I-395 Route 9 Transportation Study

Historical traffic volumes and traffic projections

PAC Meeting – May 2, 2001

TRAFFIC FORECASTS

- How were the traffic forecasts developed?
- How do the traffic forecasts from the Statewide Travel Demand Model compare with historical traffic growth?

Where do the traffic forecasts come from?

The traffic assignments and growth projections are from the East / West Highway Study that was completed in Sept., 1999

- In 1997 the Legislature directed the Department to study the costs, benefits and social and environmental impacts of a East / West Highway through the State of Maine
- A study team was selected to conduct this study with a broad range expertise.

The East / West Highway Study Team included:

- Maine State Planning Office
- Maine Department of Transportation

- RKG Associates – Overall project management and economic research

Study Sub Consultant Team

- Standards & Poors DRI – Regional and international freight movement, commodity forecasts, and Canadian market forecasts.
- Davidson Peterson Associates, Inc. – Tourism market research and impact assessment.
- Charles S. Colgan, Ph.D. – Economic forecasts and impact analysis, and US/Canadian trade issues.
- Kevin Hooper Associates – Traffic forecasts / traffic modeling using the modified Statewide Travel Demand Model

Study Sub Consultant Team (Cont.)

- Vanasse Hangen Brustlin Inc. – Transportation infrastructure assessment
- Wilbur Smith Associates – Toll financing analysis
- Roger Mallar Associates – Study advisor

East / West Highway Study Technical Reports

- A Technical Report On An East-West Highway in Maine
- Maine East-West Highway; Assessment of Toll Financing Feasibility
- Maine East-West Highway Economic Impact Analysis, Phase I Technical Report, Baseline Conditions
- Maine East-West Highway Economic Impact Analysis, Phase II Technical Report, Survey Research and Community Forecasts
- Maine East-West Highway Economic Impact Analysis, Phase III Technical Report, Economic Impacts
- Maine East-West Highway Economic Impact Analysis, Phase IV Technical Report, Case Study Analysis and Real Estate Impacts
- www.state.me.us/mdot/ewhiway/homepage.htm

Traffic assignments and growth projections

- Kevin Hooper Associates – Used a modified Maine Statewide Travel Demand Model to develop the traffic forecasts and assignments.
- The Maine Statewide travel demand model was modified to include interprovincial trips, cross border trips, and intrastate trips.
- Corridor “B” Assignments & Forecasts from the East/West Study are the basis for the traffic projections for the I-395 Route 9 Study.

Corridor "B' Assignments and Forecasts include the traffic impacts from:

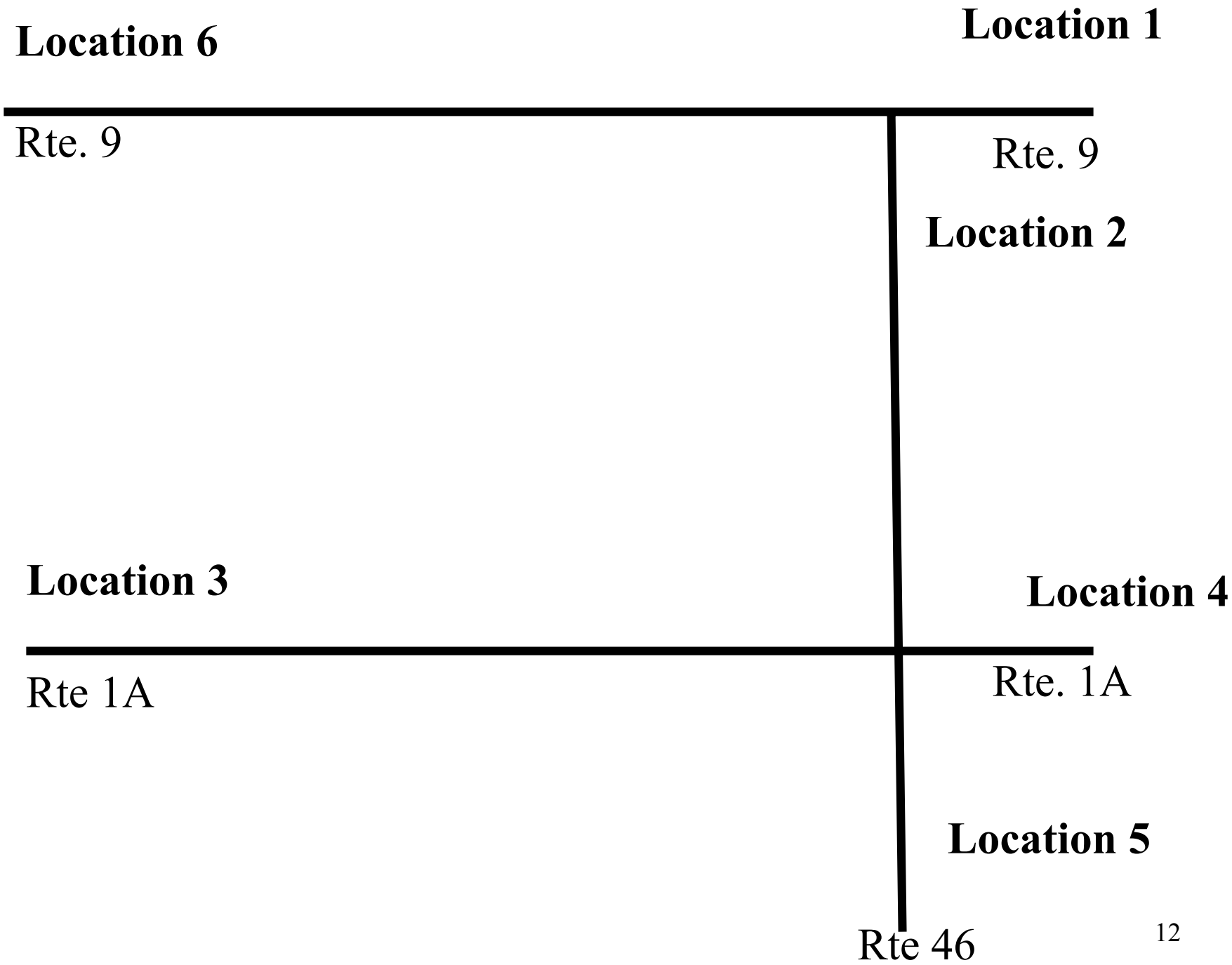
- Travel Time Savings from potential improvements to Route 9, Route 46, Route 1A and Route 2:
  - 2 lane upgrade
  - 37 miles reconstruction
  - 15 miles widening

