

**APPENDIX D-1**

**TRAFFIC COUNTS AND PROJECTED TRAFFIC VOLUMES**

**TABLE D-1-1****MID-NORTH SHORE SUBREGIONAL TRANSPORTATION STUDY****Traffic Counts: LYNN**

Count Location	S or U (*)	MTMC or ATR (**)	Count Date	Counted by	24-Hour ADT	Total Pk Hr Inter- section Volume		Actual AM and PM Peak Hours
						AM Pk Hr	PM Pk Hr	
- Route 129 (Broadway) at Parkland Ave	S	MTMC	2004	CTPS		3,200	3,630	7:15-8:15; 16:15-17:15
- Route 129 (Broadway) at Magnolia/Springvale	S	MTMC	2004	CTPS		2,790	2,880	7:15-8:15; 16:30-17:30
- Route 129 (Broadway) at Boston/Chestnut/Carter	S	MTMC	2004	CTPS		3,020	2,890	7:15-8:15; 16:30-17:30
- Market St at State/Oxford	S	MTMC	2004	Beta Group, Inc.		1,510	1,890	7:45-8:45; 16:45-17:45
- Central Ave at Munroe/Blake/Willow	U	MTMC	2004	Beta Group, Inc.		650	900	7:30-8:30; 16:15-17:15
- Central Ave/Exchange St at Union St	S	MTMC	2004	Beta Group, Inc.		690	1,100	8:00-9:00; 16:30-17:30
- Broad St at Market St	S	MTMC	2004	CTPS		2,050	2,390	7:30-8:30; 16:45-17:45
- Broad St at Washington/Spring	S	MTMC	2004	Beta Group, Inc.		1,500	1,880	7:15-8:15; 17:00-18:00
- Route 129 (Broad St) at Exchange St	S	MTMC	2004	CTPS		1,460	1,670	7:30-8:30; 16:30-17:30
- Route 129 (Broad St) at Silsbee/Newhall	S	MTMC	2004	CTPS		1,450	1,500	7:30-8:30; 16:45-17:45
- Route 129 (Lewis St) at Chestnut/Atlantic	S	MTMC	2004	CTPS		1,510	1,320	7:30-8:30; 17:00-18:00
- Route 129 (Lewis St) at Chatham/Aubrey	U	MTMC	2004	CTPS		1,020	1,280	7:30-8:30; 16:30-17:30
- Route 129 (Lewis St) at Ocean/Ocean Cir	S	MTMC	2004	CTPS		1,040	1,190	7:30-8:30; 17:00-18:00
- Route 129 (New Ocean St) at Route 129A (Eastern Ave)	S	MTMC	2004	CTPS		1,700	1,880	7:30-8:30; 17:00-18:00
- Lynn Shore Dr at Nahant/Beach	S	MTMC	2004	CTPS		2,330	2,400	7:30-8:30; 17:00-18:00
- Route 1A at Revere line		ATR	2004	MassHighway	43,400			
			1997	MassHighway	27,500			
			1990	MassHighway	41,900			
- Route 107 s. of Commercial St		ATR	2002	MassHighway	22,600			
- Route 107 e. of Fay St		ATR	1993	MassHighway	26,000			
- Route 107 w. of Fay St		ATR	1993	MassHighway	26,000			
- Route 107 at Saugus line		ATR	2004	MassHighway	21,300			
			1994	MassHighway	22,000			
			1988	MassHighway	24,000			
- Route 107 at Salem line		ATR	1987	MassHighway	25,200			
- Route 129 e. of Bradford Rd		ATR	1995	MassHighway	27,000			
- Route 129 w. of Bradford Rd		ATR	1995	MassHighway	28,000			

(\*) S=signalized intersection; U=unsignalized intersection

(\*\*) MTMC=manual turning movement count (AM/PM peak hour); ATR=automatic traffic recorder (24-hour count)

**TABLE D-1-1 (cont.)****MID-NORTH SHORE SUBREGIONAL TRANSPORTATION STUDY****Traffic Counts: LYNN**

Count Location	S or U (*)	MTMC or ATR (**)	Count Date	Counted by	24-Hour ADT	Total Pk Hr Inter- section Volume		Actual AM and PM Peak Hours
						AM Pk Hr	PM Pk Hr	
- Route 129 w. of Millard Ave		ATR	2004	MassHighway	28,900			
		ATR	1995	MassHighway	30,000			
- Millard Ave e. of Route 129		ATR	1995	MassHighway	7,100			
- Ashland St e. of Boston St		ATR	2001	MassHighway	3,500			
- Cottage St e. of Boston St		ATR	2001	MassHighway	7,000			
- Eastern Ave between Ocean St and Lynn Shore Dr		ATR	2001	MassHighway	13,400			
- Spencer St e. of Boston St		ATR	2001	MassHighway	8,300			
- Summer St e. of Boston St		ATR	2001	MassHighway	11,500			
- Summer St n. of Summer St Place		ATR	2001	MassHighway	9,200			
- Lynn Shore Dr s. of Eastern Ave		ATR	2004	MassHighway	25,400			
- Route 129 (Broad St) e. of Union St		ATR	2004	Beta Group, Inc.	19,300			
- Union St n. of Central St		ATR	2004	Beta Group, Inc.	12,200			

(\*) S=signalized intersection; U=unsignalized intersection

(\*\*) MTMC=manual turning movement count (AM/PM peak hour); ATR=automatic traffic recorder (24-hour count)

**TABLE D-1-2****MID-NORTH SHORE SUBREGIONAL TRANSPORTATION STUDY****Traffic Counts: SWAMPSCOTT**

Count Location	S or U (*)	MTMC or ATR (**)	Count Date	Counted by	24-Hour ADT	Total Pk Hr Inter- section Volume		Actual AM and PM Peak Hours
						AM Pk Hr	PM Pk Hr	
- Route 1A (Paradise Rd) at Farragut/Norfolk	U	MTMC	2004	CTPS		1,490	1,430	7:30-8:30; 16:45-17:45
- Route 1A (Paradise Rd) at Walker Rd	U	MTMC	2004	CTPS		1,870	1,780	7:30-8:30; 16:00-17:00
- Essex St at Danvers Rd	S	MTMC	2004	CTPS		2,170	2,610	7:30-8:30; 17:00-18:00
- Essex St at Burrill St	U	MTMC	2002	GPI		1,460	1,120	
- Essex St at Burpee Rd	U	MTMC	2002	GPI		1,380	1,060	
- Essex St at The Greenway	U	MTMC	2002	GPI		1,230	960	
- Route 129 e. of Monument Ave		ATR	2004	MassHighway	19,200			
			1988	MassHighway	25,200			
- Reddington St between Highland St and Rockland St		ATR	2001	MassHighway	3,100			
			1998	MassHighway	3,800			
			1992	MassHighway	2,500			
			1989	MassHighway	2,500			
- Route 1A (New Ocean St) s. of Burrill St		ATR	2004	MassHighway	15,100			
- Essex St s. of Danvers Rd		ATR	2004	MassHighway	22,900			
- Essex St e. of Burrill St		ATR	2002	GPI	14,250			
- Burrill St s. of Essex St		ATR	2002	GPI	7,400			

