decisions. Managers are to be making those decisions. It's a generic function; it's not a side issue.

So these kinds of concepts have become inherent in the way we do business. They cannot be something we don't understand or give lip service to. Frankly, I don't think very many managers or planners understand that. Until these concepts are paid some attention, we will continue to have the dubious distinction of supporting planning that is not dangerous because it's not taken seriously.

Summation: Transportation Planning—When Are Things Going to Get Better?*

THOMAS B. DEEN

When Tom Larson asked me to moderate and summarize this session, he assured me that all the panelists would be in agreement and that it would be a fairly straightforward task to synthesize the main thrusts of the panel. Fortunately, Larry Dahms has just distilled this summary and it would be redundant for me to attempt the same thing. Clearly, transportation planners today are a disconsolate bunch of folks. By their own testimony, their plans and their methods, if not themselves, are in disrepute. They stand indicted and vulnerable to charges of insensitivity and nonresponsiveness to orderly shifts in public perspectives and policies that any other profession would have easily accommodated until today their superiors sometimes question their continued viability.

Frankly, I agree with this assessment, but having done so, I see no value in dwelling on it. Since I was committed to spend 15 minutes bringing this session to an appropriate close, I was about to despair for Seymour to read the papers to an old friend and colleague, a former transportation planner whom many of you may remember. His name is I. Seymour Goodplans, formerly director of transportation planning for Metropolitan Gobblers Culch, located in one of the states in the South-Midwest. (I think he has a brother-in-law named Goodwrench who works for General Motors.) Anyway, Seymour quit the planning business in 1978 to become a bookie; he simply wasn't making enough money as a planner.

After waiting a few days for Seymour to read the papers, I gave him a ring and after a few introductory pleasantries, I asked, "What did you think of the papers I sent concerning our recent history of transportation planning?" Now mind you, I believe little if any of what Seymour had to say, but he was so provocative and since I couldn't think of anything else to say I would like to spend the next few minutes giving you an overview of our conversation.

"What did you think of the papers?" I asked.

"Well, frankly I thought they were ridiculously pessimistic. All the crying about poor methodology, bad models, pressure from the Fed's, the naivete of the MPOs is so much nonsense. You sound like the L.A. Raiders explaining why they didn't do better against the Redskins in the Superbowl, or like Gary Hart explaining his poor showing in the early primaries. The truth is that planners have just completed the equivalent of a hole-in-one but instead of basking in self-satisfaction they're carrying on like they just lost the war."

"But, Seymour," I explained patiently, "you probably don't realize that since you left the profession, transportation planners and the whole planning business have fallen on bad times. The management of the industry scorns planning, is cutting planning budgets, ridicules its methods, and points to all kinds of irrelevant and obsolete plans as proof that planning is not worth the effort, nor are the planners for that matter."

"The problem with you planners," said Seymour, "is that you can't see the forest for the trees. You've got to get away from it all and look back to get a proper perspective. What do you expect of yourselves? The facts of the matter are that over the past few decades you and your colleagues have built 95 percent of the biggest public works projects in the history of mankind—the Interstate Highway System. The system works! It's got continuity, lane balance, and the interchanges work beautifully, for the most part. What's more, they mesh well with local streets and you must have done something right with respect to location—why else the increases in land value and urban density that I see in lots of locations. Without the powers of Napoleon, or even Robert Moses for that matter, you squeezed the system into a crowded urban fabric in a few short years. You had to be pretty good just to keep from wiping cities out. What's more, the system's accident rates went into a free fall—there are thousands of people alive today that would have been dead if you hadn't done your job. You've got increased mobility plus economic benefits running out of your ears, but instead of cheering, you're crying."

"But," I tried to interrupt.

"Hold on, I'm not through. On top of building the interstate, you simultaneously were handling the
shift of virtually all intercity commercial passenger traffic from big downtown railroad stations to huge metropolitan airports that had to be carved out of the suburban landscape along with all the ground access and parking systems required to make them work. And if that weren't enough, you were playing and experimenting with the mass transit systems in the country—reorganizing them, buying new equipment, and turning around the ridership. So I don't know what you expected, but it seems to me that things aren't quite as bad as you're making them out to be."

"Well," I protested, "I just don't see how you can count on some"--optimistic. What about all the obsolete plans, the lack of credibility of planners, and the overall deemphasis in planning that we see taking place all over?"

"Look," he said, "I didn't say that planning was going to be as big a deal in the 1980s and 1990s as it was in the 1960s and 1970s. After all, the need for planning is largely a function of building and there is not as much building going on now as there was. But lots of building is still going on and planning is needed and the planners are the ones to do it."

