Francisco Downtown Pedestrian Network Design Program*, San Francisco Department of Transportation
24. *Public/Private Partnership for Traffic Management*, City of Toronto
25. *Transportation Master Plan*, Chicago Department of Transportation
26. *Using GIS To Analyze Transportation Impacts*, Portland Department of Transportation
27. *Traffic Calming in Sacramento*, Sacramento Department of Transportation
28. *Oakland Metropolitan Forum*, Oakland Department of Transportation
29. *Bike and Bay Trail Planning*, San Francisco Department of Transportation
30. *San Francisco TDR Program*, San Francisco Department of Transportation
31. *Neighboring MPOs Working Together*, San Antonio Metropolitan Planning Organization
32. *Demographic, Employment Forecast, GIS, Air Quality*, San Antonio Metropolitan Planning Organization
33. *Annual Omnibus Highway Ordinance*, Chicago Department of Transportation
34. *TDM Program*, San Francisco Department of Transportation
35. *Role of Central City*, San Antonio Metropolitan Planning Organization
36. *Surface Transportation Policy Project*, Nonprofit Community Group
37. *Transportation Plan for Portland*, LUTRAQ, Portland
38. *Using Subarea Study Process*, Florida Department of Transportation
39. *Development of 20-Year RTP*, Capital District Transportation Committee
40. *North Central Corridor Task Force*, City of Dallas, Texas Department of Transportation, Dallas Area Rapid Transit

II. Financing

1. *Financing Downtown Redevelopment*, City of Memphis
2. *Gandy MIS*, Florida Department of Transportation, Hillsborough Metropolitan Planning Organization, Pinellas County Metropolitan Planning Organization
3. *Telecom Use of Rights-of-Way*, City of Toronto
4. *WARD Program*, Chicago Department of Transportation
5. *Linkage Fees for Private Sector Support*, San Francisco Department of Transportation
6. *Joint Funding of LRT System for Orlando*, Florida Department of Transportation
7. *Joint Funding Agreements*, Florida Department of Transportation
8. *Using SIBs' Toll Credits*, Florida Department of Transportation
9. *Tampa-Ybor Streetcar Project*, HART
10. *Cost-Effective Crosswalks*
11. *Transportation Management Organizations*, Houston-Galveston Area Council, Houston
12. *Sales Tax for Transportation*, California Department of Transportation
13. *Public Investment in Strategic Private Projects*, California Department of Transportation

III. Traffic and Safety Enforcement

1. *Orange Line SW Corridor*
2. *Downtown Crossing*, City of Boston
3. *Operating and Maintaining ITS*, ITE
4. *Traffic Calming Website*, ITE
5. *Downtown Parking Freeze*
6. *Bus Tunnel*, City of Seattle
7. *Light Rail Transit*, Dallas Area Rapid Transit
8. *CBD Transit/Underground Pedestrian Tunnel Link*, Dallas Area Rapid Transit, City of Dallas

9. *Seattle Advanced Traffic Management System*, Washington State Department of Transportation
10. *Automated Traffic Signal*, Los Angeles Department of Transportation
11. *Traffic Calming Techniques for Central City*, City of Toronto
12. *Transit-Oriented Development Ordinance*, City of San Diego
13. *ITS Transportation Impact*, Metro Toronto
14. *Underground Expansion of Bus Service*, Seattle
15. *Long-Range Metrorail Modernization Plan*, Southeastern Pennsylvania Transportation Authority
16. *Central Artery*
17. *Pennsylvannia Avenue–Western Plaza*, Washington, D.C., Department of Transportation
18. *15th Street Transit Way*, City of Denver
19. *SCOOT (Split Cycle Offset Optimization Technique)*, City of Toronto
20. *Citywide Traffic Management*, Los Angeles Department of Transportation
21. *Platforms Over I-95 and Vine Street Expressway, Orange (SW) Rapid Transit Line—New Line*, Chicago Transportation Authority

IV. Environment

1. *Intergovernmental/California Environmental Quality Act Review*, California Department of Transportation
2. *Cleveland Empowerment Zone/System Preservation*, MPO-NOACA, Cleveland
3. *Air Quality Demonstration Project*, Arizona Department of Transportation

V. Human Resources Development

1. *Career Professional Civil Service Category*, Ohio Department of Transportation
2. *Build Up Greater Cleveland*, Chamber of Commerce
3. *One-Stop Career Service Center*, Department of Human Services, City of Memphis

