CHAPTER 5. Status of the System Today

Introduction

Transportation is an integral part of the daily lives of Anchorage residents. How efficiently the transportation system moves people and goods influences the quality of and time spent during travel, the cost and speed of shipping freight, and the safety of transportation users.

Transportation is shaped by the infrastructure, available modes of travel, and extent of system management and operations. The overall transportation network can be viewed as having seven essential elements:

- Roads
- Public transportation
- Pedestrian facilities
- Bicycle system
- Freight distribution
- Regional connections
- Congestion management

This chapter discusses how these elements are performing as part of the current transportation system. Trends of decreasing efficiency, longer travel times, and increased traffic hazards—already evident for the Anchorage transportation system—are expected to become more serious concerns in future years.

Additional information about the status of the Anchorage Bowl transportation system is available in the report *Status of the System, 2003* (CH2M HILL team, 2004).

Roads

The most visible component of the transportation system, the road network is used by private, commercial, and public transportation vehicles. Most of these vehicle trips (more than 90 percent in 2002) are made by drivers of private vehicles. Two-thirds of the total daily vehicle travel in 2002 was on surface streets (almost one-half on arterials and one-fifth on collector and local streets). Freeways and expressways carried the remaining one-third of all vehicle travel.

Roadway Characteristics

Essentially roads move traffic and provide access to land. A road network performs best when each type, or classification, of road is used for its primary function. Table 5-1 explains road classifications.

The busiest traffic routes in the Anchorage Bowl are important to mobility within the MOA. The freeway portions alone accommodate nearly one-third of all daily vehicle miles of travel (VMT). A large share of VMT on arterial streets occurs on only a few arterial segments—Seward Highway, Ingra-Gambell streets couplet, 5th and 6th avenues, DeBarr Road, Northern Lights/Benson boulevards, Boniface Parkway, Tudor Road, Lake Otis Parkway, Minnesota Drive, C Street, and Dimond Boulevard.

Road Ownership

Ownership of roads is shared by local, state and federal governments. Some roads have been designated as part of the National Highway System to reflect importance to the nation's economy, defense, and mobility. The Anchorage National Highway System roads consist of freeways and expressways, as well as several arterial segments (Figure 5-1).

Waiting in Traffic

Road users in Anchorage were delayed an average of 6,000 hours each day in 2002 because of congestion that prohibited free flow of traffic.

Table 5-1. Road Classifications and Their Characteristics

Classification	Primary Function	Examples	2002 Centerline Miles[a] in Anchorage Bowl	Comments
Freeway	Carries traffic (single role). Provides most mobility and least access.	Minnesota Drive; Glenn and Seward highways	18	Freeway characteristics accommodate the sole purpose of carrying traffic: high speed, limited access (no intersections), and grade-separated interchanges, providing the most safety benefit in crash reductions. The typical volume of a four-lane freeway is more than 40,000 ADT.
Expressway	Carries through traffic. Provides high mobility and somewhat restricted access.	International Airport Road between Minnesota Drive and Ted Stevens Anchorage International Airport	4	An expressway accommodates through traffic with full or partial control of access. Intersections may allow access from major arterials. Speeds typically are slower than those for freeways. The typical volume of a four-lane expressway is more than 20,000 ADT.
Arterial	Carries large volumes of traffic and goods, generally from one part of the community to another. Provides moderate to high levels of mobility and access.	Tudor Road, Northern Lights Boulevard, and 36th Avenue	144	Arterials handle the largest share of travel in Anchorage. They connect major employment centers, activity centers, and residential areas. The typical volumes range from 10,000 ADT for a two-lane (minor) arterial to 60,000 ADT for a six-lane (major) arterial.
Collector	Collects traffic from local streets and conducts it to arterials, other local streets, and activity centers. Provides limited mobility and high level of access.	Baxter and Wisconsin roads and Hillside Drive	99	Collectors accumulate traffic from local streets and provide connections to shopping centers, schools, and other commercial and community centers. The typical volumes range from 2,000 to 10,000 ADT for a two-lane collector.
Local street	Allows access to adjacent properties. Provides the highest level of access.	Streets in neighborhoods	840	These roads specialize in connecting residential properties to other parts of the roadway network. Speeds are low, and through travel is discouraged. The typical volume of a two-lane local street is less than 2,000 ADT.

[a]The centerline mile is used for comparison purposes. This unit of measurement reflects distance as the sole measurement and does not account for multiple lanes.
ADT = average daily traffic
Source: *Official Streets and Highways Plan*, MOA, 1996.

Contiguous road segments are owned by the State of Alaska and MOA (Figure 5-2), illustrating the importance of close intergovernmental cooperation and collaboration. In Anchorage, the federal government owns roads on federal lands such as military bases.

Movement or Delay

Movement within the MOA is increasing. The VMT climbed every year in the decade preceding 2002, increasing 19 percent from 3.8 billion in 1993 to 4.7 billion in 2002. The use of a road and its capacity for carrying vehicle volume is measured in a unit called "average daily traffic" (ADT), which represents the average number of vehicles traveling on a segment each day. Figure 5-3 shows 2002 ADT on Anchorage roads that carry large volumes of traffic (freeways, expressways, and arterials).

The factors below affect efficient flow of traffic:

- Traffic signal timing and spacing
- Design and spacing of roads and intersections
- Number of lanes and other road features that affect capacity
- Type and amount of access along corridor (driveway and side streets)
- Appropriate spacing, connections, and classifications of roads