(\*) S=signalized intersection; U=unsignalized intersection

(\*\*) MTMC=manual turning movement count (AM/PM peak hour); ATR=automatic traffic recorder (24-hour count)

**TABLE D-1-3****MID-NORTH SHORE SUBREGIONAL TRANSPORTATION STUDY****Traffic Counts: SALEM**

Count Location	S or U (*)	MTMC or ATR (**)	Count Date	Counted by	24-Hour ADT	Total Pk Hr Inter- section Volume		Actual AM and PM Peak Hours
						AM Pk Hr	PM Pk Hr	
- Rt 1A (Loring Ave) at Rt 114 (Lafayette St)/West Ave	S	MTMC	2004	CTPS		2,250	2,230	7:30-8:30; 16:30-17:30
- Jefferson Ave at Willson/Cloutman	U	MTMC	2004	CTPS	(flashing beacon)	1,880	2,000	7:15-8:15; 16:15-17:15
- Swampscott Rd at Aggregate Industries driveway	U	MTMC	2004	CTPS		1,360	--	7:45-8:45; --
- Rt 1A (Loring Ave) at Canal/Jefferson	S	MTMC	2004	VHB		2,680	2,970	7:30-8:30; 16:30-17:30
- Rt 107 (Highland Ave) at Wal*Mart driveway	S	MTMC	1998	GPI		1,480	2,220	
- Rt 107 (Highland Ave) at Old Village Drive	S	MTMC	1998	GPI		1,560	2,270	
- Rt 107 (Highland Ave) at Ravenna Ave/Barnes Rd	S	MTMC	1998	GPI		1,620	2,220	
- Rt 107 (Highland Ave) at Swampscott Rd/DiPietro Rd	S	MTMC	1998	GPI		2,130	2,870	
- Rt 107 (Highland Ave) at Marlborough Rd/Traders Way	S	MTMC	1998	GPI		2,520	3,500	
- Rt 107 (Highland Ave) at Hawthorne Shopping Ctr Dvwy	S	MTMC	1998	GPI		1,650	2,270	
- Rt 107 (Highland Ave) at Willson St/Cherry Hill Ave	S	MTMC	1998	GPI		1,810	2,400	
- Rt 1A (Paradise Road) at Vinnin Street	S	MTMC	2005	CTPS		2,500	2,750	7:30-8:30; 17:00-18:00
- Vinnin Street at Salem Street	S	MTMC	2005	CTPS		1,560	1,710	7:30-8:30; 17:00-18:00
- Vinnin Street at Loring Avenue	S	MTMC	2005	CTPS		1,280	1,490	8:00-9:00; 16:45-17:45
- Rt 1A (Paradise Road) at Loring Avenue	S	MTMC	2005	CTPS		1,590	2,160	8:00-9:00; 16:45-17:45
- Route 1A (Loring Ave) s. of Jefferson Ave		ATR	2004	MassHighway	27,500			
			1988	MassHighway	26,600			
- Vinnin St between Salem St and Route 1A		ATR	1996	MassHighway	16,980	(<=== ADT estimated from 11-hr counts)		
			1988	MassHighway	12,900			
- Rt 1A/Rt 114 (Lafayette St) s. of Forest/Clifton		ATR	2004	MassHighway	22,400			
- Route 114 (Lafayette St) at Marblehead line		ATR	2004	MassHighway	17,800			
			2001	MassHighway	18,900			
			1998	MassHighway	23,300			
			1995	MassHighway	20,000			
- Canal St n. of Route 1A (Loring Ave)		ATR	2004	VHB	16,200			
- Route 107 (Highland Ave) s. of Barnes Rd		ATR	1998	GPI	27,000			
- Route 107 (Highland Ave) s. of Willson St		ATR	1998	GPI	26,400			

(\*) S=signalized intersection; U=unsignalized intersection

(\*\*) MTMC=manual turning movement count (AM/PM peak hour); ATR=automatic traffic recorder (24-hour count)

(ReS, 060827, MidNorthShoreBsCnts.xls)

## PROJECTED TRAFFIC VOLUMES

North Shore communities experienced low to moderate levels of growth in population and employment between 1990 and 2000. Population in the nine cities and towns in the greater Mid-North Shore study area combined grew by an aggregate +6.0% (330,700 to 350,600), an overall average of +0.59% per year. At the same time, total employment in these communities grew by +3.9% (132,000 to 137,100), or +0.38% per year (see Table D-1-4).<sup>1</sup>

As seen from the MAPC forecasts in Table D-1-4 it is expected that population and employment levels will continue to grow on the North Shore, albeit at a decreased rate. Total population in the nine communities is expected to increase between 2000 and 2010 from 350,600 to 367,400 (+4.8%), or +0.47% per year, and between 2000 and 2030 from 350,600 to 382,700 (+9.1%), or +0.29% per year. Employment levels are projected to grow between 2000 and 2010 from 137,100 to 140,900 (+2.8%), or +0.28% per year, and between 2000 and 2030 from 137,100 to 145,900 (+6.4%), or +0.21% per year.

Study area traffic levels have shown varied growth (-2.6% to +3.5% per year) during the past two decades, depending on location. The following summarizes some of the trends in available daily volumes, by community.

<u>Location</u>	<u>Year</u>	<u>ADT</u>
<i>Lynn</i>		
1. Route 1A at Revere line	1990	41,900 \
	1997	27,500 (+0.3% per year)
	2004	43,400 /
2. Route 107 at Saugus line	1988	24,000 \
	1994	22,000 (-0.7% per year)
	2004	21,300 /
3. Route 129 west of Millard Ave	1995	30,000 \ (-0.4% per year)
	2004	28,900 /
<i>Swampscott</i>		
4. Route 129 east of Monument Ave	1988	25,200 \ (-1.7% per year)
	2004	19,200 /
5. Reddington St betw. Highland St and Rockland St	1989	2,500 \
	1992	2,500 (+1.8% per year)
	1998	3,800 /
	2001	3,100 /
<i>Salem</i>		
6. Route 1A (Loring Ave) south of Jefferson Ave	1988	26,600 \ (+0.2% per year)
	2004	27,500 /
7. Route 1A north of Webb St	1999	28,300 \ (+3.5% per year)
	2002	31,400 /

<sup>1</sup> Sources: the Web sites of Commonwealth of Massachusetts, Division of Employment and Training (ES-202 Series), 2004 (<http://www.detma.org/lmi/local/Lynn.html> ; /Swampscott.html; /Salem.html; etc.); MAPC, Population and Employment Projections, January 2006 ([www.mapc.org](http://www.mapc.org)).

