

Transportation

Transportation and Parking Services Division of the Minneapolis Public Works Department provided information on travel trends, traffic accidents, street lighting, managing the City's parking infrastructure, and bicycle facilities.

Public Works' Engineering Services Division furnished information on roadway jurisdictions and mileage, residential paving and storm drain separation programs, and bridge conditions.

Public Works' Field Services Division provided information on residential pavement condition and the City's preventive maintenance programs.

The Downtown Minneapolis Transportation Management Organization (TMO) provided information on travel demand management efforts in downtown Minneapolis.

Metro Transit provided information related to public transit service and ridership in Minneapolis.

Transportation

Travel Behavior in the Region

Information on regional travel behavior from the Metropolitan Council and the Census was released and presented in August 2003. The 2000 Travel Behavior Inventory included information on regional travel patterns and behavior, including mode of travel, trip time, and original patterns. At the regional level, there were a number of significant findings, which had direct and indirect impacts on the transportation infrastructure and quality of life in the City.

The number of trips continued to increase faster than the rate of population and household growth. Between 1990 and 2000, the number of households grew 14%, while the number of vehicle trips increased 22%. The “per person” trip rate increased from 3.9 to 4.2 trips per day between 1990 and 2000.

Transit constituted 2.5% of all trips, the same as in 1990, while the number of “drive-alone” trips increased from 49.5% to 50.8%. The percentage of trips taken in carpools increased from 43.9% to 45.1%, while the percentage taken by all other modes decreased from 4.1% to 1.6%. Despite the slight increase in carpool trips overall, the average occupancy of automobiles for work trips continues to decline, from 1.07 in 1990 to 1.05 in 2000.

The number of miles traveled by vehicles increased faster than the number of trips, indicating that trip lengths were increasing. This was reflected in a three-minute increase in the average commute time (from 21 in 1990 to 24 in 2000).

Roadway Jurisdictions

The City worked with partners at the Federal, State and County levels to maintain its streets and roadways. Each level of government could request changes to transfer jurisdiction based on changing characteristics or policy framework. Recent State of the City reports identified a number of potential jurisdictional changes in roadways; these and other negotiations are still underway.

Total Roadway Centerline Miles by Jurisdiction

2003

Type of Roadway	Miles
Interstate Highways	
I-35W	9.9
I-94	10.1
I-394	4.3
Total	24.3
Other State Trunk Highways	17.7
County-State-Aid Highways	81.5
Parkways and Special Park Roadways	59.0
Municipal-State Aid Streets	203.3
Other City Streets	704.0
City Alleys	455.0
TOTAL	1,544.8

Source: Minneapolis Public Works Department, Engineering Services Division

HOV (High Occupancy Vehicle) Lanes

Last year, the State legislature authorized a demonstration project on I-394 that would allow single occupant drivers to pay a toll to use the HOV lane. Buses and carpools will continue to use the lanes free of charge, and tolls will be set high enough so that the lanes do not become congested. The new High Occupancy/Toll (HOT) lane will be used on an "as-needed" basis and involve automated electronic fare collection (rather than toll booths). Tolls will vary based on demand (e.g., higher prices during peak rush hour).

The "MnPass" program may be implemented as early as 2004. Potential benefits of the program include new mechanisms for transportation financing, a means of providing choice for more reliable conditions, and a more efficient use of limited transportation infrastructure. Transit and carpools will continue to have reliable travel conditions free of toll charges. Primary concerns include the fact that such a program effectively increases the capacity of the roadway for driving alone. As well, those concerned with social and economic equity suggest that such a program primarily benefits those on the higher end of the economic spectrum. These concerns could be addressed over time by balancing investment between general-purpose lanes, HOT lanes, and transit infrastructure such as light rail and busways.

35W and the Crosstown Commons

In 2003, Mn/DOT refined the concept plan for the 35W/Crosstown Commons project and began preliminary geometric layout. Traffic forecasting and traffic operations modeling was completed, while an environmental impact analysis, begun at the beginning of the year, neared completion. Municipal approval of preliminary engineering was anticipated in early 2004. Construction is still anticipated between late 2005 and 2009. The 35W Access Project will involve changes to and improved access to Lake Street from 35W. Preliminary design layouts, which also included moving ramps from 35th/36th Streets to 38th Street, were submitted for review to the Minnesota Department of Transportation and the Federal Highway Administration. The Governor's 2003 bonding bill included money for continued design-related work. Primary outstanding issues included obtaining full funding commitment from the State, coordination with other corridor improvements, and resolving concerns about negative impacts of increased traffic and the prospective widening of Lake Street.

Street Renovation and Paving Program

Public Works developed a framework to set the priorities of the street renovation program, relative to the age and condition of the streets and the kinds of rehabilitation work the streets have experienced in the past. There were nearly 1,400 miles of paved driving surfaces under the jurisdiction of the City of Minneapolis, including local streets and alleys. The Department of Public Works, Paving Construction Division, was responsible for major rehabilitation or reconstruction of those surface streets and sidewalks.

The following is a list of Public Works projects for the 2003 and 2004 construction seasons.