"Seymour," I protested, "you've been spending too much time running to the bank and have forgotten how the real world is. Think of all those unfinished freeways that we can't complete, our overoptimism about our resources, our missed forecasts—plans that were obsolete before the ink was dry. Many managers have just simply lost faith in planning."

"Well," said, "since you ask, I'll explain it to you though I know you'll be too blind to see it even after I've explained. The truth is that effective planning over the past three decades has been impossible because it's been a period of wild, chaotic, tumultuous change unlikely to be repeated in the immediate future. The reason I'm more optimistic for planning in the near-term future is that things are going to be more stable in the next two decades."

"I can see," I noted icily, "that your new occupation gives you little opportunity for reading. If you don't know about all this, you should be familiar with Future Shock and Megatrends. Everybody—I repeat—everybody knows that change is accelerating not decelerating. If we saw lots of change in the past, we're going to see even more in the future. It's clear to me that you're so out of it that I shouldn't have even cared to explain it to you."

"When everybody knows something, Deen, then it becomes the conventional wisdom and therefore it's probably wrong, or at least your concept of it is wrong. History clearly shows that change does not take place as a linear function, but that it ebbs and flows. It's not even a geometric function that constantly and smoothly increases in all fields at all times. Besides, it's fashionable these days to exaggerate change and its more dramatic consequences. Look at the Club of Rome and their apocalyptic predictions. It's fair to say they overstated their case. The people who were pushing the supersonic aircraft as an absolute, inevitable, and immediate consequence of moving technology have had to revise their thinking. Many of the people who were making dire prognostications about our energy situation in the early 1970s we now know were overdoing it. Some, perhaps many, environmentalists in retrospect were exaggerating the hopelessness of our problems. For example, oil spills from supertankers were thought to be almost irrevocable disasters, but now we find that effects of damage seem to disappear in a surprisingly short time. Even the people that were saying office automation was going to be on us in 2 or 3 years are finding it's taking longer than they thought. Instead of 'upstaging' each other, planners like to 'upchange' each other. Given the current popularity of 'upchanging,' it might be wise not to take it all too seriously."

"Now one must acknowledge that planning requires some assumptions about the future and the forecasts are a hazardous occupation that does and should always keep its practitioners humble. Some projections and assumptions will turn out to be wrong and plans will always have to be modified. What's more, you are planning in the toughest possible environment. You're planning facilities that have a long lead time between conception and completion, an even longer construction time, and a longer yet service life. On top of that, they affect and are affected by virtually everything else in society."

"But," I blurted, "you've just made my point—planning is impossible and therefore useless. A pilot, if he's any good, must be able to navigate even in a storm and a planner must be able to plan even in a changing environment if he's to be of any use."

"Look," he said, "of course you must be able to plan when some things are changing, but not when all things are simultaneously and rapidly changing. As you pointed out, one has always had to expect the pilot to navigate in a storm and even in the middle of the night. But you can't expect much if you throw in two engines on fire, all the instruments dead, the copilot in the middle of a cardiac arrest, and the automatic pilot bailing out with the only parachute! And that's the way it's been for planners in the last few decades."

"And what's so different about the last three decades?" I asked.

"If you do not know that, then you simply don't have both oars in the water. Obviously it's been a period of wild swings of public moods with Viet Nam, drugs, the kids revolution of the 1960s-1970s that attempted to throw out in one generation all the accumulated wisdom of 2,000 years, the hippies, the special interest groups, etc., etc. But setting all that aside, there are five basic reasons why transportation planning has been especially tough, if not impossible, in the recent past: First, we're trying to tell you once, so get ready to take notes."

"FIRST, transportation planning has had to be conducted within an unstable and vacillating urban policy framework over the past 30 years. This policy framework has now stabilized. In fact, we now have no urban policy so you don't have to worry about it changing for awhile."

"1949 was the first time we as a nation implicitly thought about urban policy at the national level. We perceived the problem as being a lack of low income housing and the first federal public housing act was passed. We cleared slums, built housing projects, and created urban renewal projects all over. Sixteen years later we decided slum clearance was bad, not good. We have got to save those neighborhoods, not tear them down. All we need to do is provide some assistance to the social and physical infrastructure. We passed another act and presto we had model cities—a complete about-face, from tearing down to preservation, in 16 years."

"Then we saw the need for a regional approach to urban problems and set up the A-95 review system. Almost simultaneously, our environmental consciousness exploded. Apocalyptic population growth forecasts became the conventional wisdom and we decided that America must have data to support the utmost planners and new towns to accommodate this almost unmanageable growth. By 1968 we decided the Nixon Administration was demanding national urban policy to coordinate all the federal initiatives, and an act was passed in that
same year requiring the executive branch to submit an urban policy document to the Congress every 2 years. Two years later, in 1970, the first of these came out and their major conclusion was that no policy was possible in a pluralistic society, that no single national prescription concocted in Washington could possibly work for all locations--about-face in 2 years.

