

Appendix D
Detailed Study of Major Corridors and Commercial Activity
Centers

Appendix D

Detailed Study of Major Corridors and Commercial Activity Centers

Roadway System Performance

Roadways are being analyzed on a system basis. The key unit of analysis is the transportation corridor. Seven key regional corridors are described and issues and opportunities for each are identified. The analysis is a distillation of documented conditions from numerous planning studies undertaken by the MDOT, PACTS and municipalities and from issues raised in the public outreach. Corridors are segmented by community, and/or by change in road character or function for analysis purposes. Roadway system issues and opportunities are also presented for the two major commercial activity centers in the region -- Downtown Portland and the Maine Mall Area. Graphics depicting transportation issues for each corridor or activity center have been prepared.

Within each corridor, congested locations that have been documented by other studies and high crash locations (HCL) are noted. HCL's are identified by the number of accidents over a three-year period (8 or more accidents), and the critical rate factor (CRF >1.0). The CRF is the ratio of the number of actual accidents to the number expected for a similar intersection. A CRF over 1.0 shows a higher than expected incidence of accidents and indicates that there may be a safety problem at that location.

Major Transportation Corridors

Interstate Highways – I-95, I-495 & I-295

The Interstate highways perform a critical role in the regional and statewide transportation system. They provide a high degree of accessibility into and through the region. The Maine Turnpike provides major north-south access to and through the Greater Portland area. It passes along the western edge of Portland. The Maine Turnpike Authority is currently widening the Turnpike south of Exit 6A at I-295 to three lanes in each direction. I-295 provides north-south access from the Maine Turnpike at Exit 6A and Maine Mall Area to the inner urban portion of Greater Portland. In Falmouth, I-295 becomes I-95 where it joins with traffic from the Falmouth Spur.

Maine Turnpike

Issues & Opportunities:

- The Maine Turnpike Authority has funding in its 20 year capital plan for the upgrade of the Turnpike from Exit 6A to Exit 9.
- Underutilization of the Turnpike north of Exit 6A. Some through-motorists choose to use I-295 to avoid paying tolls.
- Potential opportunity to increase the use of Turnpike by through-traffic by implementing a toll-free zone north of Exit 6 to New Gloucester.

- Desirability of regional toll system and location of the toll plaza – Scarborough has traffic concerns (due to potential for local diversion of traffic off of the Turnpike onto local roads) and environmental concerns (such as noise associated with a large toll barrier). Other communities favor the concept for its potential to reduce traffic on local roads.
- Lack of direct access from interstate highways requires circuitous routing on local roads to access major centers (such as access from Turnpike to Maine Mall Area)
- New or reconfigured interchanges can provide improved access to the Turnpike (Falmouth Spur, Rand Road, Maine Mall area), relieving traffic on non-interstate roads.
- Make more efficient use of Route 703/Turnpike Connector in South Portland to provide better connectivity between roadways and to the Maine Mall area

I-95/I-295 -- Falmouth/North Portland

Issues & Opportunities:

- Congested Locations
 - I-295 northbound at Route 1 created by weaving condition from Baxter Boulevard On-ramp.
 - Implementation of ‘Ring-road Concept’ would require reconfiguration of Bucknam Road Interchange and access

I-295 Portland

Issues & Opportunities:

- Congested Locations
 - I-295 southbound in the AM at Baxter Boulevard Exit created by heavy traffic volumes.
 - I-295 southbound at the Congress Street Exit created by the on/off ramp weave maneuver.
- Poor interchange configurations introduce safety and congestion problems at Congress Street, Forest Avenue and Franklin Arterial.
- Physical and environmental constraints to widening -- spot or incremental improvements likely can be made to improve mainline operations.

I-295 South Portland

Issues & Opportunities:

- Congested Locations
 - I-295 southbound between Exits 3 and 4 caused by heavy volume entering at Exit 3 and exiting at Exit 4.
- Poor access to Exit 3 due to interchange configuration

Route 1

Route 1 is an arterial that varies in characteristics and functions with its cross-section consisting of rural two-lane (Falmouth north of Buckman Road), suburban three-lane (Falmouth), urban two-lane (Baxter Boulevard), and suburban five-lane sections (Scarborough).