**TABLE D-1-4**

(ReS, 060827, MidNoShoreFUTVOLS.xls)

**Projected Growth in Population and Employment in the Mid-North Shore Study Area: 2000 to 2030**

City/ Town	Projected Population (based on MAPC trends)							
	2000 (U.S. Census)	Change per year from '90	2010	Change per year from '00	2020	Change per year from '00	2030	Change per year from '00
Lynn	89050	0.92%	92161	0.34%	94277	0.29%	95931	0.25%
Swampscott	14413	0.55%	14883	0.32%	15251	0.28%	15529	0.25%
Salem	40407	0.59%	44082	0.87%	44902	0.53%	45500	0.40%
<b>Study Area</b>	<b>143870</b>	<b>0.79%</b>	<b>151126</b>	<b>0.49%</b>	<b>154430</b>	<b>0.35%</b>	<b>156960</b>	<b>0.29%</b>
Beverly	39903	0.44%	41084	0.29%	42047	0.26%	42768	0.23%
Danvers	24996	0.33%	26377	0.54%	27061	0.40%	27387	0.30%
Marblehead	20377	0.20%	20864	0.24%	21237	0.21%	21504	0.18%
Peabody	48131	0.23%	52153	0.81%	53712	0.55%	54994	0.45%
Revere	47284	1.00%	48870	0.33%	50114	0.29%	51055	0.26%
Saugus	26077	0.20%	26905	0.31%	27550	0.28%	28035	0.24%
<b>9 Towns</b>	<b>350638</b>	<b>0.59%</b>	<b>367379</b>	<b>0.47%</b>	<b>376151</b>	<b>0.35%</b>	<b>382703</b>	<b>0.29%</b>
City/ Town	Projected Employment (based on MAPC trends)							
	2000 (U.S. Census)	Change per year from '90	2010	Change per year from '00	2020	Change per year from '00	2030	Change per year from '00
Lynn	25376	-1.62%	25253	-0.05%	25116	-0.05%	24979	-0.05%
Swampscott	3436	2.25%	3520	0.24%	3580	0.21%	3624	0.18%
Salem	17387	-1.11%	17116	-0.16%	16865	-0.15%	16631	-0.15%
<b>Study Area</b>	<b>46199</b>	<b>-1.19%</b>	<b>45889</b>	<b>-0.07%</b>	<b>45561</b>	<b>-0.07%</b>	<b>45234</b>	<b>-0.07%</b>
Beverly	18479	2.10%	19326	0.45%	19933	0.38%	20412	0.33%
Danvers	21551	-0.05%	23022	0.66%	24148	0.57%	25063	0.50%
Marblehead	4650	1.28%	4708	0.12%	4741	0.10%	4759	0.08%
Peabody	26295	2.23%	27521	0.46%	28456	0.40%	29198	0.35%
Revere	8763	0.71%	8977	0.24%	9134	0.21%	9249	0.18%
Saugus	11137	1.20%	11505	0.33%	11766	0.28%	11965	0.24%
<b>9 Towns</b>	<b>137074</b>	<b>0.38%</b>	<b>140948</b>	<b>0.28%</b>	<b>143739</b>	<b>0.24%</b>	<b>145880</b>	<b>0.21%</b>

8. Route 114 (Lafayette St) at Marblehead line	1989	26,500 \
	1992	22,000 \
	1995	20,000 (-2.6% per year)
	1998	23,300 /
	2001	18,900 /
	2004	17,800 /

---

*Danvers*

9. Route 1 at Peabody line	1989	37,400 \
	1992	40,400 (+0.3% per year)
	1996	47,200 /
	1999	38,400 /

10. Route 114 east of Route 1	1990	36,000 \
	1993	33,000 (-0.4% per year)
	1998	33,300 /
	1999	34,700 /

---

*Revere*

11. Route 1A 0.3 km north of Boston line (continuous MassHighway counting station #8087)	1990	46,100 \
	1997	52,000 (+2.0% per year)
	2000	51,900 /
	2004	60,900 /

12. Route 60 east of Copeland Circle	1990	52,600 \ (-1.8% per year)
	1997	46,300 /

13. Route 107 north of Brown Circle	1990	25,900 \ (-2.6% per year)
	1997	21,600 /

---

*Saugus*

14. Route 1 north of Lynn Fells Parkway	1990	107,100 \
	1996	131,500 (+0.5% per year)
	1999	83,600 /
	2004	114,800 /

---

Source: MassHighway Traffic Volumes

Based on the population and employment forecasts in Table D-1-4, and on the historical daily traffic data shown above, it is expected that traffic in the Greater Mid-North Shore communities will grow only marginally in the foreseeable future. Therefore, this study assumes, based on the available information, that there will be an average of +0.25% per year growth in daily traffic in the study area.

The study also assumes the same +0.25% per year growth for the AM and PM peak hours, respectively, for the purpose of intersection LOS analysis. This rate may be conservative, since peak hour traffic levels are already at or near capacity at a number of intersections analyzed. The transportation improvements recommended in this study are all considered to be short-range, i.e., implemented within 10 years. Therefore, intersections were analyzed for operational LOS using projected traffic volumes to the year 2015, grown from existing volumes at +0.25% per year.



## **APPENDIX D-2**

### **TRUCK DATA**

## TRUCK DATA

The primary source of information on the level of truck traffic in the study area was MTMCs. The following table summarizes, by community, the percentage of trucks in the traffic stream in the AM and PM peak periods:

**TABLE D-2-1**  
**Percent Trucks at Key Study Area Intersections**

<b>Study Area Community</b>	<b>% Trucks AM Peak Period</b>	<b>% Trucks PM Peak Period</b>	<b>Source</b>
<b><i>Lynn</i></b>			
Rte 129 (Broadway) at Parkland	3.6	2.3	CTPS
Rte 129 (Broadway) at Magnolia/Springvale	3.5	2.0	CTPS
Rte 129 (Broadway) at Boston/Chestnut	4.9	2.3	CTPS
Rte 1A (Broad) at Market	5.7	2.5	CTPS
Rte 1A (Broad) at Washington/Spring	3.1	1.1	Beta Group, Inc.
Rte 1A (Broad) at Exchange	4.7	2.8	CTPS
Rte 1A (Lewis) at Chatham/Aubrey	6.7	5.5	CTPS
Rte 1A (Lewis) at Ocean St/Ocean Cir	6.4	2.9	CTPS
Rte 1A (New Ocean) at Eastern	4.7	1.9	CTPS
Lynn Shore Dr* at Nahant	1.1	0.7	CTPS
<b><i>Swampscott</i></b>			
Rte 1A (Paradise) at Farragut/Norfolk	3.2	1.4	CTPS
Rte 1A (Paradise) at Walker	2.7	1.1	CTPS
Essex at Danvers/Eastman	6.6	1.8	CTPS
<b><i>Salem</i></b>			
Rte 1A (Loring) at Rte 114 (Lafayette)/West	4.3	1.8	CTPS
Jefferson at Willson/Cloutman	3.0	1.2	CTPS
Swampscott Rd at Aggregate Industries	10.0	N.A.	CTPS
Rte 1A (Paradise) at Vinnin	4.6	1.5	CTPS
Vinnin at Salem	7.4	1.0	CTPS
Vinnin at Loring	4.4	1.8	CTPS
Rte 1A (Loring) at Jefferson/Canal	1.2	1.1	Vanasse Hangen Brustlin, Inc.