2003 Projects	From - To	Mileage	Estimated Expenditure
3rd Ave. S.	Washington Ave. to 5th St. S.	0.17	Carryover from 2002
Central Ave. NE *	27th Ave. NE to 37th Ave. NE	1.42	\$7,450,000
10th St. S.	3rd Ave. S. to Park Ave.	0.28	\$2,405,000
38th St. E.	23rd Ave. S. to Hiawatha Ave.	0.58	\$2,410,000
Nicollet Ave.	46th St. E. to M'haha Cr. Bridge	0.76	\$3,975,000
South Linden Hills	Renovation Program		\$2,440,000
East University	Renovation Program		\$1,595,000
Central Phillips	Renovation Program		\$2,910,000
Huron Blvd.	at Fulton St. SE		\$130,000
Regina Field	Renovation Program		\$335,000
	2003 Total		\$23,650,000
2004 Projects			
Central Ave. NE *	27th Ave. NE to 37th Ave. NE	1.42	\$7,450,000
15th Ave. SE	5th St. SE to Como Ave. SE	0.51	\$2,695,000
LaSalle Ave. S.	Grant St. W. to Franklin Ave. W.	0.49	\$2,968,000
Richfield Road	39th @ Sheridan Ave. S. to 36th St. W.	0.6	\$2,926,000
9th Ave. S.	Washington Ave. to 2nd St. S.	0.08	\$480,000
University West	Renovation Program	2.3	\$2,366,000
Como North	Renovation Program	4.32	\$2,491,000
	2004 Total		\$21,376,000

* Major portion of work will be completed in 2004

Alley Resurfacing Program

The prevalence of alleys throughout City neighborhoods, and the access they provide to housing, made them an important part of the transportation network in Minneapolis neighborhoods. Due to cost constraints, this system of 455 miles of paved alleys is older than residential streets. The previous resurfacing program was terminated in 1991 due to budgetary constraints. The City recently completed a successful two-year pilot study on a new method to renovate alleys. A bituminous overlay can now be placed economically utilizing a small, self-propelled paving machine. As a result of this pilot project, the City initiated a new alley surfacing program to renovate between 30 and 40 alleys each year.

Downtown Traffic

In 2003, the Public Works Department conducted its 18th "Cordon Count" for Downtown Minneapolis, a count of vehicles and people entering and leaving the Minneapolis Central Business District (CBD) at specific locations. A summary report compared these totals with those obtained between 1958 and 1998. Each of these counts took place on the second Wednesday in September between 6:30 a.m. and 6:30 p.m. Slight precipitation on the survey day in 2003 may have accounted for the

decline in pedestrian/bicycle counts over that in 1998, and average automobile occupancy reversed its consistent downward decline since 1958 when it was 1.44. Some of the key data are as follows:

Vehicles entering and leaving Downtown Minneapolis

	2003		1998	
Total vehicles	310,028		328,298	
Automobiles	266,305	(85.9%)	283,505	(86.4%)
Transit vehicles	8,111	(2.6%)	7,570	(2.3%)
Taxi	8,111	(2.6%)	7,272	(2.3%)

People entering and leaving Downtown Minneapolis by mode

	2003		1998	
Automobile	335,544	(64.2%)	347,548	(64.2%)
Bus	108,663	(20.8%)	107,201	(19.8%)
Pedestrian	35,255	(6.7%)	10,976	(2.0%)
Taxi	10,692	(2.0%)	39,982	(7.4%)
Bicycle	4,323	(0.8%)	4,959	(0.9%)

Average vehicle occupancy

	2003	1998
Automobile	1.26	1.23
Bus	13.40	14.16
Taxi	1.47	1.64

Traffic Accidents

The City analyzed locations that had higher accident rates or dramatic changes in accident rates. Some of the issues and solutions that Public Works addresses included:

- Minor malfunctioning of signal timing or Walk/Don't Walk indicators that were not detected by the central computer;
- Left turn accidents at congested intersections, which could be alleviated by adding a left turn arrow; and
- A change in the roadway and intersection environments, such as damage to signage or the growth of tree branches that may have obstructed views.

The total number of accidents in 2003 continued declining for the third year in a row, following a substantial increase (19%) in 2000. Injury accidents were down 25% since the late 1990s. Pedestrian accidents showed a similar decline. Bicycle accidents held steady, despite increased volumes of bicycles and improved bicycle lane/trail facilities.