Falmouth

Issues & Opportunities:

- Maintaining good accessibility for all transportation modes and level of service as new development and redevelopment occurs
- Strengthening the emerging village through roadway design standards.

Portland

Issues & Opportunities:

- Congested Locations
 - Veteran's Circle/Commercial Street rotary design is ineffective in processing traffic.
 - Park Avenue at State Street and High Street operate poorly due to heavy peak hour traffic volumes.
- High Crash Locations
 - Baxter Boulevard at Dartmouth Street (12 accidents/CRF=1.72)
 - Baxter Boulevard at Vannah Avenue (11 accidents/CRF=1.34)
 - Veranda Street at I-295 (10 accidents/CRF=1.54)
 - Park Street at High Street (54 accidents/CRF=1.38)
 - Valley Street (13 accidents/CRF=5.21)
- Baxter Boulevard and connecting neighborhood side streets are used to bypass more congested roadways such as Forest Avenue

South Portland

Issues & Opportunities:

- High Crash Locations
 - Main Street near Haskell Avenue (13 accidents/CRF=1.32)
 - Main Street at Turnpike Spur (52 accidents/CRF=1.23)
 - Main Street near Hayden Street (11 accidents/CRF=1.39)
 - Main Street near Turnpike Spur (26 accidents/CRF=1.66)
- Truck routings to the I-295 and the Maine Turnpike and to Broadway cause neighborhood conflicts.

Scarborough

Issues & Opportunities:

- Congested Locations
 - Dunston Corner intersection congestion is caused by heavy volumes and the close proximity of Payne Road and Pine Point Road.
 - Route 1 segment congestion south of Dunston Corner is caused by heavy summer traffic volumes.
- High Crash Locations
 - Route 1 near Fairfield Road (10 accidents/CRF=1.28)
 - Route 1 near Orchard Street (26 accidents/CRF=1.23)

Route 26 and Route 26/100

Route 26 is comprised of a rural two-lane road in Falmouth with land use primarily consisting of residential. Recent development activity in the Exit 10 area has transformed the area and traffic levels are increasing accordingly. In Portland, Auburn Street/Washington Avenue is densely developed with mixed residential/commercial land use with the roadway cross-section remaining two lanes.

Falmouth

Issues & Opportunities:

- High Crash Locations
 - Route 26 at Leighton Road (10 accidents/CRF=1.69)
 - Route 26 at Falmouth Road (16 accidents/CRF=2.33)
 - Route 26 at I-495 (12 accidents/CRF=1.97)
- Increasing development by Maine Turnpike Exit 10 in Falmouth may further degrade level of service and increase traffic loads. Opportunities exist for preserving capacity by continuing to implement access management and extending transit service.

Portland

Issues & Opportunities:

- Congested Locations
 - Washington Avenue at Canco Road is congested due limited spacing between Ray Street and Canco Road and the number of signal phases required.
- High Crash Locations
 - Washington Avenue/Walnut Street (11 accidents/CRF=1.5)
 - Washington Avenue near North Gate (12 accidents/CRF=1.76)
 - Washington Avenue near Presumpscot (12 accidents/CRF=1.00)
 - Washington Avenue near Maplewood (26 accidents/CRF=2.13)
 - Washington Avenue at Veranda (52 accidents/CRF=1.14)
- Providing adequate capacity and throughput on Washington Avenue without becoming a barrier within neighborhoods and restricting bicycle and pedestrian movements.

- Congestion delays transit service along Washington Avenue.

Route 302

Portland/Forest Avenue south of Morrill's Corner

Forest Avenue south of Morrill's Corner serves as an urban arterial providing access to businesses and residential areas along its length and as a major commuter corridor into and out of Portland. Low density business and commercial development abuts the road for most of its length but remnants of mixed use development remains near Morrill's and Woodford's Corners.

Issues & Opportunities:

South of Morrill's Corner.