- Travel time savings from potential improvements to travel through the following areas:
  - Calais / St. Stephens Area International Border Crossing Study
  - I-395 Route 9 Transportation Study
  - Skowhegan Transportation Study
- Refer to handout "A Technical Report On An East-West Highway in Maine" - Pages 25 to 29.

Corridor “B” – East / West Highway

- Beginning at the Maine/New Brunswick border proceeding westward along Route 9 to Route 46 in East Eddington.
- The corridor continues southerly along Route 46 to Route 1A in East Holden, then westerly along Route 1A to I-395 in Brewer, connecting with I-95 at or near Bangor.
- It continues southwesterly along existing I-95 leaving I-95 in Newport.
- From this point, it continues westerly along Route 2 to the Maine/New Hampshire border at Gilead.

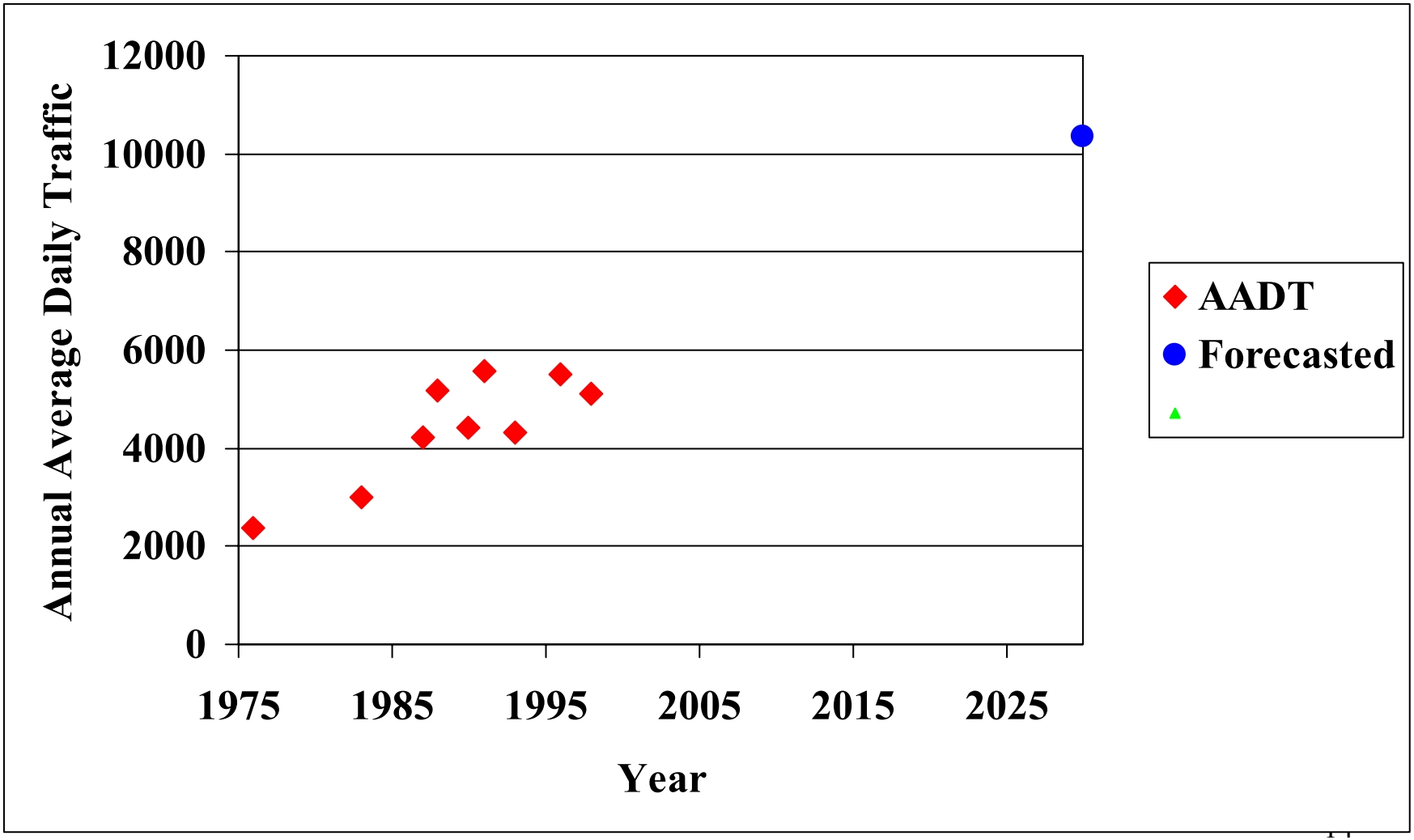
How do the traffic forecasts from the Statewide Travel Demand Model compare with historical traffic growth?