\* Lynn Shore Drive is under Massachusetts Department of Conservation and Recreation (DCR) jurisdiction. Trucks are typically not allowed on DCR facilities.

**APPENDIX D-3**

**INTERSECTION VEHICLE CRASH DATA**

**TABLE D-3-1**  
**Summary of Mass. Registry Vehicle Crash Data (1/1/1999–12/31/2001)**  
**Route 129 (Lynnfield St) at Broadway/Parkland Ave, Lynn**  
**(SIGNALIZED)**

		1999	2000	2001
Collision Type	Single Vehicle Crash	0	0	0
	Rear End	7	9	13
	Angle	9	10	7
	Sideswipe, same direction	0	0	0
	Sideswipe, opposite direction	0	0	0
	Head On	0	0	1
	Other/Unknown	3	6	3
	Total	19	25	24
Severity	Property Damage	15	18	13
	Personal Injury	4	6	9
	Fatality	0	0	0
	Other/Unknown	0	1	2
Time of Day	7:00–9:00 AM	7	3	7
	4:00–6:00 PM	5	2	6
	Other	7	20	11
Day of Week	Mon-Fri	14	21	20
	Sat-Sun	5	4	4
Pavement Conditions	Dry	16	20	17
	Wet	2	5	5
	Ice/Snow	0	0	0
	Other/Unknown	1	0	2
Light Conditions	Daylight	16	19	15
	Dawn or Dusk	0	4	3
	Dark-Lighted	2	2	5
	Dark-No lights	0	0	0
	Other/Unknown	1	0	1
Weather Conditions	Clear	15	19	17
	Rainy/Foggy/Cloudy	3	6	6
	Snow/Sleet	0	0	0
	Other/Unknown	1	0	1

**TABLE D-3-2**  
**Summary of Mass. Registry Vehicle Crash Data (1/1/1999–12/31/2001)**  
**Route 129 (Broadway) at Magnolia Ave/Springvale Ave, Lynn**  
**(SIGNALIZED)**

		1999	2000	2001
Collision Type	Single Vehicle Crash	0	0	0
	Rear End	0	1	2
	Angle	3	3	4
	Sideswipe, same direction	0	0	0
	Sideswipe, opposite direction	0	0	0
	Head On	0	0	0
	Other/Unknown	1	4	3
	Total	4	8	9
Severity	Property Damage	4	5	7
	Personal Injury	0	3	2
	Fatality	0	0	0
	Other/Unknown	0	0	0
Time of Day	7:00–9:00 AM	1	2	4
	4:00–6:00 PM	0	1	1
	Other	3	5	4
Day of Week	Mon-Fri	4	6	7
	Sat-Sun	0	2	2
Pavement Conditions	Dry	3	5	7
	Wet	1	1	0
	Ice/Snow	0	0	0
	Other/Unknown	0	2	2
Light Conditions	Daylight	3	6	6
	Dawn or Dusk	0	1	0
	Dark-Lighted	2	0	2
	Dark-No lights	0	0	0
	Other/Unknown	0	1	1
Weather Conditions	Clear	3	5	8
	Rainy/Foggy/Cloudy	1	2	0
	Snow/Sleet	0	0	0
	Other/Unknown	0	1	1

**TABLE D-3-3**  
**Summary of Mass. Registry Vehicle Crash Data (1/1/1999–12/31/2001)**  
**Route 129 (Broadway) at Boston St/Chestnut St/Carter Rd, Lynn**  
**(SIGNALIZED)**

		1999	2000	2001
Collision Type	Single Vehicle Crash	0	0	0
	Rear End	13	3	2
	Angle	4	3	3
	Sideswipe, same direction	0	0	0
	Sideswipe, opposite direction	0	0	0
	Head On	0	0	0
	Other/Unknown	7	4	3
	Total	24	10	8
Severity	Property Damage	11	6	6
	Personal Injury	11	4	2
	Fatality	0	0	0
	Other/Unknown	2	0	0
Time of Day	7:00–9:00 AM	2	1	1
	4:00–6:00 PM	8	1	3
	Other	14	8	4
Day of Week	Mon-Fri	20	8	6
	Sat-Sun	4	2	2
Pavement Conditions	Dry	17	9	5
	Wet	5	1	3
	Ice/Snow	0	0	0
	Other/Unknown	2	0	0
Light Conditions	Daylight	13	7	7
	Dawn or Dusk	3	1	1
	Dark-Lighted	7	2	0
	Dark-No lights	0	0	0
	Other/Unknown	1	0	0
Weather Conditions	Clear	16	9	4
	Rainy/Foggy/Cloudy	4	1	4
	Snow/Sleet	1	0	0
	Other/Unknown	3	0	0

**TABLE D-3-4**  
**Summary of Mass. Registry Vehicle Crash Data (1/1/1999–12/31/2001)**  
**Route 1A (Broad St) at Market St, Lynn**  
**(SIGNALIZED)**

		1999	2000	2001
Collision Type	Single Vehicle Crash	0	0	0
	Rear End	1	0	1
	Angle	2	5	5
	Sideswipe, same direction	0	0	0
	Sideswipe, opposite direction	0	0	0
	Head On	1	0	1
	Other/Unknown	0	3	2
	Total	4	8	9
Severity	Property Damage	2	2	6
	Personal Injury	2	6	3
	Fatality	0	0	0
	Other/Unknown	0	0	0
Time of Day	7:00–9:00 AM	1	2	2
	4:00–6:00 PM	2	2	0
	Other	1	4	7
Day of Week	Mon-Fri	3	5	6
	Sat-Sun	1	3	3
Pavement Conditions	Dry	3	5	6
	Wet	0	2	3
	Ice/Snow	1	0	0
	Other/Unknown	0	0	0
Light Conditions	Daylight	2	3	6
	Dawn or Dusk	0	0	1
	Dark-Lighted	2	5	2
	Dark-No lights	0	0	0
	Other/Unknown	0	0	0
Weather Conditions	Clear	2	3	6
	Rainy/Foggy/Cloudy	1	5	2
	Snow/Sleet	1	0	1
	Other/Unknown	0	0	0

**TABLE D-3-5**  
**Summary of Mass. Registry Vehicle Crash Data (1/1/1999–12/31/2001)**  
**Route 1A (Broad St) at Washington St/Spring St, Lynn**  
**(SIGNALIZED)**