Figure 5-1. National Highway System

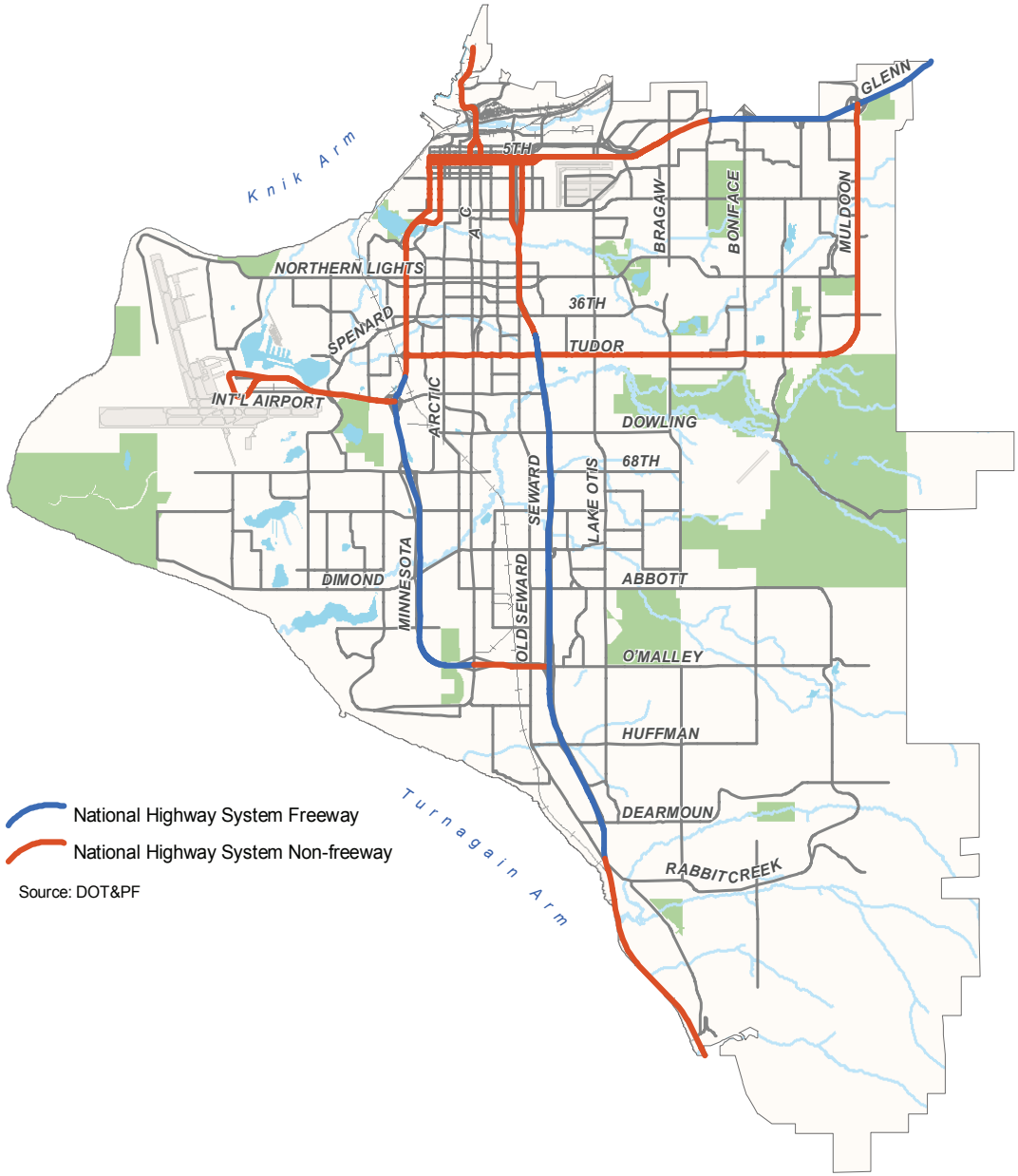


Figure 5-2. Road Ownership

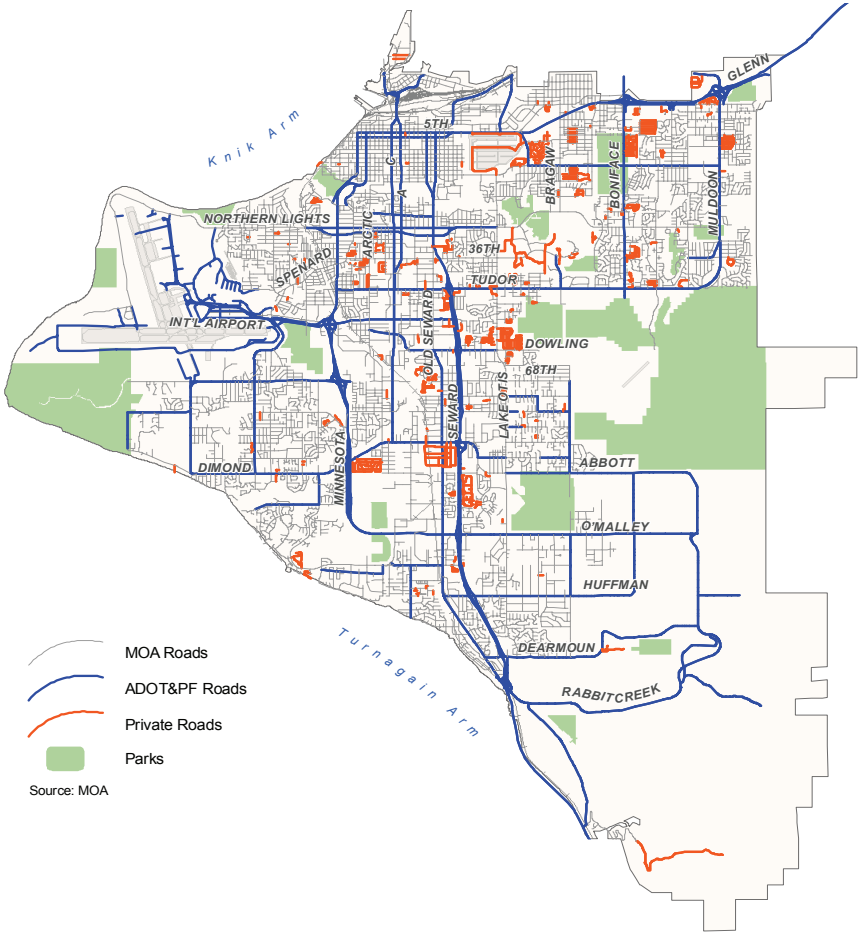
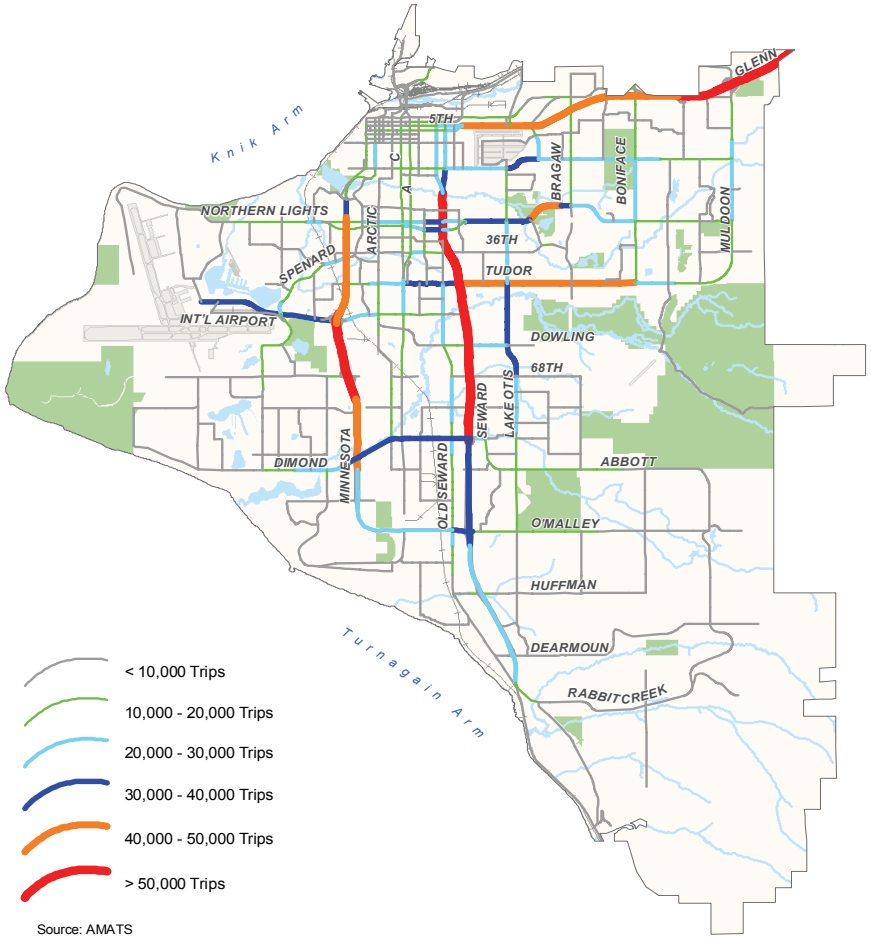


Figure 5-3. Average Daily Traffic, 2002



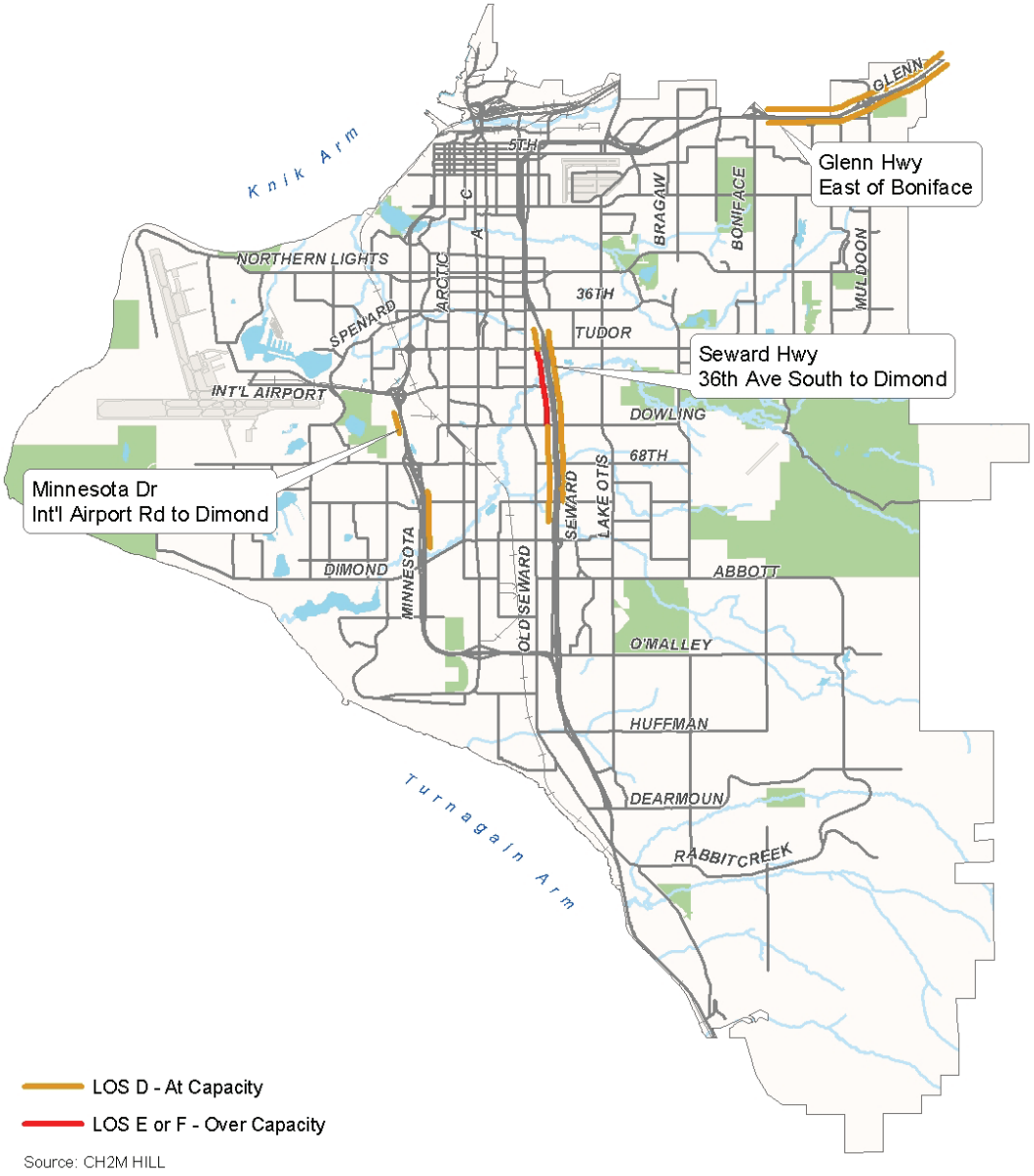
"Level of service" (LOS) describes how well traffic flows on a road based on its design and lane capacity. The roadway LOS scale ranges from LOS A—free-flow traffic—to LOS F—congested conditions that severely stall traffic. Figure 5-4 portrays 2002 LOS during morning and afternoon peak-travel periods.