- Congested Locations
 - Morrill's Corner is congested from limited spacing between Stevens Avenue and Allen Avenue and limited mainline capacity.
 - Woodford's Corner is congested from limited spacing between Ocean and Deering and limited mainline capacity.
 - The Marginal Way at State Street intersection is limited in operation due to its proximity with High Street.
 - The Forest Avenue at High Street intersection is congested because of its limited distance to Marginal Way.
- High Crash Locations
 - Forest Avenue at Ashmont (16 accidents/CRF=1.20)
 - Forest Avenue at Arlington (22 accidents/CRF=1.67)
 - Forest Avenue at Pleasant (16 accidents/CRF=1.28)
 - Forest Avenue at Read (15 accidents/CRF=1.09)
 - Morrill's Corner (52 accidents/CRF=1.03)
 - Forest Avenue at Warren (68 accidents/CRF=1.47)
 - Forest Avenue at Cumberland Avenue (34 accidents/CRF=1.31)
 - Forest Avenue at I-295 (all ramps)
 - Forest Avenue (many segments)
- Maintaining accessibility to the Downtown and corridor business and residents without compromising opportunities for transit, bicycle and pedestrian travel.
- Accumulation of low density, suburban style development (single story/single use buildings and strip development shopping centers) uses along the corridor. Opportunities for redevelopment and access management along the corridor to improve traffic flow and improve corridor aesthetics.
- Traffic congestion can degrade transit service.

Portland/Forest Avenue north of Morrill's Corner

North of Morrill's Corner Forest Avenue has low and moderate density residential development along its length. Small apartment complex and large public housing developments are located in this section. The road is one lane in each direction with parking lanes/shoulders for its length.

Issues & Opportunities:

- High Crash Locations
 - Forest Avenue at Warren (68 accidents/CRF=1.47)
 - Forest Avenue near Riverside (12 accidents/CRF=1.49)
 - Forest Avenue near Elanor (15 accidents/CRF=1.73)
- Supporting access into and out of Portland without creating barrier in the neighborhoods.
- Accommodating bicycle, pedestrian and transit usage.

Westbrook

Route 302 through Westbrook is a suburban arterial with low-density residential and commercial development along most of its length. Studies are being completed for Route 302 west of Westbrook.

Issues & Opportunities:

- High Crash Locations
 - Bridgton Road at Methodist Road (9 accidents/CRF=1.44)
 - Bridgton Road at Duck Pond Road (8 accidents/CRF=1.20)
 - Preserving arterial capacity.
- Improving roadway safety by implementing access management and other recommendations from 1992 study to add shoulders.
- A large parcel has been proposed for development (approximately 500,000 square feet) along Route 302.
- Large amount of seasonal summer traffic heading to the lakes and mountains.

Route 25

Route 25 serves as one of the few major east-west corridors in greater Portland. It serves regional automobile and truck traffic destined for the mountains and New Hampshire to the west and Portland and the Maine Mall area to the east.

Portland

East of Rosemont Corner, Route 25/Brighton Avenue is an urban arterial with one lane in each direction with shoulders that provide good accommodation for bicyclists. Route 25 terminates at Park Avenue to the east. The University of Southern Maine (Portland campus) and the Brighton Medical Center are the two major uses along it.

From Rosemont Corner to Capisic Street, Brighton Avenue is an urban arterial with two lanes in each direction with no accommodation for bicyclists. Sidewalks, often with trees in esplanades are located on both sides of the street. Low-density residential and moderate density commercial/office uses abut the road. Small clusters of businesses are located at each end of this section at the Capisic Street and Woodford Street intersections.

Issues & Opportunities:

- High Crash Locations
 - Brighton Avenue at St. George (16 accidents/CRF=1.34)
 - Brighton Avenue at Colonial (36 accidents/CRF=1.02)
 - Brighton Avenue at Capisic (21 accidents/CRF=1.34)
 - Brighton Avenue near Colonial (15 accidents/CRF=5.86)
 - Brighton near Holm (9 accidents/CRF=1.58)
- Preserving arterial capacity
- Providing high quality bicycle and pedestrian accommodations. Portland will test a three-lane cross-section on Brighton Avenue between Capisic Street and Woodford Street in 2001. This would allow a paved shoulder or bike lane for bicyclists.
- Eliminating ‘barrier’ quality of roadway due to character of traffic volume and speed.

Portland/Westbrook/Exit 8 Area

Route 25 in this area remains a four-lane roadway with turn lanes at some major intersections. Suburban style commercial land uses dominate the area.