		1999	2000	2001
Collision Type	Single Vehicle Crash	0	0	0
	Rear End	1	4	0
	Angle	2	4	0
	Sideswipe, same direction	0	0	0
	Sideswipe, opposite direction	0	0	0
	Head On	1	0	0
	Other/Unknown	0	3	3
	Total	4	11	3
Severity	Property Damage	3	3	3
	Personal Injury	1	8	0
	Fatality	0	0	0
	Other/Unknown	0	0	0
Time of Day	7:00–9:00 AM	0	0	0
	4:00–6:00 PM	0	1	0
	Other	4	10	3
Day of Week	Mon-Fri	4	7	1
	Sat-Sun	0	4	2
Pavement Conditions	Dry	3	9	3
	Wet	1	2	0
	Ice/Snow	0	0	0
	Other/Unknown	0	0	0
Light Conditions	Daylight	3	10	2
	Dawn or Dusk	0	0	1
	Dark-Lighted	1	1	0
	Dark-No lights	0	0	0
	Other/Unknown	0	0	0
Weather Conditions	Clear	2	9	3
	Rainy/Foggy/Cloudy	2	1	0
	Snow/Sleet	0	1	0
	Other/Unknown	0	0	0



**TABLE D-3-6**  
**Summary of Mass. Registry Vehicle Crash Data (1/1/1999–12/31/2001)**  
**Route 1A (Broad St) at Route 129 (Exchange St), Lynn**  
**(SIGNALIZED)**

		1999	2000	2001
Collision Type	Single Vehicle Crash	0	0	0
	Rear End	0	1	0
	Angle	0	0	0
	Sideswipe, same direction	0	0	0
	Sideswipe, opposite direction	0	0	0
	Head On	0	1	0
	Other/Unknown	0	1	1
	Total	0	3	1
Severity	Property Damage	0	1	0
	Personal Injury	0	2	1
	Fatality	0	0	0
	Other/Unknown	0	0	0
Time of Day	7:00–9:00 AM	0	1	0
	4:00–6:00 PM	0	0	0
	Other	0	2	1
Day of Week	Mon-Fri	0	3	0
	Sat-Sun	0	0	1
Pavement Conditions	Dry	0	2	1
	Wet	0	1	0
	Ice/Snow	0	0	0
	Other/Unknown	0	0	0
Light Conditions	Daylight	0	2	0
	Dawn or Dusk	0	1	0
	Dark-Lighted	0	0	1
	Dark-No lights	0	0	0
	Other/Unknown	0	0	0
Weather Conditions	Clear	0	2	1
	Rainy/Foggy/Cloudy	0	1	0
	Snow/Sleet	0	0	0
	Other/Unknown	0	0	0

**TABLE D-3-7**  
**Summary of Mass. Registry Vehicle Crash Data (1/1/1999–12/31/2001)**  
**Routes 1A/129 (Broad St) at Silsbee St/Newhall St, Lynn**  
**(SIGNALIZED)**

		1999	2000	2001
Collision Type	Single Vehicle Crash	0	0	0
	Rear End	1	2	1
	Angle	2	1	1
	Sideswipe, same direction	0	0	0
	Sideswipe, opposite direction	0	0	0
	Head On	0	0	0
	Other/Unknown	0	4	2
	Total	3	7	4
Severity	Property Damage	0	2	2
	Personal Injury	2	4	2
	Fatality	0	0	0
	Other/Unknown	1	1	0
Time of Day	7:00–9:00 AM	0	1	0
	4:00–6:00 PM	1	0	0
	Other	2	6	4
Day of Week	Mon-Fri	2	5	3
	Sat-Sun	1	1	1
Pavement Conditions	Dry	2	6	2
	Wet	1	1	1
	Ice/Snow	0	0	1
	Other/Unknown	0	0	0
Light Conditions	Daylight	1	4	3
	Dawn or Dusk	1	0	0
	Dark-Lighted	1	3	1
	Dark-No lights	0	0	0
	Other/Unknown	0	0	0
Weather Conditions	Clear	2	5	2
	Rainy/Foggy/Cloudy	1	2	1
	Snow/Sleet	0	0	1
	Other/Unknown	0	0	0

**TABLE D-3-8**  
**Summary of Mass. Registry Vehicle Crash Data (1/1/1999–12/31/2001)**  
**Route 1A/129 (Broad St/Lewis St) at Chestnut St/Atlantic St, Lynn**  
**(SIGNALIZED)**

		1999	2000	2001
Collision Type	Single Vehicle Crash	0	0	0
	Rear End	2	6	2
	Angle	2	5	4
	Sideswipe, same direction	0	0	0
	Sideswipe, opposite direction	0	0	0
	Head On	0	0	0
	Other/Unknown	1	2	3
	Total	5	13	9
Severity	Property Damage	2	4	3
	Personal Injury	3	8	4
	Fatality	0	0	0
	Other/Unknown	0	1	2
Time of Day	7:00–9:00 AM	1	4	0
	4:00–6:00 PM	1	0	3
	Other	3	9	6
Day of Week	Mon-Fri	2	9	7
	Sat-Sun	3	4	2
Pavement Conditions	Dry	5	9	8
	Wet	0	2	0
	Ice/Snow	0	1	0
	Other/Unknown	0	1	1
Light Conditions	Daylight	3	9	6
	Dawn or Dusk	0	0	0
	Dark-Lighted	2	3	2
	Dark-No lights	0	0	0
	Other/Unknown	0	1	1
Weather Conditions	Clear	5	9	8
	Rainy/Foggy/Cloudy	0	2	0
	Snow/Sleet	0	1	0
	Other/Unknown	0	1	1

**TABLE D-3-9**  
**Summary of Mass. Registry Vehicle Crash Data (1/1/1999–12/31/2001)**  
**Route 1A/129 (Lewis St) at Chatham St/Aubrey Ter, Lynn**  
**(UNSIGNALIZED: flashing beacon)**

		1999	2000	2001
Collision Type	Single Vehicle Crash	0	0	0
	Rear End	0	0	0
	Angle	0	0	1
	Sideswipe, same direction	0	0	0
	Sideswipe, opposite direction	0	0	0
	Head On	0	0	0
	Other/Unknown	1	0	0
	Total	1	0	1
Severity	Property Damage	1	0	1
	Personal Injury	0	0	0
	Fatality	0	0	0
	Other/Unknown	0	0	0
Time of Day	7:00–9:00 AM	0	0	0
	4:00–6:00 PM	0	0	0
	Other	1	0	1
Day of Week	Mon-Fri	1	0	1
	Sat-Sun	0	0	0
Pavement Conditions	Dry	1	0	0
	Wet	0	0	1
	Ice/Snow	0	0	0
	Other/Unknown	0	0	0
Light Conditions	Daylight	1	0	0
	Dawn or Dusk	0	0	1
	Dark-Lighted	0	0	0
	Dark-No lights	0	0	0
	Other/Unknown	0	0	0
Weather Conditions	Clear	1	0	0
	Rainy/Foggy/Cloudy	0	0	1
	Snow/Sleet	0	0	0
	Other/Unknown	0	0	0