Traffic engineers paid special attention to the newly redesigned Hiawatha Avenue corridor, in preparation for introduction of Light Rail Transit in 2004. Pedestrian access to the LRT stations will be closely monitored. Newly relevant was the introduction last year of new speed limits on Hiawatha Avenue. From the existing limit of 35 mph, limits were increased to 50 mph for southbound traffic between Downtown Minneapolis and just south of the Cedar Avenue bridge, to 55 mph for northbound traffic from 26th Street, to 40 mph between 26th Street and 50th Street, and to 45 mph between 50th Street and Trunk Highway 62 ("the Crosstown"). In addition to an ongoing public safety campaign that began last year, measures to address safety of pedestrians and drivers crossing Hiawatha Avenue and the LRT tracks include/will include:

- Gate arms and flashers to alert drivers and prevent cars from advancing or turning while the train is crossing;
- Signage stating "Don't stop on tracks;"
- Signage stating "No Turn on Red;"

- Signal timing to clear intersections of cross traffic prior to the arrival of the train;
- Pedestrian level signage stating: "Look Both Ways;"
- Zebra striped crosswalks;
- Pedestrian "Walk/Don't Walk" indicators with a countdown timer;

**Traffic Accidents, by Type
1999 to 2003**

	1999	2000	2001	2002	2003
Total Accidents	7,077	8,418	8,079	7442	7018
Injuries	4,051	4,140	3,626	3297	3051
Fatalities	10	17	19	12	14
Pedestrian Accidents	383	352	373	367	268
Pedestrian Fatalities	5	2	9	5	2
Bicycle Accidents	304	298	269	232	234
Bicycle Fatalities	0	1	0	1	1

Source: Minneapolis Public Works Department, Transportation and Parking Services Division

Sidewalk Maintenance Program

The Sidewalk Division of the Public Works Department maintained the City's 1,900 miles of sidewalks and oversaw the inspection and construction of sidewalks associated with all street-paving projects. New standards developed in 2003, to be implemented in 2004, included new specifications for tree grates and pedestrian ramps. During the 2003 construction season, over \$4.7 million was spent on sidewalk infrastructure Citywide, compared to \$3.2 million the previous year. The focus of activity during the past construction season was the following areas: Folwell, Webber-Camden, McKinley, University East, Central Phillips, Bancroft, Lynnhurst, Armatage, south Linden Hills, and Powderhorn Park.

Bridges in the City

Minneapolis had a total of 608 bridges within the City limits (excluding bridges as part of interstate highways). Of the 608 bridge structures, 281 structures carried railroad, pedestrian, and skyway (pedestrian) traffic over roadways. The remaining 327 bridge structures carried roadways over creeks and rivers, railroads, and other roadways. The City and Park Board owned 179 of these bridges and the City maintained an additional 149 bridges as a result of agreements with other entities.

Since the late 1970s the City has had an aggressive bridge replacement program, successfully securing a variety of funding sources to finance bridge repair and replacement. An ongoing five-year program was revised each year by the Public Works Department to keep the bridge network viable. The Public Works Department performed annual structural inspections of all bridges according to strict criteria set up by the Federal government.

In 2002, the Public Works Department developed updated information on the structural deficiency and budget implications of future bridge rehabilitation and replacement. At the end of 1999, 27 bridges were structurally deficient, and 30 were functionally obsolete, as defined by Federal rating criteria; the cost of replacing these bridges was estimated at about \$50 million in 1996 dollars. By 2002, the City had estimated that about 85 more bridges built prior to 1940 would need to be added to the deficient list, and would require an additional \$70 million in 1996 dollars. At the replacement rate of four bridges per year, it would take about 20-25 years to replace these deficient structures without counting additional bridges that may become deficient as they exceed their useful life of 60 years.

Pedestrian Level Lighting

The City was in the process of developing a comprehensive set of policies and procedures related to street lighting, including handling requests, establishing standards, and funding and maintenance. Residents of the City of Minneapolis became more interested in the installation of pedestrian level lighting around their neighborhoods as concern over security and aesthetics became more focused on conditions on neighborhood streets after nightfall. Installation of the pedestrian level light standard occurred last year on Bank St (28 lights), Logan Park (60), Nicollet Avenue (50).

Parking In Downtown

The municipal parking system grew to 25,864 spaces in 22 ramps and eight surface lots last year. Despite this growth, use of the system declined. The aggregate public investment in the downtown parking system was about \$443,930,000. The most recent State audit of the parking system indicated that in 2002, Total Operating Revenues for the Municipal Parking Enterprise Fund were \$54,116,340 while Total Operating Expenses were \$40,713,197

A survey last year indicated that the total off-street parking supply, including privately owned ramps and lots, was 58,698 spaces. This total did not include the 4,500 plus on-street parking meters. Last year, rules for use of these spaces by handicapped persons were made more restrictive. Drivers could now only park free at one, two, and four-hour meters for a maximum of four hours. To replace the loss of all-day free parking at meetings, the City now offers a 50% reduction in the regular monthly rate for persons with disability permits.

Newly opened City ramps and planned facilities include:

- Downtown East Municipal Ramp: 450 spaces.
- 11th & Harmon Municipal Ramp: 600 spaces.
- Vineland Place Municipal Ramp: 675 spaces.
- Guthrie Theatre Municipal Ramp (opening 2006): 1000 spaces.

**Average Daily Use of Downtown
Municipally-Owned Parking Spaces
2003**

User Type	%	# Cars Parked/Day
Hourly/Daily	46.0	12,068
Monthly	35.5	9,315
Carpool/Vanpool	6.1	1,601
Validation	2.1	551
Event	10.3	2,703
Total	100.0	26,238
Total Cars Parked in 2003		6,821,883

Source: Public Works Transportation and Parking Services Division