VI. Transit, Taxi, and Ferry

1. *5th–6th Street Dual Bus-Only Streets*, Portland
2. *Transit and Pedestrian Priority Street System*, City of San Francisco
3. *LRT Line*, Saint Louis–Bi-State
4. *South County Busway*, City of Miami Transit Authority
5. *South and East Parkway Busways*, Pittsburgh Port Authority
6. *49th–50th Bus Taxi Streets*, New York City Department of Transportation
7. *Madison Avenue Bus Lane*
8. *Limited Stop Bus*, New York City Metropolitan Transit Authority
9. *Bike System Planning and Design*, City of Houston
10. *Downtown DASH*, Los Angeles Department of Transportation
11. *Bus Transit Center Concept*, San Diego Transit
12. *Hill Street Transit*, Los Angeles Department of Transportation

VII. Maintenance and Construction

1. *Normalization of Bridge Pavement*, Ohio Department of Transportation

VIII. Marketing

1. Internet Web Page, Chicago Department of Transportation
2. *Public Information and Marketing*, Houston-Galveston Area Council

Participants

Jose Abreu	Florida Department of Transportation
Dennis Archer	City of Detroit
Regina Armstrong	Urbanomics
Lucilla Ayer	Hillsborough County Metropolitan Planning Organization
Richard Bacigalupo	Regional Transportation Authority, Chicago
Frances Banerjee	City of Los Angeles Department of Transportation
F. Kaid Benfield	Natural Resources Defense Council
Aristide Biciunas	Chicago Area Transportation Study
Emil Brandt	Metropolitan Council, St. Paul
Hooper Brooks	Surdna Foundation
Carney Campion	Golden Gate Bridge Highway and Transportation
Lewis Clopton	Federal Transit Administration
David Coyle	Ohio Department of Transportation
Robert Cuellar	Turner Collie and Braden
Elizabeth Deakin	University of California at Berkeley
Sharon Dent	Hillsborough Area RTA
Jeffrey Dillon	City of Milwaukee Department of Public Works
Peter Dreier	Occidental College
Ronald Ecker	NOACA
Ronald Fisher	Federal Transit Administration
Francis Francois	American Association of State Highway and Transportation Officials
Ronald Freeland	Mass Transit Administration, Baltimore
David Gallogly	Boston Transportation Department
Miguel Gavino	Washington State Department of Transportation
Joseph Giglio	Northeastern University
Jim Gleich	AC Transit
Denise Goren	City of Philadelphia
James Gosnell	Southern California Association of Governments
Terry Gotts	Michigan Department of Transportation

Philippe Grall	Center for Transportation Policy and Management, New York University
Robert Gregg	LYNX-CFRTA
Thomas Griebel	Austin, Texas
Arthur Guzzetti	American Public Transit Association
William Habig	Mid-Ohio RPC
Kari Hackett	Houston-Galveston Area Council
Luann Hamilton	Chicago Department of Transportation
Gloria Hardiman-Tobin	Federal Highway Administration
Tony Harris	California Department of Transportation
James Harris	New York Metropolitan Transportation Council
Allan Hendrix	California Department of Transportation
Cheri Heramb	Chicago Department of Transportation
Robert Hicks	Public Technology, Inc.
Julie Hoover	Parsons Brinckerhoff
Carolyn Hyland Ismart	Florida Department of Transportation
Brigid Hynes-Cherin	BHC Trans
Curtis Johnson	Metropolitan Council, St. Paul
Tomoya Kaji	Woodrow Wilson School
Linda Karson	Transportation Research Board
David Kaufman	City of Toronto
Tamara Keeler	Virginia Department of Transportation
John Keith	Institute of Public Administration
Larry King	Pennsylvania Department of Transportation
Frank Kruesi	Chicago Transit Authority
Floyd Lapp	New York City Department of City Planning
Thomas Larwin	San Diego Metropolitan Transit Development Board
Herbert Levinson	Herbert S. Levinson Transportation Consultant
Clemenc Ligocki	Indiana Department of Transportation
Gordon Linton	Federal Transit Administration
Ysela Llort	Florida Department of Transportation
Barry Lundberg	Wilbur Smith Associates
Robert MacLennan	Metropolitan Transit Authority, Houston
Richard Maitino	New York State Department of Transportation
Hugo Malanga	Fort Worth Transportation and Public Works Department
Albert Martin	Detroit Department of Transportation
Richard Mendez	Miami Dade Aviation Department
Michael Meyer	Georgia Tech
John Milam	VIA Metro Transit
Renzo Nastasi	Orange County Planning Department
Lance Neumann	Cambridge Systematics
Mark Norman	Institute of Transportation Engineers
Al Notzon	Alamo Area Council of Governments
Adiele Nwankwo	Southwest Michigan Council of Governments
James Okazaki	City of Los Angeles Department of Transportation
Robert Paaswell	City College of New York
Shiva Pant	Fairfax County Office of Transportation
Henry Peyrebrune	Center for Transportation Policy and Management, New York University
Said Rahmani	Center for Transportation Policy and Management, New York University
Darnall Reynolds	California Department of Transportation
Roy Roberts	General Motors Corporation
Tom Ryden	Dallas Area Rapid Transit
Frederick Salvucci	Massachusetts Institute of Technology
Elliot Sander	Center for Transportation Policy and Management, New York University
David Schulz	Northwestern University
Marcy Schwartz	CH2M Hill