**TABLE D-3-10**  
**Summary of Mass. Registry Vehicle Crash Data (1/1/1999–12/31/2001)**  
**Route 1A/129 (Lewis St) at Ocean St/Ocean Cir, Lynn**  
**(SIGNALIZED)**

		1999	2000	2001
Collision Type	Single Vehicle Crash	0	0	0
	Rear End	0	3	1
	Angle	2	0	1
	Sideswipe, same direction	0	0	0
	Sideswipe, opposite direction	0	0	0
	Head On	0	0	0
	Other/Unknown	0	0	1
	Total	2	3	3
Severity	Property Damage	2	1	2
	Personal Injury	0	2	1
	Fatality	0	0	0
	Other/Unknown	0	0	0
Time of Day	7:00–9:00 AM	0	1	0
	4:00–6:00 PM	0	1	1
	Other	2	1	2
Day of Week	Mon-Fri	2	1	3
	Sat-Sun	0	2	0
Pavement Conditions	Dry	2	2	3
	Wet	0	1	0
	Ice/Snow	0	0	0
	Other/Unknown	0	0	0
Light Conditions	Daylight	2	3	2
	Dawn or Dusk	0	0	0
	Dark-Lighted	0	0	1
	Dark-No lights	0	0	0
	Other/Unknown	0	0	0
Weather Conditions	Clear	2	3	2
	Rainy/Foggy/Cloudy	0	0	1
	Snow/Sleet	0	0	0
	Other/Unknown	0	0	0

**TABLE D-3-11**  
**Summary of Mass. Registry Vehicle Crash Data (1/1/1999–12/31/2001)**  
**Route 1A/129 (New Ocean St) at Route 129A (Eastern Ave), Lynn**  
**(SIGNALIZED)**

		1999	2000	2001
Collision Type	Single Vehicle Crash	0	0	0
	Rear End	1	1	2
	Angle	8	11	5
	Sideswipe, same direction	0	0	0
	Sideswipe, opposite direction	0	0	0
	Head On	0	0	1
	Other/Unknown	0	1	1
	Total	9	13	9
Severity	Property Damage	6	7	4
	Personal Injury	3	6	5
	Fatality	0	0	0
	Other/Unknown	0	0	0
Time of Day	7:00–9:00 AM	1	1	0
	4:00–6:00 PM	1	0	3
	Other	7	12	6
Day of Week	Mon-Fri	7	10	5
	Sat-Sun	2	3	4
Pavement Conditions	Dry	8	4	6
	Wet	1	7	3
	Ice/Snow	0	1	0
	Other/Unknown	0	1	0
Light Conditions	Daylight	5	4	5
	Dawn or Dusk	1	0	1
	Dark-Lighted	3	8	3
	Dark-No lights	0	0	0
	Other/Unknown	0	1	0
Weather Conditions	Clear	8	4	6
	Rainy/Foggy/Cloudy	1	8	2
	Snow/Sleet	0	0	1
	Other/Unknown	0	1	0

**TABLE D-3-12**  
**Summary of Mass. Registry Vehicle Crash Data (1/1/1999–12/31/2001)**  
**Lynn Shore Drive at Nahant Street/Beach Road, Lynn**  
**(SIGNALIZED)**

		1999	2000	2001
Collision Type	Single Vehicle Crash	0	0	0
	Rear End	1	1	2
	Angle	3	1	2
	Sideswipe, same direction	0	0	0
	Sideswipe, opposite direction	0	0	0
	Head On	1	0	0
	Other/Unknown	0	1	1
	Total	5	3	5
Severity	Property Damage	3	2	4
	Personal Injury	2	1	1
	Fatality	0	0	0
	Other/Unknown	0	0	0
Time of Day	7:00–9:00 AM	0	0	1
	4:00–6:00 PM	1	0	0
	Other	4	3	4
Day of Week	Mon-Fri	3	2	4
	Sat-Sun	2	1	1
Pavement Conditions	Dry	5	3	5
	Wet	0	0	0
	Ice/Snow	0	0	0
	Other/Unknown	0	0	0
Light Conditions	Daylight	2	1	4
	Dawn or Dusk	0	1	1
	Dark-Lighted	3	1	0
	Dark-No lights	0	0	0
	Other/Unknown	0	0	0
Weather Conditions	Clear	5	3	5
	Rainy/Foggy/Cloudy	0	0	0
	Snow/Sleet	0	0	0
	Other/Unknown	0	0	0

**TABLE D-3-13**  
**Summary of Mass. Registry Vehicle Crash Data (1/1/1999–12/31/2001)**  
**Route 1A (Paradise Rd) at Farragut Rd/Norfolk Ave, Swampscott**  
**(SIGNALIZED)**

		1999	2000	2001
Collision Type	Single Vehicle Crash	0	0	0
	Rear End	0	2	0
	Angle	0	1	3
	Sideswipe, same direction	0	0	0
	Sideswipe, opposite direction	0	0	0
	Head On	0	0	0
	Other/Unknown	0	0	2
	Total	0	3	5
Severity	Property Damage	0	2	3
	Personal Injury	0	1	2
	Fatality	0	0	0
	Other/Unknown	0	0	0
Time of Day	7:00–9:00 AM	0	1	1
	4:00–6:00 PM	0	0	1
	Other	0	2	3
Day of Week	Mon-Fri	0	1	3
	Sat-Sun	0	2	2
Pavement Conditions	Dry	0	1	4
	Wet	0	2	1
	Ice/Snow	0	0	0
	Other/Unknown	0	0	0
Light Conditions	Daylight	0	3	2
	Dawn or Dusk	0	0	0
	Dark-Lighted	0	0	3
	Dark-No lights	0	0	0
	Other/Unknown	0	0	0
Weather Conditions	Clear	0	2	2
	Rainy/Foggy/Cloudy	0	1	3
	Snow/Sleet	0	0	0
	Other/Unknown	0	0	0



**TABLE D-3-14**  
**Summary of Mass. Registry Vehicle Crash Data (1/1/1999–12/31/2001)**  
**Route 1A (Paradise Rd) at Walker Rd, Swampscott**  
**(SIGNALIZED)**