Applied to intersections, the LOS scale ranges from LOS A—all vehicles move through a traffic light during a single green cycle with no delay—to LOS F—vehicle drivers experience long delays at traffic lights, waiting through multiple green traffic signals. Figures 5-5 and 5-6 show the 2002 intersection LOS in the morning and afternoon peak periods of travel, respectively. Comparison of intersection LOS data available for both 1998 and 2002 indicates more delay at 56 percent of the intersections in the afternoon peak period in 2002.

Delays Affect Safety, Freight Costs, and Service Delivery

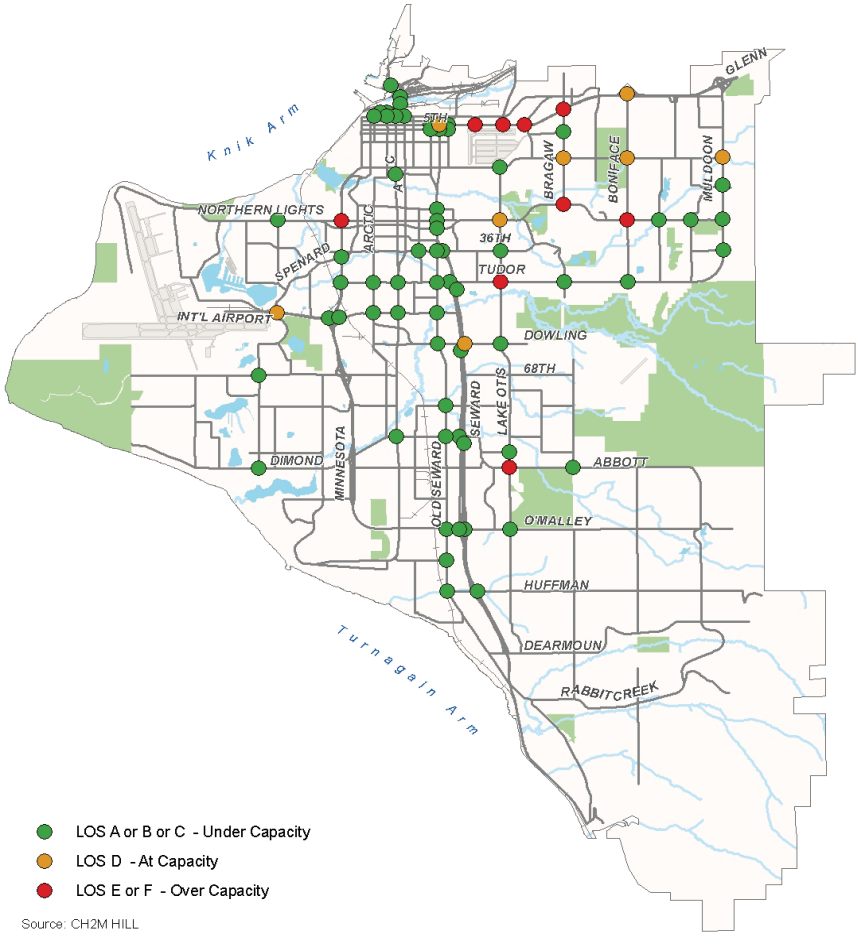
The travel time spent by vehicle occupants is not the only concern when roads and intersections perform at poor level of service. The flow of traffic also affects travel time required for public transportation, school buses, freight shipments, and emergency service response. Delays can drive up the cost of shipping, hinder fire truck and ambulance access, and affect coordination of scheduled activities.

Figure 5-4. Freeway Level of Service, 2002



Source: CH2M HILL

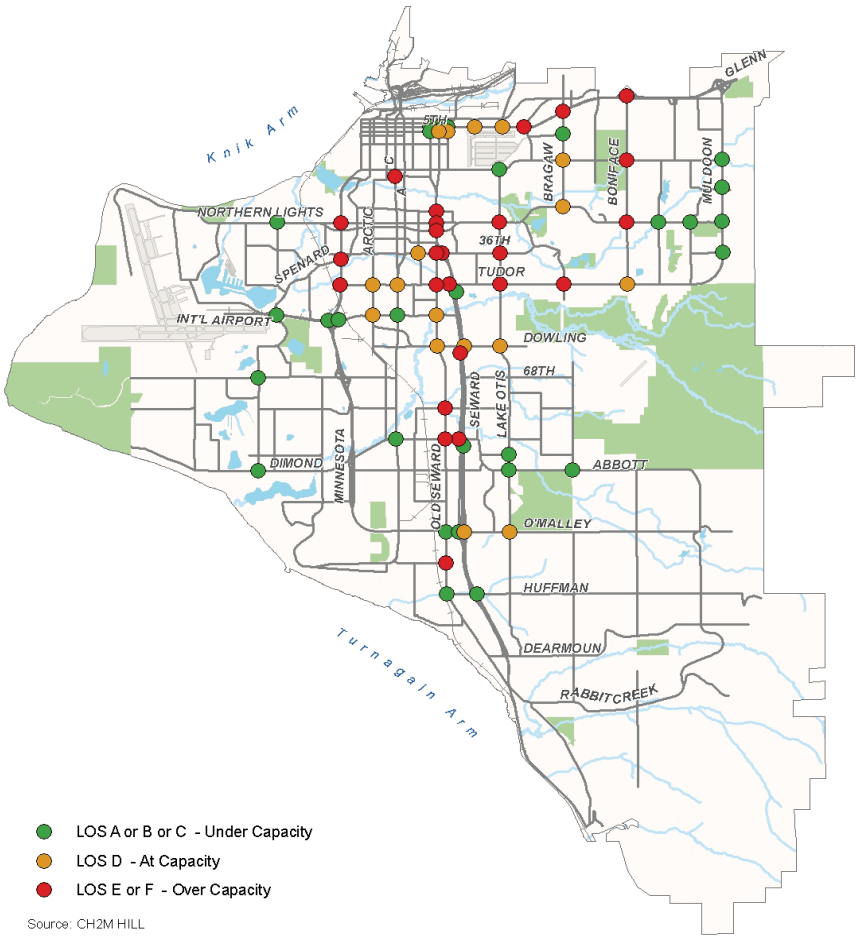
Figure 5-5. Intersection Level of Service, Morning Peak Period, 2002



Source: CH2M HILL

In the morning peak period, 16 of 78 intersections, primarily on the Glenn Highway, Northern Lights Boulevard, and Lake Otis Parkway, showed significant delays (LOS D, E, or F).

Figure 5-6. Intersection Level of Service, Afternoon Peak Period, 2002



Source: CH2M HILL

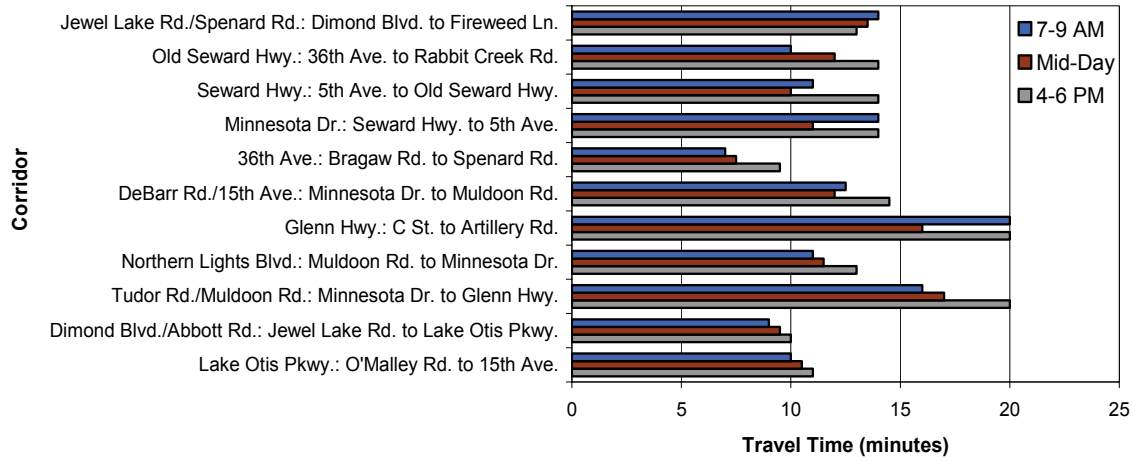
In the afternoon peak period, 40 intersections, or 51 percent off the 78 intersections examined, showed significant delays (LOS D, E, or F).

Travel Time Variables

On many road segments, the time required for a vehicle in Anchorage to travel from Point A to Point B varies by time of day. Studies conducted in 2003 showed that trips made on most corridors took longer during the afternoon peak period than during mid-day (Figure 5-7).

In a comparison of 2003 and 1998 travel times for the dominant direction of traffic during the afternoon peak period, travel times generally were longer in 2003. For example, travel time increased 21 percent for the Glenn Highway and 19 percent for Minnesota Drive, findings consistent with population and housing growth in the Mat-Su Valley and South Anchorage.

Figure 5-7. Automobile Travel by Time of Day, 2003



Source: CH2M HILL

Crashes Increase with More Vehicle Miles Traveled

Roads and intersections with the highest traffic volumes and LOS ratings of D, E, or F tend to be locations with the most crashes. Reported crashes show a generally stable trend for the years 1998 through 2003 (Table 5-2).