Issues & Opportunities:

- Congested Locations
 - Brighton Avenue at Larrabee Road
 - The Riverside Street at MTA Exit 8 intersection is problematic due heavy traffic volumes and insufficient roadway capacity.
 - The Riverside Street at Warren Avenue intersection is congested to inadequate roadway capacity.
- High Crash Locations
 - Riverside Street at Larrabee (49 accidents/CRF=1.34)
 - Riverside Street at Warren (44 accidents/CRF=1.00)
 - Riverside near Brighton (32 accidents/CRF=1.93)
 - Riverside near Exit 8 (49 accidents/CRF=2.03)

Westbrook

Issues & Opportunities:

- Congested Locations
 - Bill Clarke Drive at Spring Street
- High Accident Locations
 - Main Street at Larrabee (86 accidents/CRF=1.73)
 - Bill Clarke Drive at Mechanic (23 accidents/CRF=2.02)
 - Bill Clarke Drive at Central (12 accidents/CRF=1.17)
 - Bill Clarke Drive at Brackett (13 accidents/CRF=1.19)
 - Bill Clarke Drive at Church (11 accidents/CRF=1.00)
 - Main Street near Larrabee (27 accidents/CRF=2.44)

Gorham

In Gorham, Route 25 serves as Main Street – the heart of Gorham Village. It is a major commuter corridor and is very congested during the afternoon peak travel period.

Issues & Opportunities:

- Congested Locations
 - Route 25 at Route 202/4 congestion caused by the convergence of state highways and insufficient roadway capacity.
 - Route 25 at New Portland Road congestion caused by insufficient roadway capacity.
 - Route 25 at Route 114/South/School Streets congestion caused by the convergence of state highways and insufficient roadway capacity.
 - Route 25 at Route 237
- High Crash Locations
 - Main Street at Mosher (12 accidents/CRF=1.27)
 - Main Street at Files (10 accidents/CRF=1.98)
 - Main Street at Flaggy Meadow (18 accidents/CRF=2.27)
 - Main Street at Route 4 (12 accidents/CRF=1.08)
 - Main Street at Route 114 (50 accidents/CRF=1.04)
 - Main Street at Libby (11 accidents/CRF=1.56)
 - Main Street (many segments)
- Protecting and enhancing the village character through roadway design standards
- Providing adequate traffic capacity for east-west travel
- Heavy increase in travel demand in this corridor.
- Traffic safety and industrial park access at the intersection with Route 237

Route 22

Route 22 in the western portion of the PACTS area consists of a two-lane rural arterial with low-density residential/commercial land use. Development becomes denser and comprises mostly commercial and office developments in Westbrook and Portland west of the Turnpike. East of the Turnpike development becomes more residential and mixed use. This area of Portland has experienced conflict between neighborhood livability and heavy traffic volumes.

Scarborough/Gorham

Issues & Opportunities:

- Congested Locations
 - Route 22/114 overlap area – both intersections and intersection approaches congested caused by increased demand for east-west travel, the convergence of state highways and limited roadway capacity.
- High Crash Locations

- Route 22 at Burnham Road (11 accidents/CRF=1.07)
- Heavy increase in travel demand in this corridor.

Westbrook

Issues & Opportunities:

- Congested Locations
 - County Road at Spring Street congestion is caused by limited intersection approach capacity.
 - County Road from Spring Street to Portland Town line
 - Cummings Road from County Road to South Portland Town line

Portland

Issues & Opportunities:

- Congested Locations
 - Congress Street from Westbrook TL to Johnson Road.
- High Crash Locations
 - Congress Street at Massachusetts (22 accidents/CRF=1.28)
 - Congress Street at Bolton (34 accidents/CRF=1.98)
 - Congress Street at Marston (29 accidents/CRF=2.11)
 - Park Street at St. John (57 accidents/CRF=1.31)
 - Park Street at Marston (29 accidents/CRF=3.02)
 - Park Street at Lowell (16 accidents/CRF=1.60)
 - Congress Street at I-295 (all ramps)
 - Congress Street (many segments)
- Neighborhood and traffic conflict caused by heavy volumes and high traffic speeds. Roadway becomes a barrier within the neighborhood.