"Five years later, in 1975, new population forecasts took into account the free fall in birth rates and we decided that growth was manageable after all. Besides many, if not most, of the new towns that we had started were failing financially so we started a major urban initiative in the space of not much over 5 years.

"Then the new focus became the limits to growth after the oil shocks. The buzz words became 'systems management' and 'make do with what you have.' Planning became short term (long term planning suddenly changed from good to bad); we became aware of the growth shift from northeast and midwest to southwest; and we perceived an uncomfortable awareness of a permanent underclass that needed attention.

"By 1982 the last of the national policy documents emerged from the White House, which basically concluded that the Feds were not effective in addressing urban problems, that they were local concerns anyway, so we should just forget it. Thus in the 14-year period between 1968 and 1982, we developed urban policy documents each 2 years and in almost every case our diagnosis of the problem changed before we could get a program designed, let alone carried out. Now I submit that no one, but no one, can plan transportation when standing on a platform as shaky as that.

"SECOND, I continued, "all aside from the instabilities of our urban policies, our goals for transportation were just as wobbly. Back in the 1950s we were to eliminate traffic congestion, then we were maximizing mobility--remember drawing desire lines? In the early 1960s after Doug Carroll finished his Chicago Study, we were all into finding optimum economic solutions. Then after the urban riots in the late 1960s, we were providing transportation for the physically and economically handicapped. Then, rebuilding our transit systems got fashionable and our goals were to do all the above plus provide desirable urban environments. Now any of us could figure out what that meant the environmentalists got to Congress and we had to spend all our time learning to write environmental impact statements. Then the Arabs stopped the oil, everything else became secondary, and we got TSW, 'learning to manage what you have,' short-term planning, and TIPS. For almost three decades, our goals and objectives were jumping around like ducks in a shooting gallery, which would have made the whole planning exercise a joke if we hadn't made heroic efforts to respond. I think we did as good as we could given the situation.

"THIRD," he continued, "the entire transportation system was undergoing cataclysmic shifts the likes of which have never been seen and, in my opinion, we won't see again for awhile. Transit usage fell from 19 billion passengers in the late 1940s to 6 billion in 1975. Automobile ownership was doubling every few years. Rail passengers dropped by a factor of 10 in about 20 years. Air passengers exploded by a factor of 100 and we tried to develop a complete new transport system plus ground infrastructure to support it. Note that all these changes are quantum changes-orders of magnitude in most cases—not 20 or 30 percent changes of the variety we are now seeing. On top of that, we were planning complete roadway systems in our large cities. Not a link here and there, but complete new systems that we knew were going to dramatically alter mobility patterns in each case. Simultaneously with all this, we were having wholesale shifts in goods movement, moving freight from rail to truck until trucks now have grown seven five times that of the rail system.

"FOURTH, on top of all the above, we were undergoing major shifts in social, economic, and geographic forces and patterns—on factors that influenced demand and supply requirements for transportation. High winds of change to urban centers took place. Since almost everyone in the country now lives in cities, we aren't going to experience that again, unless you believe that everyone is now going to move back to the farm. We were moving from the home to jobs—again something that, while still going on, is substantially done. Shifts were also going on from the center cities to the suburbs and CBD employment was declining or at best stable, while suburban employment flourished. Retail sales left downtown and we had another new traffic phenomenon to face—the regional shopping center—and hundreds of these were built in a few years. Several of these things are one-time phenomena. Some are continuing, but down. In any event, we've now seen them before and know better their impacts.

"FIFTH and the final and most important point," he paused, catching his breath, "is that through all this we were handicapped by being captive of our own illusions about our own capabilities and our control and what we couldn't. When we began to see the city to suburb shifts occurring, planners universally believed that we could stop it. 'Just rejuvenate transit and change the mortgage policies,' they said, 'and people will stay in the city.' As we saw people leaving transit for cars, we said, 'Let's build rail transit and we can hold or even increase the modal split.' I think it's safe to say our aspirations are somewhat more limited today on that score. There were those who believed that the reason people were leaving passenger trains was because the railroads deliberately gave bad service because they wanted out of the business. 'Just clean up the stations and buy some new equipment,' they said, 'and people will come back and passenger rail can be profitable.' Believe that, and I've got a bridge you might be interested in. It wasn't just our illusions everyone believed that the government should, could, and would solve all problems. If we could send a man to the moon, we could . . . etc., etc. Finally, we believed in the technological fix even on those things that, while still going on, are substantially done. The government and the private sector poured well over a billion dollars into exotic high-speed contraptions that could overcome the lure of cars. Government alone put more than $700 million into tracked air cushion vehicles, linear induction motors, PRTs, people movers, Transbus, etc. Many of these can be seen today rusting away in a field outside the airport at Pueblo, Colorado, a testimony to our illusions. Well, we don't hold such illusions any more and neither do most of our constituents, which makes a tremendous difference in the kinds of pressures and barriers we have to leap in order to develop credible plans.