Public Transportation

Bus Service

People Mover is the fixed-route bus service in Anchorage operated by the MOA Department of Public Transportation. In 2002, buses carried 3.12 million passengers. Forty-one buses with 40-passsenger capacities operated on 14 urban fixed routes and 3 express routes. Bus service ranged from 30- to 60-minute frequency during peak periods and generally every 60 minutes for other hours on weekdays. On weekends, service ranged from 60- to 120-minute frequency.

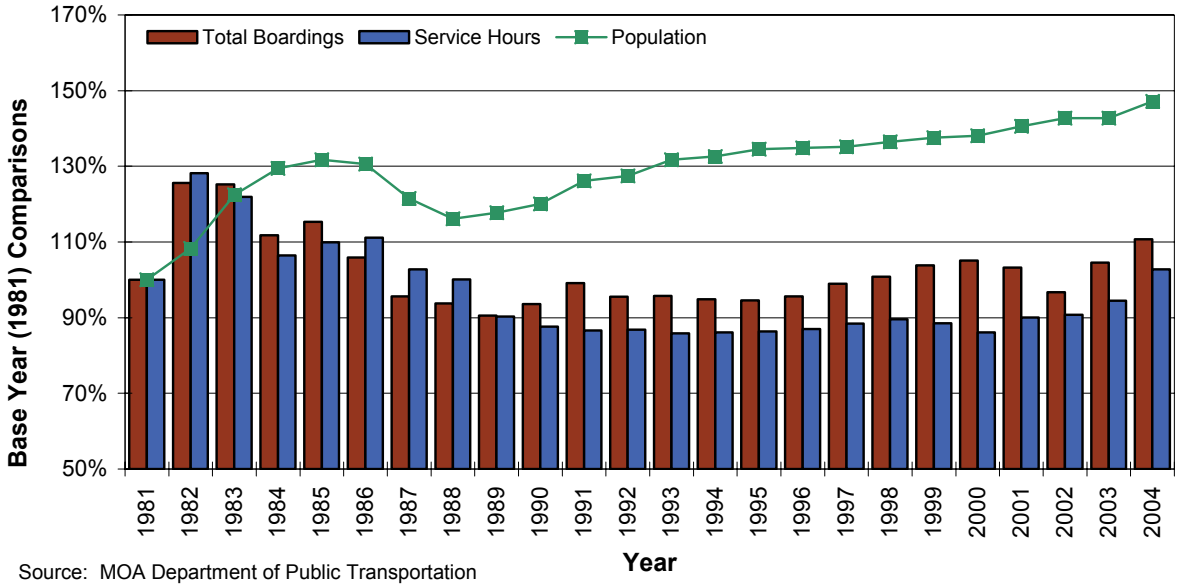
As shown in Figure 5-8, bus ridership and service hours remained fairly stable during the decade from 1992 to 2002; rider gains in 1999 and 2000 resulted from free service offered during periods of poor air quality. While population increased steadily, transit service declined from 0.44 bus hours per capita in 1992 to 0.41 in 2002. Many members of the Anchorage community rely heavily on public transportation. Among them are young and elderly persons, non-drivers, and others without access to private vehicles, for reasons such as budget, living accommodations, medical conditions, or physical limitations.

Table 5-2. Crashes Reported at Selected Intersections, 1998–2003

Intersections Rated LOS D or Worse During Morning or Afternoon Peak Hours	Number of Crashes					
	1998	1999	2000	2001	2002	2003
Glenn Highway and						
Bragaw Street	23	40	28	41	50	28
Airport Heights	-	19	19	41	24	20
Seward Highway and						
Fireweed Lane	37	36	34	24	29	21
Northern Lights Boulevard	32	30	39	37	46	25
Benson Boulevard	28	41	39	51	43	49
36th Avenue	36	43	39	49	37	46
Lake Otis Parkway and						
Northern Lights Boulevard	33	36	35	39	35	32
Tudor Road	40	54	57	49	57	48
36th Avenue	18	25	24	29	17	38
Old Seward Highway and						
Tudor Road	36	46	23	32	38	18
Dimond Boulevard	33	30	26	38	43	35

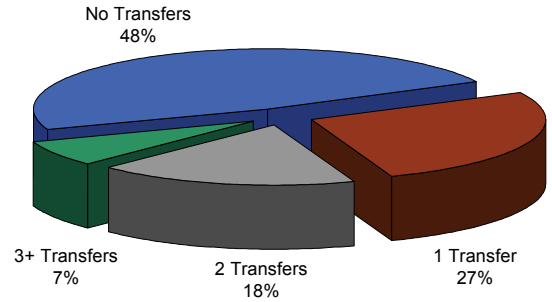
Sources: MOA annual traffic reports (1998-2003); CH2M HILL Team, *Status of the System,* 2003, 2004

Figure 5-8. People Mover Passenger Boardings and Service Hour Trends



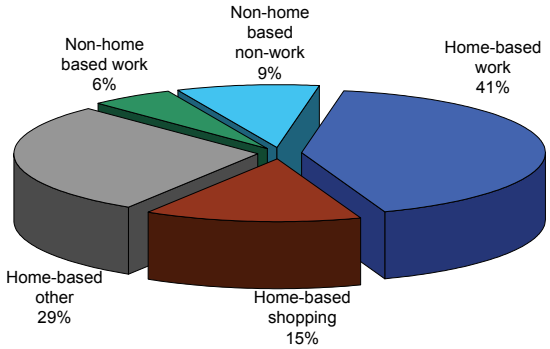
Source: MOA Department of Public Transportation

Figure 5-9. Transfers to Reach Transit Destinations



Source: People Mover Route Restructuring Onboard Survey, August 2001

Figure 5-10. Transit Trip by Purpose, 2002



Source: 2002 Anchorage Household Survey

The following factors affect ridership volume:

- Number of transfers required for travel
- Travel time
- Suitability of routes for desired trips
- Bus stop amenities, such as weather protection, seating, and lighting
- Cost of service
- Frequency of service
- Access to service (for example, sidewalk availability and maintenance)

Compared to travel by automobile, bus trips often took three times longer for the same trips in 2002. A 2001 People Mover survey of people riding buses showed that 52 percent of riders transferred to reach their destinations (Figure 5-9). According to a 2003 study, bus trips to destinations downtown took about 30 minutes; trips to destinations elsewhere generally required 45 minutes or more of travel.

One-quarter mile is considered to be a benchmark for reasonable transit access from point of origin or destination. People Mover bus service is not available in some areas; about 60 percent of the Anchorage Bowl population lived within one-quarter mile of a bus stop in 2002.

Figure 5-10 shows 2002 transit trips by purpose.

Other Public Transportation

In addition to regularly scheduled service on fixed routes, the following alternatives provide needed or desired services for shared transportation:

- AnchorRIDES—This shared-ride service provides demand-responsive, curb-to-curb transportation service to people with disabilities that prevent them from using the fixed-route system and to senior citizens. It meets the federal requirements of the Americans with Disabilities Act (ADA) and is structured to comply with various funding sources. AnchorRIDES operated 32 vehicles in 2002, funded primarily by local taxes and the Alaska Commission on Aging. Rider fares, donations, and Medicaid also contribute to operating costs. Nearly 193,000 passengers were served in 2002.
- DART—The DART service is a demand-responsive, flexible-route system that provides transit service in Anchorage and Chugiak-Eagle River low-density areas where fixed-route service is not economically feasible or practical. Users call ahead to arrange for pickups at designated locations.
- School Buses— The Anchorage School District operates buses that carry students to and from schools—252 buses in 2004.

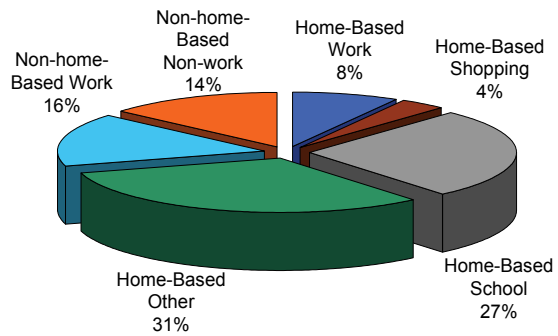
Restructuring People Mover

A major thrust to revamp People Mover routes and service structure was in motion in 2002 (*The People Mover Blueprint: A Plan to Restructure the Anchorage Transit System*, RLS and Associates, Inc., 2002) to provide more of a "customer focus" to the system. Initial phases of the 5-year restructuring program were begun in 2003.

Pedestrian Facilities

According to results of the 2002 Anchorage Household Survey, Anchorage residents made 56,720 walking trips on a typical weekday in spring 2002. That number is about five times the weekday bicycle trips and also five times the public transportation rides per weekday. The composition of these trips by purpose is shown in Figure 5-11.

Figure 5-11. Walking Trips by Purpose, 2002



Source: 2002 Anchorage Household Survey data collected in April and May

Pedestrian Mobility and Quality of Life

An important indicator for a livable city is the ability to walk. Features should include pedestrian-friendly amenities that make it easy and enjoyable to walk in neighborhoods and business districts. Safe walking routes surrounding schools also are important.

A favorable pedestrian environment provides connectivity. Desirable amenities include sidewalks set back from street curb lines, crosswalks, shorter walking distances across intersections, grade-separated walkways, benches, landscaping, signs, and lighting to increase personal security.