Route 77

Route 77 in South Portland from the Casco Bay Bridge is a high capacity facility with two through lanes in each direction and multiple turn lanes at intersections. Land uses are primarily commercial. From Broadway south towards Cape Elizabeth Route 77 becomes a two-lane facility with lower volumes and residential development. In Portland, Route 77 is comprised of State and High Streets. These are two lane, one-way streets that traverse the Portland peninsula, connecting Forest Avenue at I-295 with the Casco Bay Bridge and points south.

South Portland

Issues & Opportunities:

- Congested Locations
 - Broadway at Cottage Road congestion is caused by limited eastbound through lane capacity.
- High Crash Locations

- Broadway at Ocean (58 accidents/CRF=1.16)
- Broadway at Cottage Road (61 accidents/CRF=1.28)
- Broadway at Route 77 southbound (45 accidents/CRF=2.94)
- Pedestrian circulation and safety on Broadway and the Greenway.

Portland

Issues & Opportunities:

- High volume of through traffic on State and High Streets bisecting the peninsula conflicts with high-density neighborhoods and historic district (18 % of peak hour traffic on State Street is through-traffic).
- Potential relief of through traffic from I-295 by construction of I-295 Connector Road from Congress Street interchange to West Commercial Street

Important Commercial Areas

Downtown Portland

Downtown Portland is the economic and employment center of the region and contains the highest density residential neighborhoods in the state. Significant traffic enters and exits the Portland Peninsula during commuter time periods. Major access onto the Peninsula is limited to the Casco Bay Bridge, I-295 interchanges, St. John Street, Preble Street, and Deering Avenue. The Portland waterfront is a major cargo port on the Eastern seaboard and is home to a significant fishing fleet.

Issues & Opportunities:

- Congested Locations
 - Congress Street at Elm Street congestion is caused by the lack of a left-turn lane on the Congress Street westbound approach.
 - Congress Street at Forest Avenue congestion is caused by its limited distance to High Street.
 - Congress Street at High Street congestion is caused by its distance to Forest and signal inefficiencies.
- High Crash Locations (CRF over 2.00)
 - Congress Street at St. John (40 accidents/CRF=2.44)
 - Commercial Street at Pearl (10 accidents/CRF=2.80)
 - Union Street/Fore Street (8 accidents/CRF=3.24)

Maine Mall Area

The Maine Mall area is the PACTS region major suburban activity center with significant retail, office, and other commercial development. Access into the area is primarily provided via the Turnpike at Exits 7 and 7A, Westbrook Street, Congress Street, Payne Road, Route 703 and Running Hill Road. Most roads in the area have multi-lanes with turn lanes provided at major intersections.

Issues & Opportunities:

- Congested Locations
 - Maine Mall Road at Gorham congestion is caused by heavy traffic volumes.
 - Philbrook Road at John Roberts Road congestion is caused by the ineffective multi-way stop sign control.
 - Foden Road at Western Avenue
 - Western Avenue between Maine Mall and Jetport
- High Crash Locations (over 20 accidents)
 - Gorham at Foden (40 accidents/CRF=1.17)
 - Maine Mall Road at Turnpike
 - Maine Mall Road at Gorham (58 accidents/CRF=1.15)
 - Westbrook Street at I-295 (89 accidents)
 - Maine Mall Road (many segments)
- Maintaining accessibility to and circulation within key to continued vitality of the area.
- Roadways poorly accommodate users other than automobile and truck traffic.

Speed - Delay Analysis: Major Corridors

Travel Time/Average Delay Survey Results

The quality of travel is often associated with speed or travel time. Speed is an important consideration in highway transportation because the rate of vehicle movement has a significant economic, safety, time, and service (comfort and convenience) meaning to both the motorist and the general public. Using a floating car method, WSA conducted speed surveys on most key routes in the PACTS region. The surveys were conducted in the peak travel direction during the AM peak period (entering Portland) and during the PM peak period (leaving Portland). A summary of the results by corridor is presented below. These results will be supplemented with additional surveys. Some of the results below represent single surveys; multiple surveys are desired to ensure an average of travel are recorded.

Route 1

Bucknam Road (Falmouth) to I-295

During the morning commute time the total travel time was 5 minutes and 14 seconds, while during the evening the travel time was slight greater or 5 minutes and 29 seconds. No major delays were recorded although some delay was encountered at the Depot Street and Clearwater Drive traffic signals.