		1999	2000	2001
Collision Type	Single Vehicle Crash	0	0	0
	Rear End	1	0	2
	Angle	1	0	0
	Sideswipe, same direction	0	0	0
	Sideswipe, opposite direction	0	0	0
	Head On	1	0	0
	Other/Unknown	1	1	1
	Total	4	1	3
Severity	Property Damage	2	0	1
	Personal Injury	2	1	1
	Fatality	0	0	0
	Other/Unknown	0	0	1
Time of Day	7:00–9:00 AM	2	0	0
	4:00–6:00 PM	0	1	0
	Other	2	0	3
Day of Week	Mon-Fri	4	1	3
	Sat-Sun	0	0	0
Pavement Conditions	Dry	3	1	2
	Wet	1	0	0
	Ice/Snow	0	0	0
	Other/Unknown	0	0	1
Light Conditions	Daylight	2	0	2
	Dawn or Dusk	0	0	0
	Dark-Lighted	2	1	0
	Dark-No lights	0	0	0
	Other/Unknown	0	0	1
Weather Conditions	Clear	3	1	2
	Rainy/Foggy/Cloudy	1	0	0
	Snow/Sleet	0	0	0
	Other/Unknown	0	0	1

**TABLE D-3-15**  
**Summary of Mass. Registry Vehicle Crash Data (1/1/1999–12/31/2001)**  
**Essex St at Danvers Rd/Eastman Ave, Swampscott**  
**(SIGNALIZED)**

		1999	2000	2001
Collision Type	Single Vehicle Crash	0	0	0
	Rear End	3	2	1
	Angle	7	1	0
	Sideswipe, same direction	0	0	0
	Sideswipe, opposite direction	0	0	0
	Head On	0	1	0
	Other/Unknown	1	2	1
	Total	11	6	2
Severity	Property Damage	8	5	2
	Personal Injury	3	1	0
	Fatality	0	0	0
	Other/Unknown	0	0	0
Time of Day	7:00–9:00 AM	2	1	0
	4:00–6:00 PM	1	1	0
	Other	8	4	2
Day of Week	Mon-Fri	9	3	2
	Sat-Sun	2	3	0
Pavement Conditions	Dry	6	5	0
	Wet	2	1	0
	Ice/Snow	2	0	1
	Other/Unknown	1	0	1
Light Conditions	Daylight	6	4	0
	Dawn or Dusk	0	0	0
	Dark-Lighted	4	2	1
	Dark-No lights	0	0	0
	Other/Unknown	1	0	1
Weather Conditions	Clear	6	4	0
	Rainy/Foggy/Cloudy	3	2	0
	Snow/Sleet	2	0	1
	Other/Unknown	0	0	1

**TABLE D-3-16**  
**Summary of Salem Police Department Vehicle Crash Data (1/1/2002–12/31/2004)**  
**Route 1A (Loring Ave) at Route 114 (Lafayette St)/West Ave, Salem**  
**(SIGNALIZED)**

		2002	2001	2002
Collision Type	Single Vehicle Crash	1	0	1
	Rear End	4	2	4
	Angle	5	2	0
	Sideswipe, same direction	2	3	2
	Sideswipe, opposite direction	0	0	0
	Head On	0	1	0
	Other/Unknown	0	0	0
	Total	12	8	7
Severity	Property Damage	9	7	4
	Personal Injury	1	0	1
	Fatality	0	0	0
	Other/Unknown	2	1	2
Time of Day	7:00–9:00 AM	1	1	1
	4:00–6:00 PM	3	2	1
	Other	8	5	5
Day of Week	Mon-Fri	12	8	6
	Sat-Sun	0	0	1
Pavement Conditions	Dry	4	6	5
	Wet	7	2	2
	Ice/Snow	1	0	0
	Other/Unknown	0	0	0
Light Conditions	Daylight	8	6	3
	Dawn or Dusk	1	1	1
	Dark-Lighted	3	1	0
	Dark-No lights	0	0	3
	Other/Unknown	0	0	0
Weather Conditions	Clear	5	6	5
	Rainy/Foggy/Cloudy	6	2	2
	Snow/Sleet	1	0	0
	Other/Unknown	0	0	0

**TABLE D-3-17**  
**Summary of Salem Police Department Vehicle Crash Data (1/1/2002–12/31/2004)**  
**Jefferson Ave at Willson St/Cloutman St, Salem**  
**(UNSIGNALIZED: flashing beacon)**

		2002	2003	2004
Collision Type	Single Vehicle Crash	0	0	1
	Rear End	4	2	0
	Angle	2	2	7
	Sideswipe, same direction	1	2	0
	Sideswipe, opposite direction	0	0	0
	Head On	0	0	0
	Other/Unknown	0	0	0
	Total	7	6	8
Severity	Property Damage	6	5	7
	Personal Injury	0	0	1
	Fatality	0	0	0
	Other/Unknown	1	1	0
Time of Day	7:00–9:00 AM	2	0	3
	4:00–6:00 PM	0	0	1
	Other	5	6	4
Day of Week	Mon-Fri	7	4	8
	Sat-Sun	0	2	0
Pavement Conditions	Dry	3	3	5
	Wet	3	2	2
	Ice/Snow	1	1	0
	Other/Unknown	0	0	1
Light Conditions	Daylight	4	5	5
	Dawn or Dusk	0	0	1
	Dark-Lighted	3	1	1
	Dark-No lights	0	0	0
	Other/Unknown	0	0	1
Weather Conditions	Clear	3	1	6
	Rainy/Foggy/Cloudy	3	4	1
	Snow/Sleet	1	1	0
	Other/Unknown	0	0	1

**TABLE D-3-18**  
**Summary of Mass. Registry Vehicle Crash Data (1/1/1999–12/31/2001)**  
**Swampscott Rd at Aggregate Industries driveway, Salem**  
**(UNSIGNALIZED)**

		1999	2000	2001
Collision Type	Single Vehicle Crash	0	0	0
	Rear End	2	0	2
	Angle	0	0	0
	Sideswipe, same direction	0	0	0
	Sideswipe, opposite direction	0	0	0
	Head On	2	0	0
	Other/Unknown	2	1	2
	Total	6	1	4
Severity	Property Damage	1	1	3
	Personal Injury	5	0	1
	Fatality	0	0	0
	Other/Unknown	0	0	0
Time of Day	7:00–9:00 AM	2	0	0
	4:00–6:00 PM	0	0	0
	Other	4	1	4
Day of Week	Mon-Fri	5	1	4
	Sat-Sun	1	0	0
Pavement Conditions	Dry	1	1	1
	Wet	2	0	3
	Ice/Snow	3	0	0
	Other/Unknown	0	0	0
Light Conditions	Daylight	4	0	1
	Dawn or Dusk	1	0	0
	Dark-Lighted	1	1	2
	Dark-No lights	0	0	0
	Other/Unknown	0	0	1
Weather Conditions	Clear	1	1	2
	Rainy/Foggy/Cloudy	5	0	1
	Snow/Sleet	0	0	1
	Other/Unknown	0	0	0

**TABLE D-3-19**  
**Summary of Mass. Registry Vehicle Crash Data (1/1/1999–12/31/2001)**  
**Route 1A (Paradise Rd) at Vinnin St (Vinnin Square), Salem**  
**(SIGNALIZED)**