The physical layouts of many Anchorage neighborhoods do not promote walking. For example, most neighborhoods other than the older areas of Anchorage are not connected by local streets, resulting in poor linking among neighborhoods. And many adjoining housing parcels in Anchorage are positioned on long blocks that are not conducive to walking within a neighborhood or to other neighborhoods. Anchorage is known for its regional trail system but undeveloped pedestrian sidewalk system.

Also discouraging pedestrian activity is the predominant lack of pedestrian-friendly amenities noted above. Finally, Anchorage is challenged by winter weather that leaves sidewalks covered by snow, preventing or hindering pedestrian use. Many Anchorage pedestrian facilities are not cleared of snow.

Figure 5-12 shows the existing sidewalks and the paved and unpaved trails in Anchorage. Although recreational trails and paths are extensive in certain areas, pedestrian connectivity and accessibility are poor in many areas of the city.

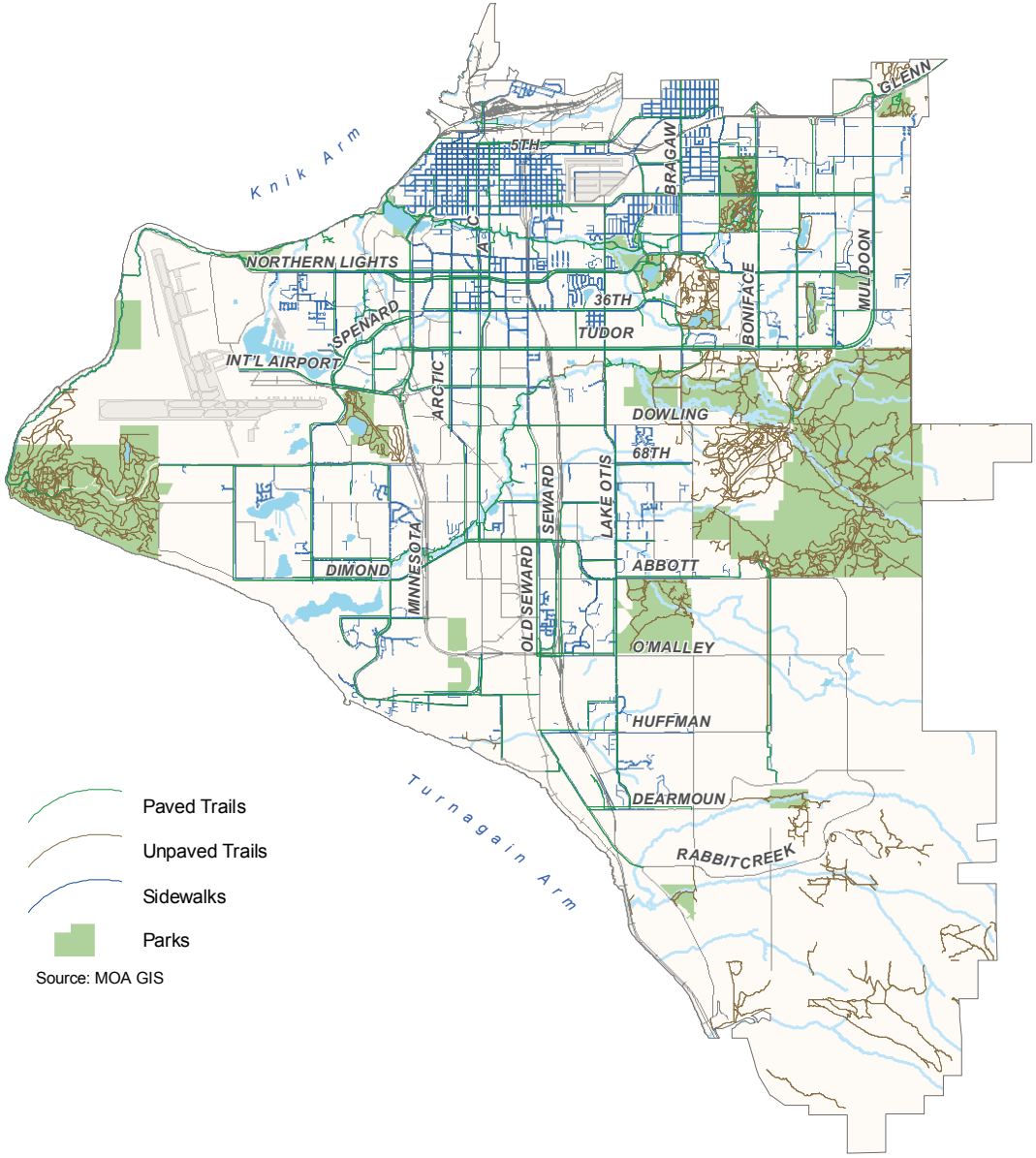
The sidewalk network in Anchorage is incomplete and discontinuous in many areas. Pedestrians are forced to walk in the street where no sidewalk is provided. Many road crossings are hazardous because of the number of lanes to be crossed and the presence of double turn lanes that make pedestrians hard to see from vehicles.

In general, sidewalk networks are more likely to be found in the older neighborhoods such as Downtown, Fairview, Mountain View, Airport Heights, and South Addition. In areas such as the newer subdivisions east of Bragaw and north of Tudor Road, the sidewalks are discontinuous or often missing entirely. Sidewalks are nearly nonexistent on the Hillside.

In 2002, Anchorage pedestrians could travel on these facilities:

- 451 miles of sidewalk
- 191 miles of paved trails
- 235 miles of unpaved trails

Figure 5-12. Pedestrian Sidewalks, Paths, and Trails, 2002



Source: MOA GIS

Bicycle System

The principal types of bicycle network planned in conjunction with transportation improvements and treated as part of the transportation system are bicycle lanes and bicycle trails. Bicycle lanes (or routes) serve as a viable transportation mode. They are striped on roads and allow bicyclists to ride at high speeds with traffic.

Bicycle trails consist of paved and unpaved paths. They are separated from roadways by varying distances and can be found in parks and greenbelts.

The predominant bicycle use of trails is for recreational riding, rather than commuting. The 2002 Anchorage Household Survey identified 11,500 bicycle trips per weekday in the spring, a number identical to People Mover bus trips. Bicycle trips account for 1 percent of weekday trips by all modes. The composition of bicycle trips by purpose is shown in Figure 5-13.

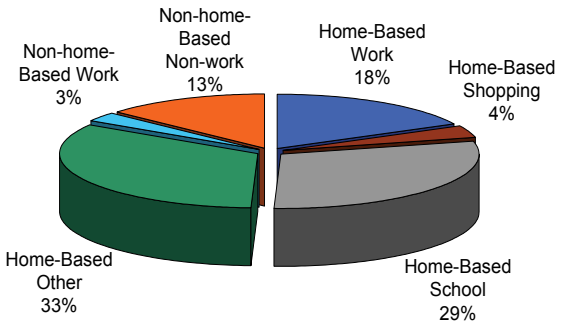
Recreational Trail Use

A 2003 count of trail users by the MOA Traffic Department observed the following at selected recreational trails:

- 22 percent higher use on weekends than weekdays in summer
- 71 percent more use in summer than in winter

All trail users—pedestrians, bicyclists, skiers, and others—were included in these counts.

Figure 5-13. Bike Trips by Purpose, 2002



Source: 2002 Anchorage Household Survey data collected in April and May

Crash statistics indicate that safety risks for bicyclists and pedestrians are highest on arterial and collector streets. Pedestrian and bicycle crashes were concentrated in Downtown and the northern portion of Midtown, around Northern Lights and Benson boulevards and 36th Avenue. Concentrations of crashes in these areas reflect the heavy vehicle traffic, distractions inherent to the high levels of activity, and higher use of sidewalks and trails by pedestrians and bicyclists.

Trail System Structure

Bicycle and pedestrians both use the trail networks, but sidewalks are seen as a separate pedestrian network that is not covered in the MOA *Areawide Trails Plan* (April 1997). The trails plan classifies components of the Anchorage trail system network as follows:

- Multi-use paved trails
- Multi-use unpaved trails
- Bicycle routes
- Cross-country ski trails
- Snowmobile trails
- Skijoring Trails
- Sled dog mushing trails
- Water trails
- Interpretive trails
- Grade-separated crossings
- Trailheads

Freight Distribution

Trucks of all sizes distribute goods that arrive and depart by air, sea, and rail carrying freight to, from, and throughout Anchorage and the region. Because freight distribution is an integral part of the daily economic activity of the MOA, freight travel patterns affect traffic and are affected by the operating efficiency of the road network. A 2001 MOA freight mobility study identified the following constraints to freight transport in Anchorage:

- Awkward access at the Port of Anchorage
- Delays from train operations and track operations in the port vicinity
- Road delays and poor signal timing
- Congestion at intersections
- Difficulties in executing left turns at many busy intersections

Table 5-3 shows the 2002–2004 daily truck traffic at select Anchorage locations. Heavy (combination unit) truck volumes were highest around the Port of Anchorage and on the National Highway System routes—Seward and Glenn highways. The truck volumes ranged from 3.4 percent to 9 percent of total daily traffic on urban freeways, but reached nearly 20 percent on rural sections. Truck trips numbering several hundred a day are common on many arterials in Anchorage, but typically compose from 1 to 3 percent of total daily vehicles. Most trucks on city streets are smaller, single-unit vehicles. (See the footnotes in Table 5-3 for definitions of single-unit and combination trucks.)