Saco Town Line to Cash Corner

The total travel time was 15 minutes and 29 seconds during the morning and 15 minutes and 21 seconds during the evening. No major delays were encountered during both time periods, but some delays occurred at most signalized intersections.

Route 100/26

MTA Exit 10 to Veranda Street

During the morning commuter period the travel time was 14 minutes and 34 seconds with major delays north of Canco Road (48 seconds) and south of Canco Road (3 minutes). The total travel time during the evening was 9 minutes and 46 seconds and some minor delays at Ocean Avenue (40 seconds), Canco Road (42 seconds), and Allen's Avenue (30 seconds)

Route 302

Windham Town Line to Park Avenue

The total travel time during the morning time period was recorded to be 18 minutes and 55 seconds with major delays at the School Zone south of Riverside Street (48 seconds) and at Morrill's Corner (1 minute and 39 seconds). During the evening time period the total travel time was 22 minutes and 40 seconds with major delays at Woodford's Corner (Over 2 minutes), and at Morrill's Corner (2 minutes).

Route 22

Route 202/4 to St. John Street

The total travel time for this route was 23 minutes and 23 seconds during the morning and 26 minutes and 47 seconds during the evening period. During the morning, excessive delays were not recorded although many intersections experienced delays in excess of 25 seconds. During the evening significant delays were noted at Jetport Drive (47 seconds), Spring Street (53 seconds), and at Route 114 (over 2 minutes).

Route 25

Park Avenue to Route 35

During the morning period the total travel was 39 minutes and 57 seconds with major delays at Route 202/4 (1 minute and 53 seconds), Route 114 (1 minute and 43 seconds), New Gorham Road (1 minute and 30 seconds), Spring Street (over 3 minutes), and at Stevens Avenue (56 seconds). During the evening period the total travel time was 42 minutes and 49 seconds with major delays at Stevens (1 minute and 11 seconds), Woodford Street (1 minute and 3 seconds), New Gorham Road (1 minute and 47 seconds), Route 202/4 (just over 3 minutes), and at Route 114 (1 minute and 36 seconds). The table from Appendix F on page D-14 shows the results of the travel time analysis.

Appendix F

Automobile Travel Time Analysis: Selected Origins & Destinations

								Response						Response	
				2000 Base	2025 Base	Arterial 1	Arterial 2	Arterial 3	Arterial 3	Interstate 1	Interstate 2	Interstate 3	Interstate 4	Interstate 5	Interstate 4
Origin	Destination	Minutes	Minutes	Minutes	Minutes	Minutes	Minutes	Minutes	Minutes	Minutes	Minutes	Minutes	Minutes	Minutes	Minutes
19	Monument Square Vicinity	164	Scarborough	19	19	18	18	18	18	18	18	23	17	17	17
19	Monument Square Vicinity	185	Gorham, w/o Overlap	26	29	27	25	25	24	29	29	24	21	29	21
19	Monument Square Vicinity	205	Gorham w/o Bypass	36	46	45	41	40	40	46	46	35	32	45	32
19	Monument Square Vicinity	209	Cape Elizabeth	14	16	16	16	16	15	16	16	16	16	16	15
19	Monument Square Vicinity	214	Yarmouth	15	18	18	18	18	18	17	17	17	18	15	17
19	Monument Square Vicinity	218	Cumberland	21	24	24	24	24	24	23	22	22	23	22	22
19	Monument Square Vicinity	224	Windham	25	32	31	31	28	28	32	32	30	24	31	23
123	Maine Mall	164	Scarborough	12	15	14	14	14	14	16	16	14	15	16	15
123	Maine Mall	185	Gorham, w/o Overlap	18	21	19	17	16	16	21	20	15	13	21	13
123	Maine Mall	205	Gorham w/o Bypass	31	39	37	32	32	32	38	37	27	24	38	24
123	Maine Mall	209	Cape Elizabeth	16	17	17	17	17	17	17	17	17	17	17	17
123	Maine Mall	214	Yarmouth	22	26	25	25	25	25	24	22	22	23	22	22
123	Maine Mall	218	Cumberland	22	24	24	23	20	20	26	24	24	24	26	23
123	Maine Mall	224	Windham	22	28	28	28	21	21	28	28	26	21	28	20
								Response						Response	
				Transit 1	Transit 2	T3A-BRT	T3A-BRT	T3B-Rail	T3B-Rail						
Origin	Destination	Minutes	Minutes	Minutes	Minutes	Minutes	Minutes	Minutes	Minutes						
19	Monument Square Vicinity	164	Scarborough	19	19	18	18	18	18						
19	Monument Square Vicinity	185	Gorham, w/o Overlap	30	29	29	28	29	29						
19	Monument Square Vicinity	205	Gorham w/o Bypass	46	46	44	43	44	44						
19	Monument Square Vicinity	209	Cape Elizabeth	16	15	15	16	15	16						
19	Monument Square Vicinity	214	Yarmouth	18	18	18	18	17	17						
19	Monument Square Vicinity	218	Cumberland	24	24	24	23	23	23						
19	Monument Square Vicinity	224	Windham	32	32	31	31	32	32						
123	Maine Mall	164	Scarborough	15	15	14	14	15	15						
123	Maine Mall	185	Gorham, w/o Overlap	21	21	20	20	21	20						
123	Maine Mall	205	Gorham w/o Bypass	38	38	38	36	38	37						
123	Maine Mall	209	Cape Elizabeth	17	17	17	17	17	17						
123	Maine Mall	214	Yarmouth	26	25	25	25	24	24						
123	Maine Mall	218	Cumberland	24	24	24	24	24	24						
123	Maine Mall	224	Windham	28	28	27	27	27	28						