Location 6
Location 1
Rte. 9
Rte. 9
Location 2
Location 3
Location 4
Rte 1A
Rte. 1A
Location 5
Rte 46

Location 1					
Eddington - SR 9 (SE/O SR 46)					
		1998 Minus	Annual		
Year	AADT	Historical	Num. Growth		
1976	2383	2717	124	2.42%	
1983	3015	2085	139	2.73%	
1987	4220	880	80	1.57%	
1988	5190	-90	-9	-0.18%	
1990	4420	680	85	1.67%	
1991	5560	-460	-66	-1.29%	
1993	4320	780	156	3.06%	
1996	5500	-400	-200	-3.92%	Projected
1998	5100				Year
Regression Historical Traffic Volumes:					2030
1976 to 1998			147	2.88%	9804
1988 to 1998			47	0.92%	6604
1993 to 1998			232	4.55%	12524
Model:					
2030	10040	4940	154	**3.03%**	10040
AADT - Annual Average Daily Traffic					

Eddington – Rte. 9 (E/O Rte.46)

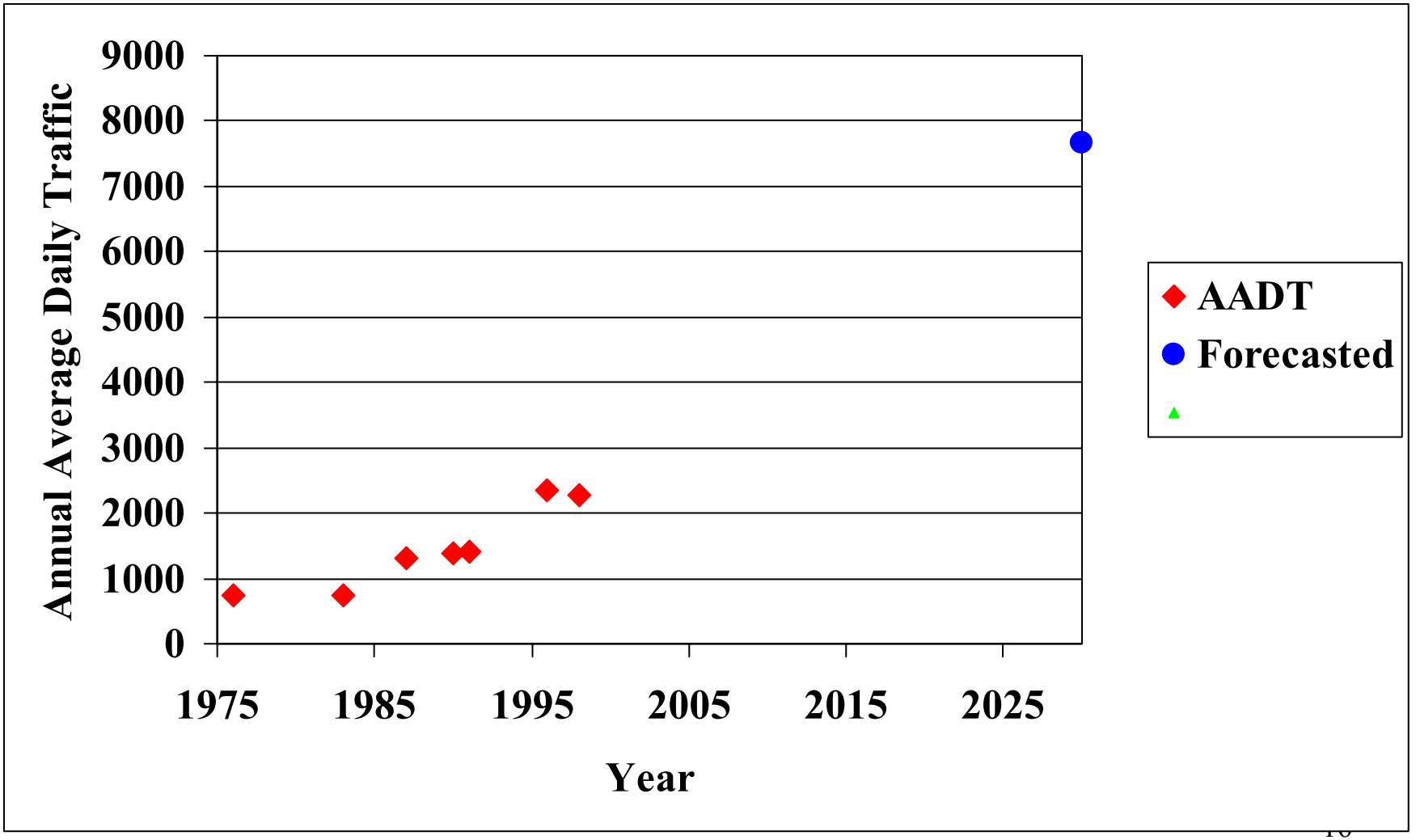
Location 1



Location 2					
Eddington - (SR 46 S/O SR 9)					
		1998 Minus	Annual		
Year	AADT	Historical	Num. Growth		
1976	738	1532	70	3.07%	
1983	730	1540	103	4.52%	
1987	1310	960	87	3.84%	
1990	1380	890	111	4.90%	
1991	1410	860	123	5.41%	
1996	2340	-70	-35	-1.54%	Projected
1998	2270				Year
Regression Historical Traffic Volumes:					2030
1976 to 1998			79	3.48%	4798
1988 to 1998			108	4.76%	5726
1993 to 1998			135	5.95%	6590
Model:					
2030	7670	5400	169	**7.43%**	7670
AADT - Annual Average Daily Traffic					

Eddington – Rte. 46 (S/O Rte.9)