Table 5-3. Average Weekday Truck Counts at Spot Locations, 2002–2004

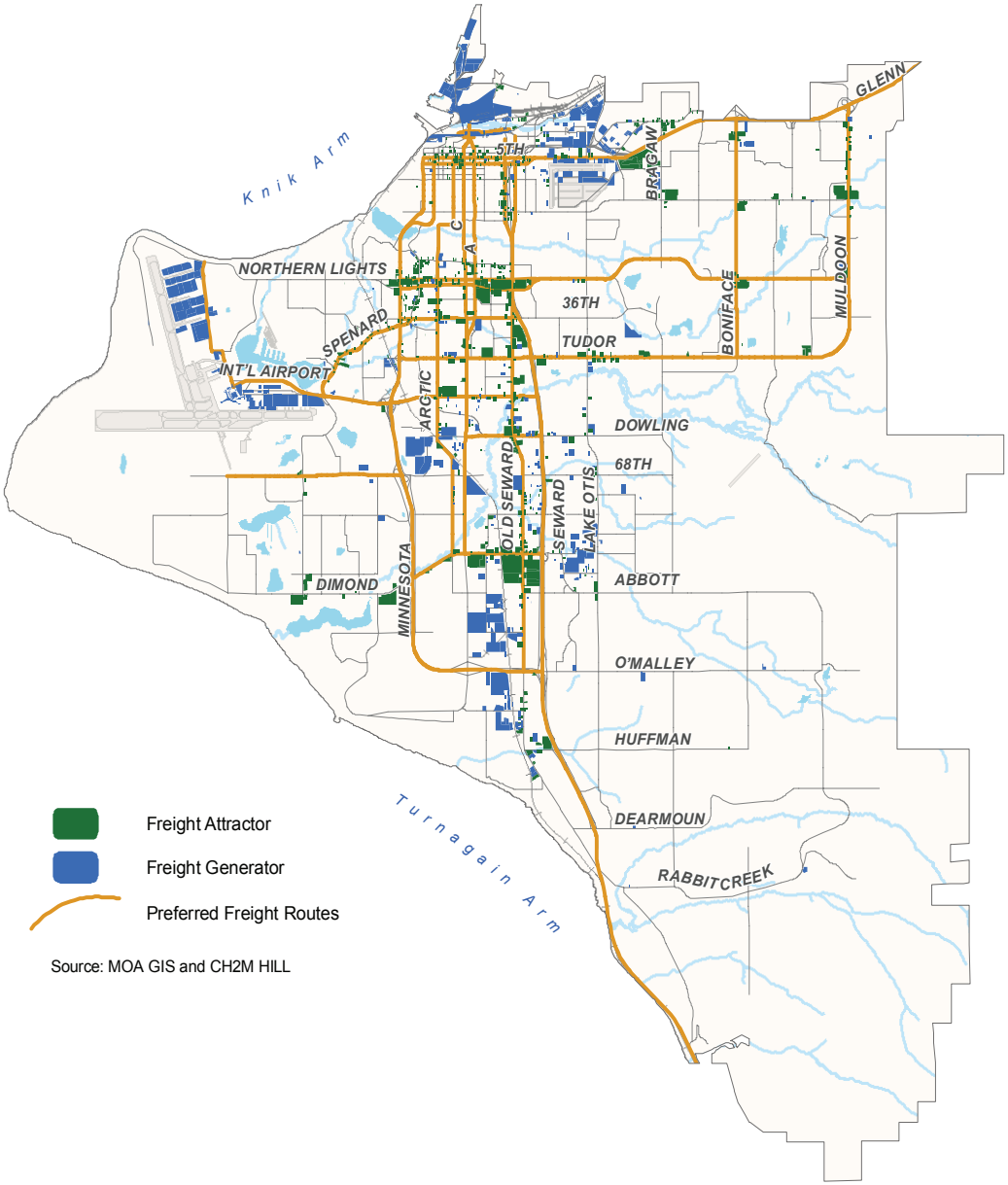
Location	Single-Unit Truck[a]	Combination Unit Truck[a]	Percentage of ADT
Port of Anchorage	110	640	40.0
Ocean Dock, north of A and C street ramps	358	647	37.2
Post Street, east of Reeve Boulevard	182	0	5.7
Glenn Highway east of Muldoon Road	1,825	585	4.7
Boniface Parkway, north of DeBarr Road	442	0	1.9
Bragaw Street, north of Penland Parkway	388	2	2.1
Fireweed Lane, east of Cordova Street	206	1	1.7
Benson Boulevard, east of A Street	839	15	3.1
Northern Lights Boulevard, west of Denali Street	315	722	12.0
Seward Highway, between 36th Avenue and Benson Boulevard	1,960	420	4.9
Tudor Road East of Boniface Parkway	875	130	3.0
Postmark Drive, south of Northern Lights Boulevard	46	0	0.8
Old International Airport Road, west of Jewel Lake Road	87	0	0.3
International Airport Road at Spenard Road	485	115	3.3
C Street, between Tudor Road and International Airport Road	445	190	2.7
Lake Otis Parkway, south of Dowling Road	1,169	3	3.9
Seward Highway, near 76th Avenue	3,250	1,820	9.0
Dimond Boulevard east of C Street	265	80	4.8
Minnesota Drive south of Raspberry Road	1,200	100	3.4
Seward Highway at Potters Marsh	1,230	520	19.7

[a] According to the *Annual Traffic Volume Report* prepared by DOT&PF in 2002, all single-unit and combination trucks are considered commercial vehicles. A single-unit truck has two or three axles. Examples are delivery trucks and dump trucks; pickups are not included. Combination trucks have four or more axles. Examples are concrete trucks, fuel trucks, and tractors hauling one or more trailers.

Source: MOA and DOT&PF

The locations that attract and generate freight are shown in Figure 5-14. The locations for generators and attractors were determined by using parcel information from the MOA land-use database, available as a geographic information system product. The Port of Anchorage and Ted Stevens Anchorage International Airport (TSAIA) are major generators of truck traffic bound for Anchorage locations and destinations within and outside the region. Among other entities that generate or attract significant numbers of truck trips are manufacturing facilities, freight terminals, postal facilities, and large retail and commercial centers. Government yards, utility service and maintenance facilities, and construction sites also generate truck activity.

Figure 5-14. Freight Generators and Attractors



Source: MOA GIS and CH2M HILL

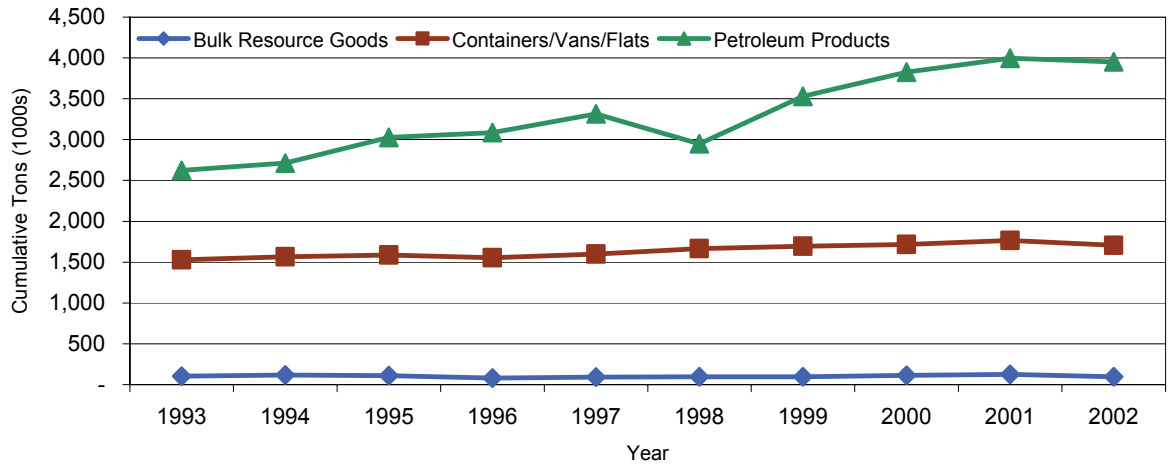
Port of Anchorage

Freight tonnage at the Port of Anchorage—containers and trailers, bulk resource materials, and petroleum products—rose 50 percent from 1993 to 2002. Figure 5-15 shows the tonnage composition. Trucks entering and leaving the port in 2002 moved more than 142,000 revenue loads.

Ted Stevens Anchorage International Airport

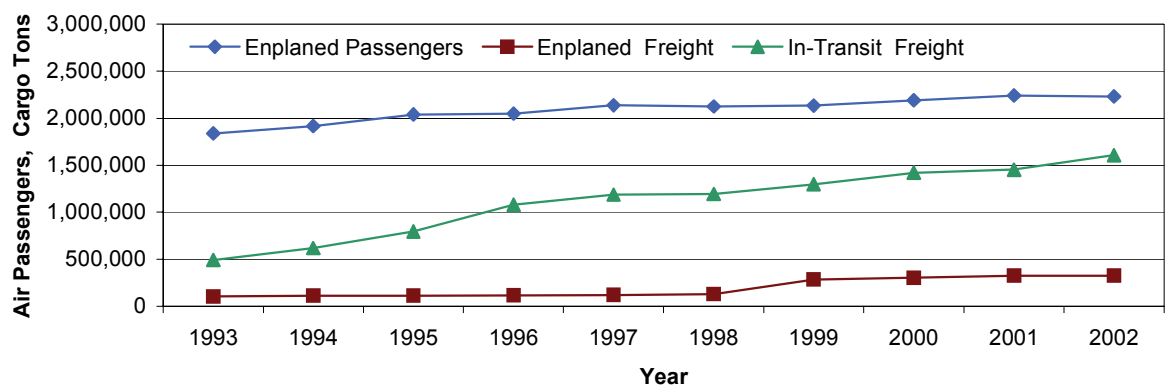
Figure 5-16 shows a stable or slow climb in passenger and freight volumes leaving TSAIA. Visitors, including travelers who arrived in or left Anchorage by cruise ship (traveling only one way by air), account for slightly more than half of air passenger travel at TSAIA (Figure 5-17). In summer 2002, an estimated 6,700 visitors per day arrived by air at TSAIA.