Safety and Accidents

High Crash Locations and Total Accidents

MaineDOT considers a location to be a High Crash Location if it has a Critical Rate Factor (CRF) of over 1.0 and at least 8 accidents over a three-year period. The CRF is a ratio of actual accident rates to 'expected' accident rates based on similar locations statewide. A CRF over 1.0 identifies a potential safety issue at a location. The first table below lists the number of crashes and high crash locations by community. The second table lists the number of crashes by major corridor.

Crash Data Summary: 1997 - 1999

COMMUNITY	TOTAL CRASHES	PEDESTRIAN CRASHES	TRUCK CRASHES	# HIGH CRASH LOCATIONS
Cape Elizabeth	284	0	5	1
Falmouth	943	2	83	8
Gorham	1224	3	59	17
Portland	8390	137	485	124
Scarborough	2006	9	170	25
South Portland	2977	33	190	42
Westbrook	1421	18	87	17

Source: MaineDOT, Bureau of Planning.

Total Crashes by Major Corridor: 1997- 1999

COMMUNITY	RT. 1	RT. 302	RT. 100	RT. 25	RT. 22	I295SB	I295NB
Cape Elizabeth	*	*	*	*	*	*	*
Falmouth	130	*	93	*	*	34	47
Gorham	*	*	*	437	116	*	*
Portland	632	1126	1344	630	788	207	154
Scarborough	476	*	*	*	63	30	12
South Portland	318	*	*	*	*	89	42
Westbrook	*	122	*	338	43	*	*

Source: MaineDOT, Bureau of Planning.

Financial Costs of Vehicle Accidents in PACTS Communities

The costs of accidents that occurred within the seven PACTS communities were obtained from the MaineDOT for the period 1997-1999. During this three-year period, the estimated total cost of all vehicular crashes was over \$376.5 million. This was comprised of \$329.5 million from person injuries and approximately \$47 million in property damages. The totals by community are shown in the table below.

**Personal and Property Damage: Vehicle Crashes
PACTS Communities: 1997 - 1999**

COMMUNITY	PERSONAL INJURY	PROPERTY DAMAGE	TOTAL
Cape Elizabeth	\$ 3,721,00	\$ 642,000	\$ 4,363,000
Falmouth	\$30,235,000	\$ 2,128,000	\$32,363,000
Gorham	\$24,850,000	\$ 2,932,000	\$27,782,000
Portland	\$127,799,000	\$24,358,000	\$152,157,000
Scarborough	\$62,602,000	\$ 4,770,000	\$67,372,000
South Portland	\$47,736,000	\$ 8,534,000	\$56,270,000
Westbrook	\$32,523,000	\$ 3,702,000	\$36,225,000
Total	\$329,504,000	\$47,076,000	\$376,580,000

Source: MaineDOT, Bureau of Maintenance and Operations, Accidents Records Section.