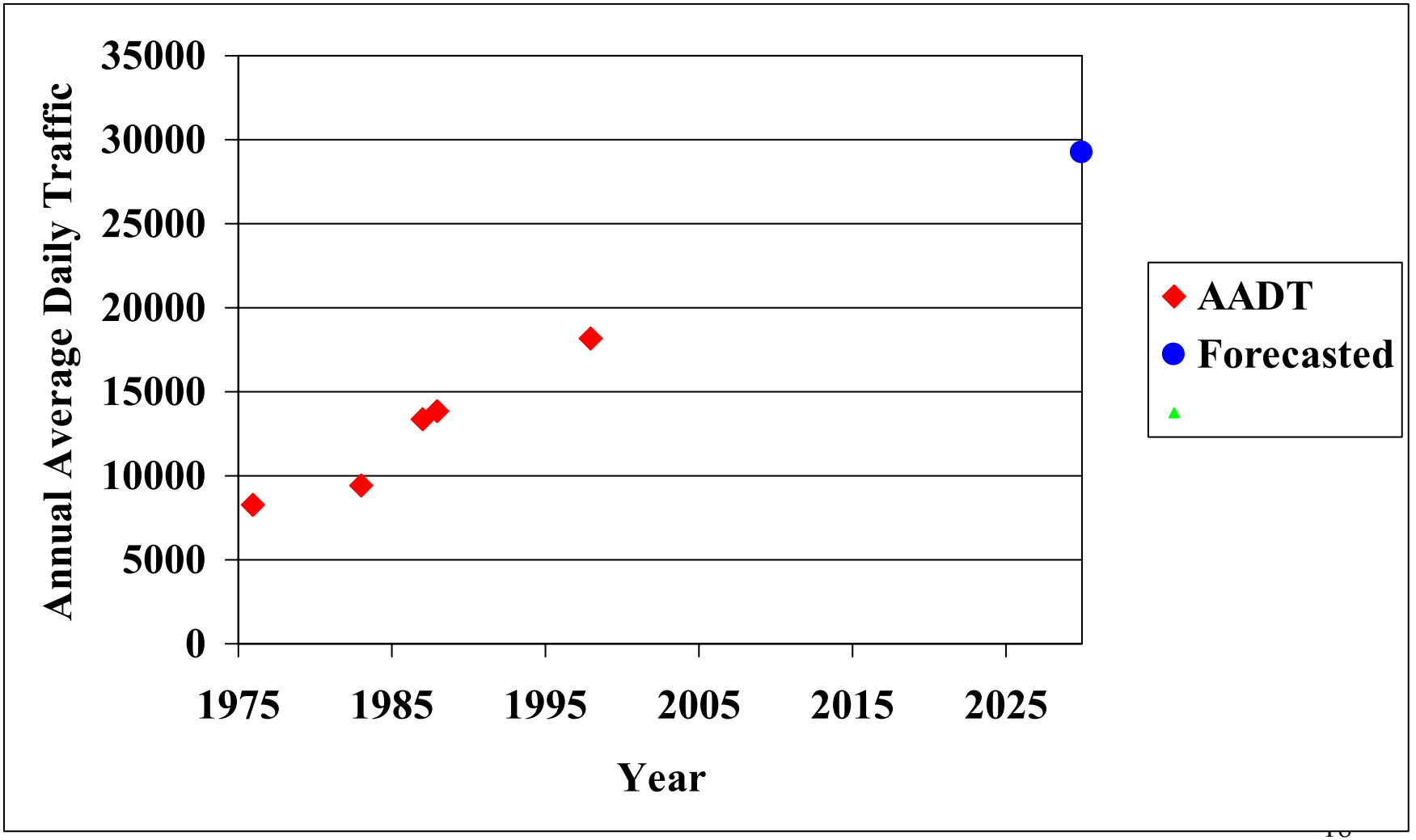
Location 2



Location 3					
Holden - (US 1A @ Brewer TL					
		1998 Minus	Annual		
Year	AADT	Historical	Num. Growth		
1976	8227	9913	451	2.48%	
1983	9455	8685	579	3.19%	
1987	13360	4780	435	2.40%	
1988	13880	4260	426	2.35%	Projected
1998	18140				Year
Regression Historical Traffic Volumes:					2030
1976 to 1998			478	2.64%	33436
1987 to 1998			589	3.25%	36988
1993 to 1998				0.00%	
Model:					
2030	29190	11050	345	**1.90%**	29190
AADT - Annual Average Daily Traffic					

Rte. 1A (Brewer-Holden T.L.)