		1999	2000	2001
Collision Type	Single Vehicle Crash	0	0	0
	Rear End	10	5	0
	Angle	11	6	3
	Sideswipe, same direction	0	0	0
	Sideswipe, opposite direction	0	0	0
	Head On	0	1	0
	Other/Unknown	3	0	0
	Total	24	12	3
Severity	Property Damage	15	7	1
	Personal Injury	9	3	2
	Fatality	0	0	0
	Other/Unknown	0	2	0
Time of Day	7:00–9:00 AM	2	0	1
	4:00–6:00 PM	6	1	0
	Other	16	11	2
Day of Week	Mon-Fri	18	9	2
	Sat-Sun	6	3	1
Pavement Conditions	Dry	16	11	2
	Wet	5	1	1
	Ice/Snow	2	0	0
	Other/Unknown	1	0	0
Light Conditions	Daylight	12	10	3
	Dawn or Dusk	1	0	0
	Dark-Lighted	8	2	0
	Dark-No lights	0	0	0
	Other/Unknown	3	0	0
Weather Conditions	Clear	14	11	2
	Rainy/Foggy/Cloudy	8	1	1
	Snow/Sleet	1	0	0
	Other/Unknown	1	0	0

**TABLE D-3-20**  
**Summary of Mass. Registry Vehicle Crash Data (1/1/2002–12/31/2004)**  
**Vinnin St at Salem St/plaza driveway (Vinnin Square), Salem**  
**(SIGNALIZED)**

		1999	2000	2001
Collision Type	Single Vehicle Crash	0	0	0
	Rear End	0	0	0
	Angle	3	1	1
	Sideswipe, same direction	0	0	0
	Sideswipe, opposite direction	0	0	0
	Head On	0	0	0
	Other/Unknown	0	0	1
	Total	3	1	2
Severity	Property Damage	3	1	2
	Personal Injury	0	0	0
	Fatality	0	0	0
	Other/Unknown	0	0	0
Time of Day	7:00–9:00 AM	1	0	0
	4:00–6:00 PM	1	0	0
	Other	1	1	2
Day of Week	Mon-Fri	3	1	2
	Sat-Sun	0	0	0
Pavement Conditions	Dry	1	1	2
	Wet	2	0	0
	Ice/Snow	0	0	0
	Other/Unknown	0	0	0
Light Conditions	Daylight	2	0	1
	Dawn or Dusk	0	0	0
	Dark-Lighted	1	1	1
	Dark-No lights	0	0	0
	Other/Unknown	0	0	0
Weather Conditions	Clear	1	1	2
	Rainy/Foggy/Cloudy	2	0	0
	Snow/Sleet	0	0	0
	Other/Unknown	0	0	0

**TABLE D-3-21**  
**Summary of Mass. Registry Vehicle Crash Data (1/1/1999–12/31/2001)**  
**Vinnin St at Loring Ave (Vinnin Square), Salem**  
**(SIGNALIZED)**

		1999	2000	2001
Collision Type	Single Vehicle Crash	0	0	0
	Rear End	1	2	1
	Angle	8	6	5
	Sideswipe, same direction	0	0	0
	Sideswipe, opposite direction	0	0	0
	Head On	1	0	1
	Other/Unknown	1	1	0
	Total	11	9	7
Severity	Property Damage	5	5	5
	Personal Injury	6	3	2
	Fatality	0	0	0
	Other/Unknown	0	1	0
Time of Day	7:00–9:00 AM	0	2	0
	4:00–6:00 PM	3	4	2
	Other	8	3	5
Day of Week	Mon-Fri	9	7	6
	Sat-Sun	2	2	1
Pavement Conditions	Dry	8	3	6
	Wet	2	6	1
	Ice/Snow	1	0	0
	Other/Unknown	0	0	0
Light Conditions	Daylight	5	4	4
	Dawn or Dusk	1	1	0
	Dark-Lighted	5	4	3
	Dark-No lights	0	0	0
	Other/Unknown	0	0	0
Weather Conditions	Clear	7	2	5
	Rainy/Foggy/Cloudy	3	7	2
	Snow/Sleet	1	0	0
	Other/Unknown	0	0	0



**TABLE D-3-22**  
**Summary of Mass. Registry Vehicle Crash Data (1/1/1999–12/31/2001)**  
**Route 1A (Paradise Rd) at Loring Ave (Vinnin Square), Salem**  
**(SIGNALIZED)**

		1999	2000	2001
Collision Type	Single Vehicle Crash	0	0	0
	Rear End	2	6	4
	Angle	2	2	7
	Sideswipe, same direction	0	0	0
	Sideswipe, opposite direction	0	0	0
	Head On	1	0	2
	Other/Unknown	2	2	1
	Total	7	10	14
Severity	Property Damage	4	7	8
	Personal Injury	3	3	6
	Fatality	0	0	0
	Other/Unknown	0	0	0
Time of Day	7:00–9:00 AM	0	3	1
	4:00–6:00 PM	1	2	2
	Other	6	5	11
Day of Week	Mon-Fri	5	10	11
	Sat-Sun	2	0	3
Pavement Conditions	Dry	4	9	10
	Wet	2	1	3
	Ice/Snow	1	0	1
	Other/Unknown	0	0	0
Light Conditions	Daylight	3	7	6
	Dawn or Dusk	0	0	8
	Dark-Lighted	4	3	0
	Dark-No lights	0	0	0
	Other/Unknown	0	0	0
Weather Conditions	Clear	5	9	10
	Rainy/Foggy/Cloudy	2	1	3
	Snow/Sleet	0	0	1
	Other/Unknown	0	0	0

**TABLE D-3-23**  
**Summary of Salem Police Department Crash Data (1/1/2002–12/31/2004)**  
**Route 1A (Loring Ave) at Canal St/Jefferson Ave, Salem**  
**(SIGNALIZED)**

		<b>2002</b>	<b>2003</b>	<b>2004</b>
Collision Type	Single Vehicle Crash	2	2	0
	Rear End	14	17	7
	Angle	8	6	4
	Sideswipe, same direction	1	6	0
	Sideswipe, opposite direction	0	0	0
	Head On	0	2	0
	Other/Unknown	0	0	0
	Total	25	33	11
Severity	Property Damage	21	31	9
	Personal Injury	2	1	1
	Fatality	0	0	0
	Other/Unknown	2	1	1
Time of Day	7:00–9:00 AM	5	5	0
	4:00–6:00 PM	6	7	0
	Other	14	21	11
Day of Week	Mon-Fri	25	30	8
	Sat-Sun	0	3	3
Pavement Conditions	Dry	16	19	5
	Wet	8	8	5
	Ice/Snow	1	6	1
	Other/Unknown	0	0	0
Light Conditions	Daylight	20	23	4
	Dawn or Dusk	0	1	1
	Dark-Lighted	0	0	0
	Dark-No lights	5	9	6
	Other/Unknown	0	0	0
Weather Conditions	Clear	17	21	5
	Rainy/Foggy/Cloudy	7	10	6
	Snow/Sleet	1	2	0
	Other/Unknown	0	0	0