James Scott	Transportation Research Board
James Scroggins	City of Baltimore Department of Public Works
Rodney Slater	U.S. Department of Transportation
Paul Tait	Southwest Michigan Council of Governments
Ronald Tober	Greater Cleveland Regional Transit Authority
John Tomczyk	Chicago Department of Transportation
Polly Trottenberg	U.S. Senate
David Trowbridge	Wisconsin Department of Transportation
Vukan Vuchic	University of Pennsylvania
Thomas Walker	Chicago Department of Transportation
Patricia Waller	University of Michigan Transportation Research Institute
Douglas Wiersig	City of Houston
Kenneth Yunker	Southeast Wisconsin Regional Planning Commission
Samuel Zimmerman	DMJ&M

The Transportation Research Board is a unit of the National Research Council, which serves the National Academy of Sciences and the National Academy of Engineering. The Board's mission is to promote innovation and progress in transportation by stimulating and conducting research, facilitating the dissemination of information, and encouraging the implementation of research results. The Board's varied activities annually draw on approximately 4,000 engineers, scientists, and other transportation researchers and practitioners from the public and private sectors and academia, all of whom contribute their expertise in the public interest. The program is supported by state transportation departments, federal agencies including the component administrations of the U.S. Department of Transportation, and other organizations and individuals interested in the development of transportation.

The National Academy of Sciences is a private, nonprofit, self-perpetuating society of distinguished scholars engaged in scientific and engineering research, dedicated to the furtherance of science and technology and to their use for the general welfare. Upon the authority of the charter granted to it by the Congress in 1863, the Academy has a mandate that requires it to advise the federal government on scientific and technical matters. Dr. Bruce M. Alberts is president of the National Academy of Sciences.

The National Academy of Engineering was established in 1964, under the charter of the National Academy of Sciences, as a parallel organization of outstanding engineers. It is autonomous in its administration and in the selection of its members, sharing with the National Academy of Sciences the responsibility for advising the federal government. The National Academy of Engineering also sponsors engineering programs aimed at meeting national needs, encourages education and research, and recognizes the superior achievements of engineers. Dr. William A. Wulf is president of the National Academy of Engineering.

The Institute of Medicine was established in 1970 by the National Academy of Sciences to secure the services of eminent members of appropriate professions in the examination of policy matters pertaining to the health of the public. The Institute acts under the responsibility given to the National Academy of Sciences by its congressional charter to be an adviser to the federal government and, upon its own initiative, to identify issues of medical care, research, and education. Dr. Kenneth I. Shine is president of the Institute of Medicine.

The National Research Council was organized by the National Academy of Sciences in 1916 to associate the broad community of science and technology with the Academy's purpose of furthering knowledge and advising the federal government. Functioning in accordance with general policies determined by the Academy, the Council has become the principal operating agency of both the National Academy of Sciences and the National Academy of Engineering in providing services to the government, the public, and the scientific and engineering communities. The Council is administered jointly by both the Academies and the Institute of Medicine. Dr. Bruce M. Alberts and Dr. William A. Wulf are chairman and vice chairman, respectively, of the National Research Council.