Further, 30 percent of the peak-hour commuters in major travel corridors ride the bus. We also have the highest per-capita ridership of any transit system serving a region of this size in North America. On weekdays, the Transitway carries some 200,000 passenger trips.

Benefits of the Transitway include postponing the need for new and expanded roads, reducing pollution, savings in bus capital expenditures, and reducing operating costs for line-haul services. Public support for the Transitway is strong. The system has also generated worldwide interest. In the last month alone, we have had visitors from Japan, China, Hong Kong, and from cities in the United States and Canada.

Within three years we will have another three miles of the Transitway in operation and an additional ten miles are in the planning stage. On Wednesday we will be opening the first freeway bus lane in Ottawa. This is a four-mile bus-only lane on the shoulder of Highway 17. This lane is expected to carry some 4,000 bus riders during the morning peak hour.

Again, welcome to Ottawa-Carleton. I hope you have a productive conference and an enjoyable stay in the area.

Canadian Perspective on HOV Facilities

Alan Ian Cormier
Canadian Urban Transit Association

Thank you very much for inviting me to participate in your conference on HOV facilities. I would like to provide a Canadian perspective on HOV applications. Because of my role in public transportation, the overview will be from a transit perspective.

Let me first take a moment to provide you with an update on the general state of public transit in Canada today. No doubt you are all aware of the recession that has had North America in its grip for the last few years. Urban transit has not been spared from the effects of the economic slowdown. Transit ridership in many areas has unfortunately been stagnant or declining over the last couple of years—notably in well established urban centers of central Canada, such as Toronto and Hamilton.

However, we maintain an optimistic view for the future. It is towards the future that we are developing plans to increase transit ridership and transit's share of the total urban travel market. It will take the combined and coordinated efforts of many groups to accomplish this.

The Canadian Urban Transit Association (CUTA) represents providers of urban transit services, suppliers, and related organizations in Canada. Our mission is to promote the role of urban transit in enhancing mobility, and to support our members in the fulfillment of their mandate.

CUTA has undertaken a major effort in this direction with its "modal shift to transit" project. The objective of this recently completed study was to identify short- and long-term measures that could be implemented by all levels of government—and by the transit industry itself—to

help effect a modal shift to transit. Our goal is to double transit's share of the market within ten years—a goal which we believe is attainable.

The study was conducted by a team of consultants representing different disciplines in transportation, management, financial management, and taxation. The study findings included the fact that current socio-demographic trends are negatively affecting transit ridership, and that increased transit ridership is critical to addressing major urban issues such as traffic congestion, air quality, and the quality of urban life. Further, the study found that in order to increase the productivity of the existing urban transportation infrastructure and accommodate future economic growth, increased transit ridership is essential.

The study concluded that a doubling of transit ridership is possible in the foreseeable future, but that such a goal will only be realized if there is cooperation from all levels of government. It was found that some cities already have some of the required initiatives in place, and that many are transferable from center to center.

The findings of this study, and our resulting "vision" for transit in Canada, are placed well within the North American context. Canada's urban centers, including many medium and smaller centers, suffer from the same problems associated with traffic congestion and deteriorating infrastructure that face cities in the United States.

In addition, customer expectations are rising. Providing customer-oriented service is now critical to our success. Many transit systems have responded to this need by implementing a higher standard of service. For example, air conditioning is now standard on buses in many cities, as are a range of features to make riding easier for many customers. Some examples include kneeling buses, priority seating, larger signs, and our most recent commitment—the introduction of the low-floor bus to help customers with mobility restrictions.

In addition, transit officials have been working with municipal and provincial planners to develop and implement transit-supportive land use guidelines. For example, the province of Ontario has released a report calling for all municipalities to re-evaluate their official plans, ensuring that future developments support transit use by creating pedestrian-friendly projects and nodes of higher-density development. Toronto, Montreal, and Vancouver are each updating their official plans to call for much more transit facilities in the future.

I would now like to provide a brief summary of the transit and HOV applications as they exist in Canada today, and as they stand approved for development in the near future. Here in Ottawa, you will find one of the finest and most extensive networks of transit-only lanes in North America. Operated by the Ottawa-Carleton Regional Transit Commission (OC Transpo)—the regional public transit agency—the Transitway links suburban areas of Ottawa with the central core. Here, the definition of a high-occupancy vehicle includes only red-and-white buses, because the Transitway consists of bus-only lanes on fully separated rights-of-way, with limited stops and fast travel times. I am sure that you will hear much more about the Ottawa Transitway during the conference.

Across the country, a number of other cities have implemented or are adding to transit-HOV projects. Just across the river from Ottawa, the city of Hull operates bus-only lanes along a major downtown arterial street.