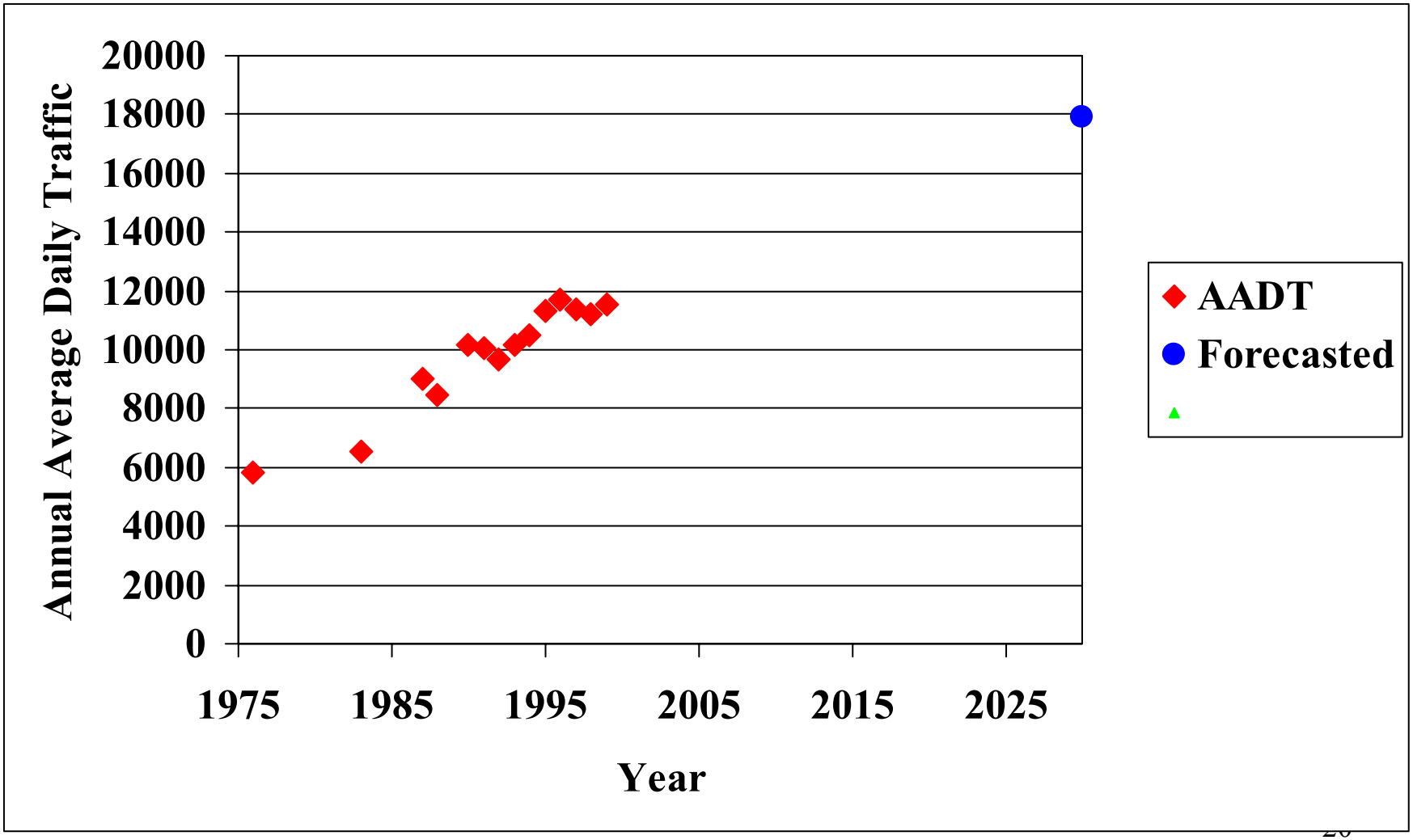
Location 3



Location 4					
Holden - Route 1A (East of 46)					
		1998 Minus	Annual		
Year	AADT	Historical	Num. Growth		
1976	5817	5403	246	2.19%	
1983	6520	4700	313	2.79%	
1987	9010	2210	201	1.79%	
1988	8440	2780	278	2.48%	
1990	10154	1066	133	1.19%	
1991	10071	1149	164	1.46%	
1992	9670	1550	258	2.30%	
1993	10140	1080	216	1.93%	
1994	10520	700	175	1.56%	
1995	11341	-121	-40	-0.36%	
1996	11714	-494	-247	-2.20%	
1997	11363	-143	-143	-1.27%	
1998	11220				Projected
1999	11536				Year
Regression Historical Traffic Volumes:					2030
1976 to 1998			287	2.56%	20404
1988 to 1998			277	2.47%	20084
1993 to 1998			-71	-0.63%	8948
1990 to 1999			209	1.86%	18015
Model:					
2030	17910	6690	209	**1.86%**	17910
AADT - Annual Average Daily Traffic					

Holden - Rte. 1A (E/O Rte.46)