"Well," I said, "I'll have to admit you've got a couple of interesting points in there that give me some pause, but you've simply ignored the prospect for all sorts of major unanticipated changes that might be lurking right over our current horizons. For example, what about nuclear war or a major worldwide economic collapse?"
the tubes and let the devil take the hindmost. But then, planning is in the same boat with everyone else. In the past decades, others were prospering and succeeding while planners were swimming in the storm. At least now we all swim in the same water."

"All right, then," I countered, "what about energy? Isn't that a disaster just waiting to spring out and catch us unaware again?"

"O.K., I'll admit that all bets are off if we have a major sustained disruption of Middle East oil supplies," he relented. "In fact, that would probably set off either a major depression or a nuclear war, but otherwise the problem seems manageable. First, we have the strategic reserve that will help us along in the short term, and we certainly have a better grasp of energy economics. There were all kinds of people, including many in Congress, who argued in 1974 and 1975 that there was no elasticity between oil prices and either consumption or production. I don't think anyone still believes that anymore. And besides, it's not a new problem. We've seen it before; it won't suddenly be a new intervention into our whole process that we never knew or heard of before. Doubtless, we are going to see price and supply ups and downs with a gradual upward ratcheting of price, but not this doubling and tripling in price that we've just been through."

By this time I was getting pretty exasperated with Seymour. "If things are going to be so predictable," I said, "we can just kiss off planning. We will just do one plan for 20 years and that's it. Then there will be real trouble for us; we'll all be unemployed and become bookies like you."

"Hold on now," he said. "There are still plenty of live issues that will keep you occupied. The population is aging and, Deen, even you must admit that this is a sure prediction. Aging is going to have uncertain effects on travel demand--its peaking and distribution. Safety and service needs will also be affected. City decentralization is still moving steadily on and while we may have no more illusions about stopping it, it will continue to cause heartburn and plans will have to account for the resulting changes. And, of course, we've got to keep an eye on the communications revolution. The personal computers and networking allowing the possibilities of working, shopping, banking, etc., at home are going to require some fast stepping. You'd better be monitoring carefully the experience of companies that are already moving in that direction. But, then you can keep your eye on a few moving targets; it's when they all are moving that you get vertigo. And then you'd best keep your eye on deregulation or re-regulation, changes in concepts of equity, imposition of user charges and stuff like that, but that is just noise compared to the storm we've just passed through."

"Well," I huffed, "what about some new technology coming in from left field and knocking all your future stability into a cocked hat?"

"Like what?" he said.

"Well, like space travel."

"Are you talking about the year 2000 or 2050?"

"I think we're talking about 2000," I said.

"Well, what do you think?" he ic.ed.

I tried to recover by changing the subject, but he continued. "You have got to remember that all the technological and system changes that occurred in the 1950s and 1960s were pretty much anticipated. It wasn't that it was all so new; we knew what it was and that it was coming. We knew that the interstate was coming and was generating traffic and expanding the truck system. We knew about airplanes and jets and their economies and speed. We knew railroading was in a free fall. The problem was that it all was changing in quantum jumps, so we never could get a handle on the impacts of it all."

"Well," I said, "I just refuse to believe it's going to be so easy and, what's more, I can't believe that things wouldn't have been a lot better if we'd done a lot better job; had been more sensitive to other needs when we located the interstate; had done more in citizen participation and environmental concerns before the law required us to and . . . ."

"Ah, there you go again," he almost sighed. "If you had had perfect foresight in 1960, what would you have done? I'll tell you what you would have done. You would have contrived a gigantic, cumbersome, unwieldy planning process that would have considered everything but the Battle of Armageddon. You would have alerted everyone to concerns about neighborhood disruption, environmental problems, energy crises, suburban sprawl, and things they had never heard of until they would have been so scared you would have been lucky to have built 20 percent of the interstate and probably none of the required new airports or rail transit links, and what we did build would have taken twice as long and cost twice as much. Would that have made things better or planners happier?"

When I heard that, I hung up. There is just no sense in arguing with someone as obstinate as Seymour.