In Toronto, transit and taxi diamond lanes have been in place for a number of years. One of the most successful examples is the Bay Street "urban clearway." Running for approximately 3½ kilometers from north of Bloor Street to Front Street, the curb lanes in both directions are reserved for transit vehicles, taxis, and bicycles on weekdays from 7:00 a.m. to 7:00 p.m. This system has reduced travel times for transit vehicles, allowing more efficient use of existing resources and attracting new riders to the transit service on the street.

Another example of a transit-HOV lane is located in the west end of the metropolitan Toronto area. This system, which links two municipalities along the busy Dundas Street corridor, is open to buses and automobiles with three or more occupants. The transit-HOV lane is in effect during weekday peak periods and extends from Dixie Road to the Kipling Subway terminal, a distance of well over six kilometers.

A new project is currently under development in Mississauga—just west of Toronto—that will add transit lanes to an existing freeway corridor. The lanes are the first step towards implementing a busway similar to the Ottawa Transitway. Also in Toronto, proposals have been made to develop exclusive rights-of-way for light rail vehicles such as those in place on the Harbourfront and Queensway corridors.

The Montreal region includes a growing number and variety of transit-HOV lanes. One of the earliest traverses the Champlain Bridge across the St. Lawrence River. During peak hours, buses use a contraflow lane to make the crossing from Montreal's South Shore area. The lane is separated from opposing traffic by manually placed cones and special signs.

Another contraflow lane example is along Pie IX Boulevard, a major north-south arterial street located in the east end of the city. During peak hours, buses travel in a peak-direction only contraflow lane. The lane is delineated by traffic cones, overhead signs, special traffic signals, and flashing arrows on the fronts of the buses. Passengers can access the system by special stations located in the median of the street.

Additional examples of reserved transit and taxi lanes exist along two major arterial corridors from two mid-city areas to downtown Montreal. Transit service is provided by regular and R-Bus routes. The R-Bus routes provide frequent, rapid, peak-hour bus services. This new service, which was just implemented in September, has been so popular that service levels have already been increased significantly on both routes. Another example is a bus-only lane on a major bridge linking Montreal and Laval, a city to the north. In addition, a number of other transit lanes also exist in the city.

In Quebec City, curb lanes along a major arterial corridor are used for mainline bus service. Frequent bus service provides the backbone of a restructured network, linking downtown with other major traffic generators in the city, including a major university and shopping areas.

Other Canadian cities also have examples of transit and transit-HOV lanes. Halifax in the east and Edmonton in the west have created transit-only throughways, allowing transit to bypass congested points in the street network, or to take shortcuts not available to regular traffic.

In Vancouver, a paved shoulder along a freeway south of the city allows transit vehicles to bypass peak-hour traffic back-ups at a bottleneck where the highway narrows to pass through a tunnel. Another planned example on the west coast is the Barnett Highway link between Vancouver and Coquitlam, a suburb to the east of the city. The highway, which serves as a primary link between the two points, is currently a two-lane facility. It is scheduled to be rebuilt to three lanes, including a center, reversible transit-HOV lane.

In short, the concept of reserved transit and transit-HOV lanes is becoming very widely applied and accepted in Canada. Currently, the majority of this country's examples are indeed transit-only lanes, as opposed to bus, vanpool, and carpool lanes. This is not to be interpreted as an anti-automobile approach. Indeed, we believe that the automobile will be part of the Canadian urban environment for many years to come. However, we also believe that if the world is to survive as we know it, transit must play a larger role. Through the continuing implementation of transit-HOV projects, Canadian cities will thrive in the future.

In these tough economic times, it would be easy to say that we simply cannot afford to implement new highway projects, but Canadians are learning that making more effective use of the existing urban infrastructure is critical. We cannot afford to build a never-ending network of more and wider roads and expressways. We are learning to reevaluate our needs and redirect our resources towards developing an urban structure that is more oriented to persons and to mass transit. This will be accomplished by implementing transit-oriented land use guidelines, and by designing transit priority and high-occupancy vehicle lanes using existing roads and freeways.

In this way, we believe that this country will be able to meet the urban challenges of the future. I hope you find the next few days to be most informative, and may I take this opportunity to again welcome you to Canada and the conference.

Status of HOV Projects and Activities

Katherine F. Turnbull
Texas Transportation Institute

A number of people deserve credit for helping organize the conference this year. Rich Cunard and the TRB staff did their normal outstanding job in taking care of the arrangements with the hotel, John Bonsall and his staff have organized the local activities, and Don Capelle and other members of the TRB HOV Systems Committee have assisted in organizing the workshop sessions. The efforts of all these people deserve to be recognized.

It is a pleasure to have the opportunity to provide an overview of recent HOV projects and activities. A great deal has happened since the previous National Conference on HOV Systems in Seattle, which was held in the spring of 1991. I think you will see the continued high level of interest in HOV facilities reflected in the workshops and the general sessions of this conference. The Intermodal Surface Transportation Efficiency Act (ISTEA) and the federal Clean Air Act Amendments (CAAA) have focused a good deal of attention on transportation in general and HOV projects in particular.