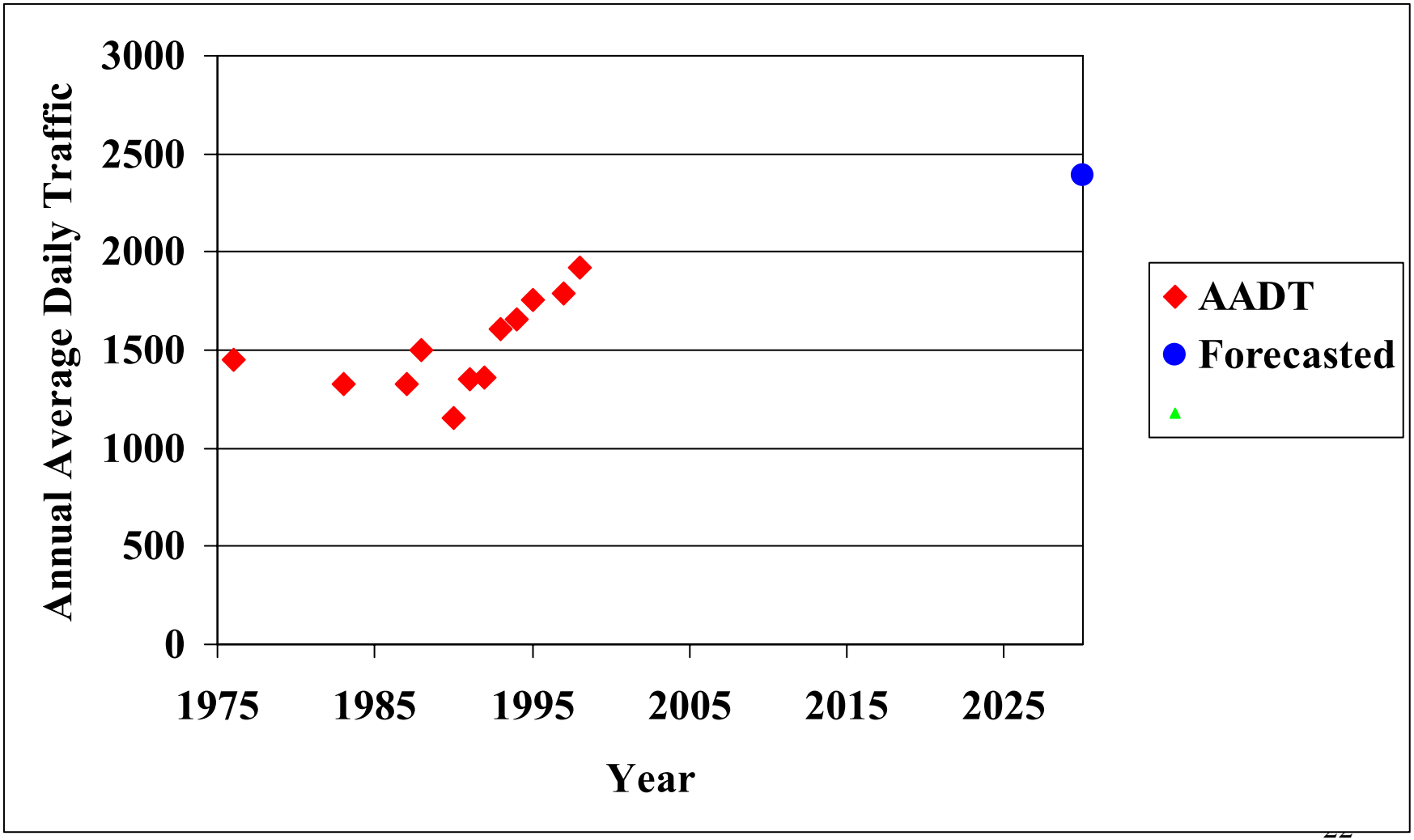
Location 4



Location 5					
Holden -Route 46 (S/O Route 1A)					
		1998 Minus	Annual		
Year	AADT	Historical	Num. Growth		
1976	1451	469	21	1.11%	
1983	1325	595	40	2.07%	
1987	1330	590	54	2.79%	
1988	1500	420	42	2.19%	
1990	1150	770	96	5.01%	
1991	1354	566	81	4.21%	
1992	1364	556	93	4.83%	
1993	1605	315	63	3.28%	
1994	1660	260	65	3.39%	
1995	1755	165	55	2.86%	
1997	1790	130	130	6.77%	Projected
1998	1920				Year
Regression Historical Traffic Volumes:					2030
1976 to 1998			22	1.15%	2624
1988 to 1998			62	3.23%	3904
1993 to 1998			54	2.81%	3648
Model:					
2030	2390	470	15	**0.76%**	2390
AADT - Annual Average Daily Traffic					

Holden – Route 46 (S/O Route 1A)