Figure 5-15. Port of Anchorage Tonnage Trends, 1993-2002



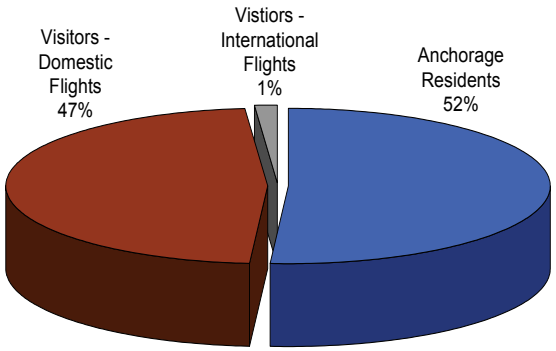
Source: Port of Anchorage

Figure 5-16. Ted Stevens Anchorage International Airport Passenger and Cargo Trends, 1993-2002



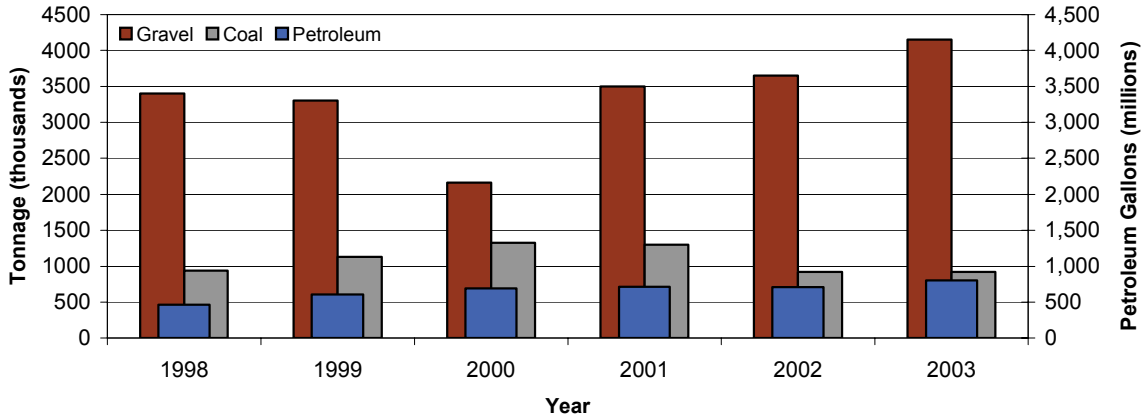
Source: Ted Stevens Anchorage International Airport

Figure 5-17. Ted Stevens Anchorage International Airport Passengers, 2002



Source: Ted Stevens Anchorage International Airport

Figure 5-18. Alaska Railroad Freight Trends, 1998-2003



Source: Alaska Railroad Corporation

Railroad

The railroad, which is owned by the State of Alaska and operated by Alaska Railroad Corporation, plays an important role in moving heavy freight. Rail transport moves bulk resource products and petroleum shipments to and through Anchorage.

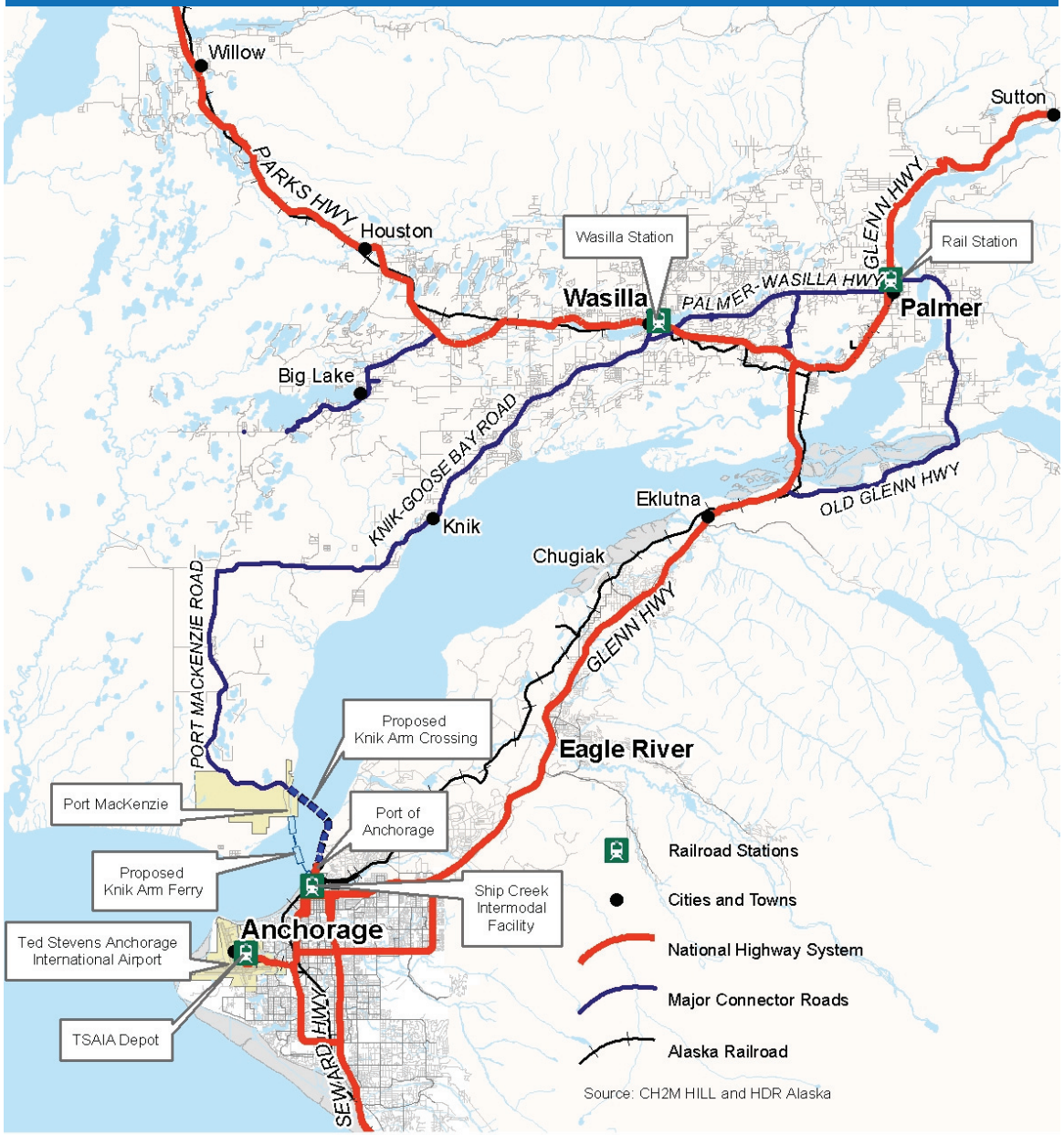
Rail freight volumes have been relatively steady. In 2002, the railroad transported nearly 7.5 million tons of freight. Figure 5-18 shows volumes of gravel, coal, and petroleum hauled by rail between 1998 and 2003.

General cargo and passengers, including cruise ship customers, also travel by rail. In 2002, rail passenger services carried 480,000 riders, primarily tourists.

Regional Connections

The transportation system connects Anchorage with the rest of the state, the country, and the world. On the National Highway System, cars and trucks move people and goods to and from other regions of the state. (See Figure 5-1.) Ships, planes, and the railroad carry consumables, manufactured products, and travelers to and from Anchorage. In addition, these modes are connected through transfer hubs and corridors in an intermodal transportation system that is depicted in Figure 5-19.

Figure 5-19. Regional Transportation Hubs and Corridors

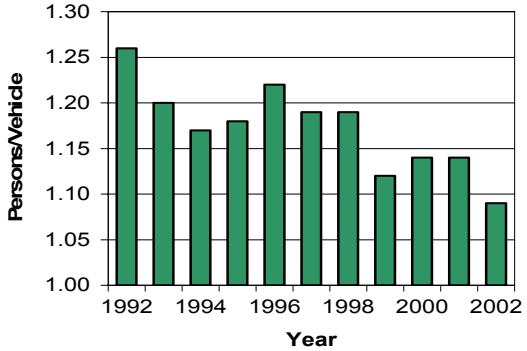


Congestion Management

Congestion management consists of actions and strategies to help manage peak-period travel now and to alleviate future congestion. These actions and strategies improve efficiency of the transportation system, provide alternative travel means to get some cars off the roads, reduce pollution, noise, and crashes, and increase safety for pedestrians and bicyclists.