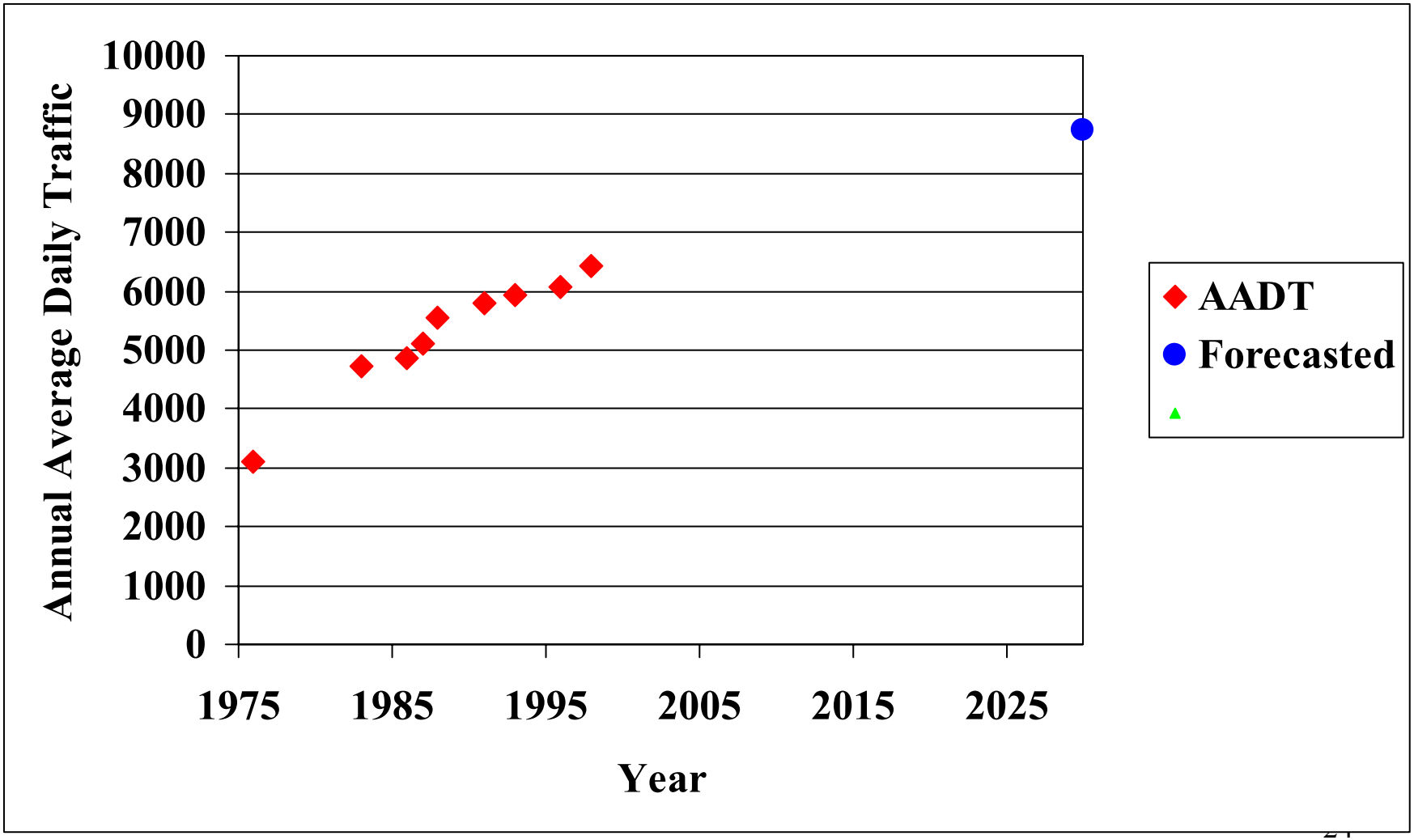
Location 5



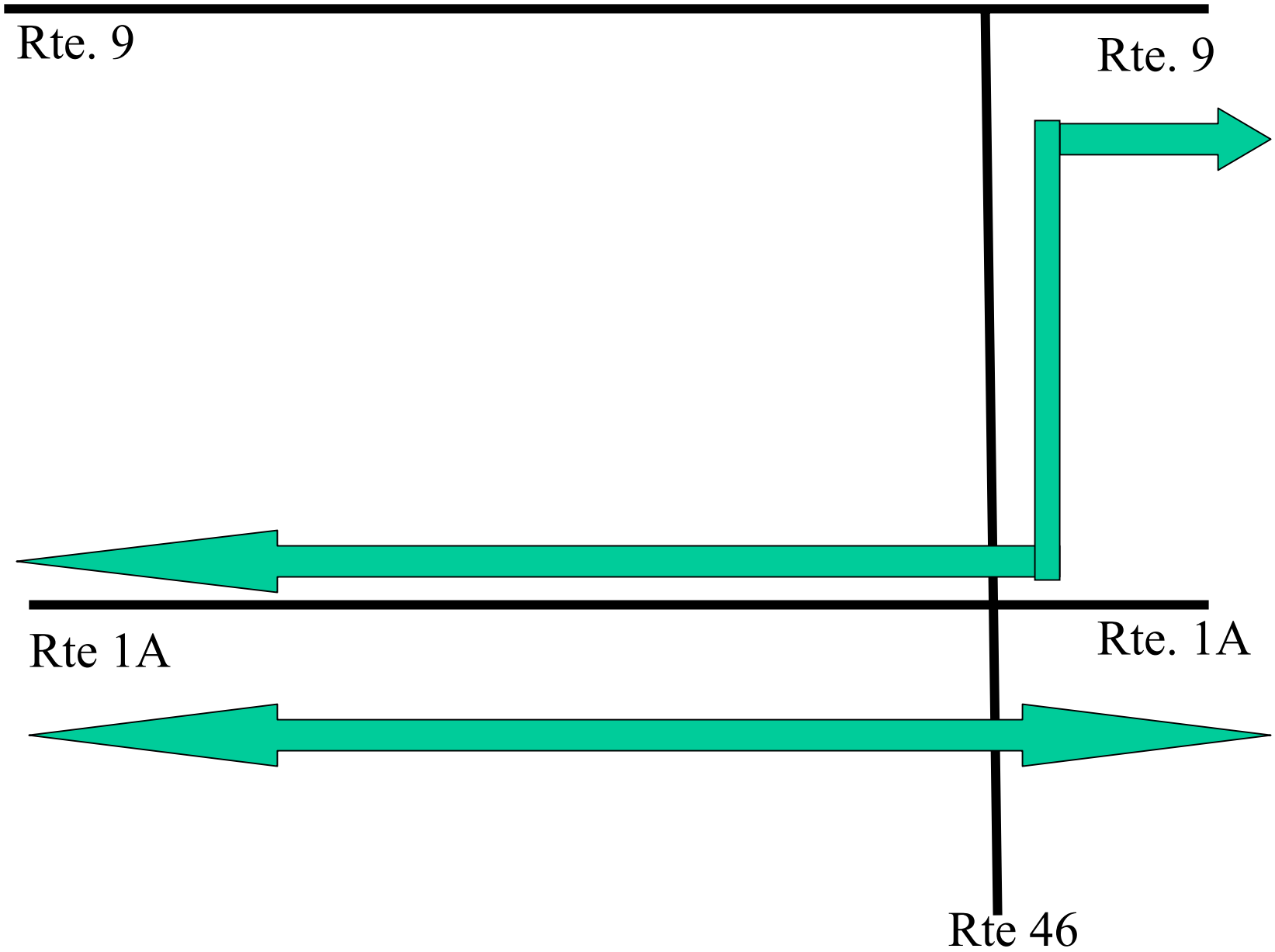
Location 6					
Eddington - SR 9 E/O IR 4008					
		1998 Minus	Annual		
Year	AADT	Historical	Num. Growth		
1976	3112	3328	151	2.35%	
1983	4730	1710	114	1.77%	
1986	4870	1570	131	2.03%	
1987	5120	1320	120	1.86%	
1988	5540	900	90	1.40%	
1991	5790	650	93	1.44%	
1993	5930	510	102	1.58%	
1996	6080	360	180	2.80%	Projected
1998	6440				Year
Regression Historical Traffic Volumes:					2030
1976 to 1998			143	2.22%	11016
1988 to 1998			83	1.29%	9096
1993 to 1998			97	1.51%	9544
Model:					
2030	8730	2290	72	**1.11%**	8730
AADT - Annual Average Daily Traffic					

Eddington – SR 9 (E/O Rte. 178)

Location 6



Corridors where growth expected



Any Questions?