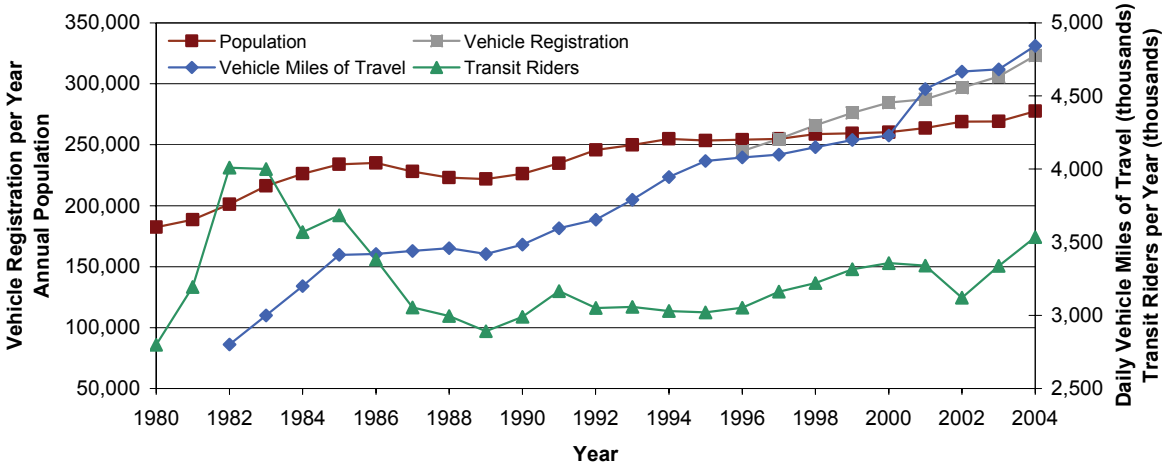
Adverse effects of private vehicle reliance and heavy traffic are increasingly visible in Anchorage. A reflection of population and employment growth, vehicle ownership (Figure 5-20) continues to climb; vehicles registered in Anchorage reached 296,800 in 2002 and 323,240 by 2004. Vehicle trips by solo drivers account for the largest share of daily total trips. Daily VMT continues to rise faster than population because of urban sprawl. In 1990, the average daily VMT per capita was 15.4; by 2002, this figure was 17.4. Figure 5-21 shows that vehicle occupancy entering employment sites has decreased. In 2002, fewer than 10 percent of vehicles in the morning commute carried passengers.

Figure 5-21. Persons per Vehicle Entering Employment Sites During Morning Commute, 1992-2002



Source: MOA Department of Public Transportation

Figure 5-20. Vehicle Ownership and Use, 1980-2004



Note: Vehicle registration not available before 1995.

Source: MOA

In 1994, to increase efficient use of the existing transportation system and reduce travel demand, especially trips by solo drivers, AMATS created the Congestion Management Program. The MOA Department of Public Transportation promotes ride sharing through its Share-A-Ride program and works with employers to identify Transportation Coordinators who encourage alternative transportation modes and promote ride sharing through carpools and vanpools.

The MOA Share-A-Ride program relies on the use of a confidential database of commuters interested in sharing rides to match potential carpool candidates with similar travel patterns and work schedules. In addition to the carpoolers connected through the MOA program, many drivers arrange their own carpools.

Vanpools are designed to meet the needs of long-distance commutes (at least 20 miles one-way). The MOA program makes vans available for groups of 8 to 13 people who can commute together. One person usually drives and maintains the van, and the riders pay a monthly fare.

Table 5-4 shows participation in ride-sharing programs. For 2003, of the 23 vanpools, all but 3 operated from the Mat-Su Valley to Anchorage job sites. As noted in the Public Transportation section, vanpools function best for long-distance commutes.

Status and Assessment of Anchorage Congestion Management Initiatives

The Congestion Management Program adopted in 1994 articulated many possible component activities; it did not identify priorities or provide guidance on the effectiveness or costs of various initiatives or strategies. Clear institutional responsibilities and staffing were not defined.

Table 5-4. Ride Sharing in the Anchorage Area, 2000–2003

Ride Sharing Entity	2000	2001	2002	2003
Registered applicants	4,484	4,298	4,377	3,878
Active carpools	423	348	209	314
Active carpoolers	860	713	419	634
Active vanpools	18	18	21	23
Active vanpoolers	231	260	270	323

Source: MOA Department of Public Transportation

Table 5-5 lists congestion management program strategies reported to be implemented to some degree. A number of them are miniscule in scale or impact, however. Some of the successes are discussed below.

Transit-Related Programs. The People Mover route restructuring initiative to revamp bus routes, coordinate schedules, and improve service frequencies, passenger amenities, multi-ride passes, accommodation of bicycles on transit, and transit service information and marketing actions is largely responsible for attracting a 23 percent gain in riders since 2002.

Telecommuting and Alternative Work Hours. Employer implementation of telecommuting arrangements represents a significant contribution to reducing commuter traffic demand. In 2002, 20,000 workers reported telecommuting in lieu of driving to work, eliminating about 15,000 commute trips per weekday to and from work. The number of eliminated trips exceeds the riders carried daily by People Mover.

Alternative Work Hours. A significant share of the Anchorage workforce operates on flexible work schedules (about 45 percent in 2002). Work schedule flexibility in combination with a relatively large share of workers in "non 8 to 5"positions reduces traditional morning and afternoon traffic during peak periods.

Intersection and Road Improvements. The Highway Safety Improvement Program was implemented to address problem intersections and road segments that have high traffic crash volumes. Good signal timing is important for efficient traffic operation. Implementation of a systemwide program of updating traffic signal timing and timing plans for more than 250 signalized intersections is under way. Additionally, traffic-calming protocols are applied to influence neighborhood traffic speed, safety, and cut-through traffic.

Table 5-5. Existing Congestion Management Strategies

Access management	Ride-sharing programs
Priority parking for carpools/vanpools	Employer subsidized transit use
On-site transportation coordinator	Ride share, transit, and bike marketing programs
Alternative work hours	Telecommuting
Improvements to bus routes and schedules	More frequent service
Transit passenger amenities	Transit marketing and information programs
Monthly transit passes	Improved feeder bus service
Improved express bus service	Park-and-ride facilities
Road operational changes	Transit service for elderly and handicapped individuals
Intersection improvements	Signal system improvements
Roadway Improvements	Enforcement
Turn prohibitions	Public-sector parking pricing
On-street parking controls	Bicycle plans and maps
Bicycle lockers, racks, and other storage	Pedestrian connections with transit
Integration of facilities for bicyclists with transit[a]	Safety consideration for sidewalks

[a]The program to integrate facilities for bicyclist with transit was a new strategy recommended in the 1994 Congestion Management Program that was implemented since the plan was adopted.

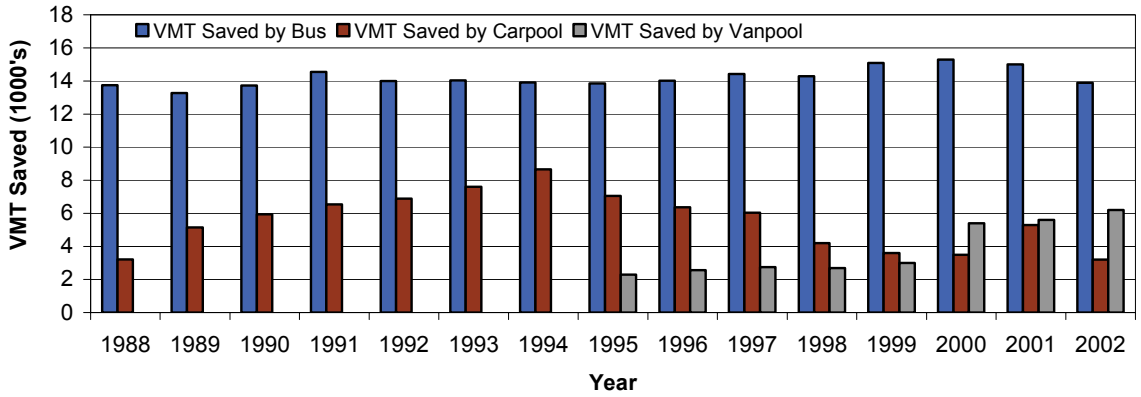
Source: MOA *Congestion Management Program*, October 1994

Ride Sharing. Vanpools in the MOA Share-A-Ride program carry commuter groups, and operate over long distances, significantly contributing to reducing systemwide VMT. Funding of van acquisition is a limiting constraint in implementing more vanpools, and a large waiting list of interested commuters cannot currently be served. Carpool, vanpool marketing, and ride matching are ongoing programs facilitated by the MOA Department of Public Transportation. Currently, approximately

800 persons participate in MOA Share-a-Ride carpools.

The benefits of commuter carpools or vanpools include reduced traffic congestion, improved air quality, and lower costs for commuting expenses such as gas and vehicle wear and tear. Those combined trips reduce VMT, including an estimated 3.2 million VMT saved by carpools and 6.2 VMT saved by vanpools in the MOA programs in 2002. Riders of the AnchorRIDES minibuses and the People Mover bus service also reduce VMT, relieving the road burden by almost 14 million VMT in 2002. See Figure 5-22. Other informal ride sharing for commute to work trips (that is not arranged by the Share-a-Ride program) also saves VMT.

Figure 5-22. Vehicle Miles of Travel Saved by Transit, Carpool, and Vanpool, 1988-2002



Source: MOA Department of Public Transportation