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# STATE OF MAINE 119TH LEGISLATURE FIRST REGULAR SESSION

# Final Report of the

# COMMISSION TO REVIEW TRAFFIC CONGESTION INCLUDING TRUCK TRAFFIC ALONG THE ROUTE 1 YORK CORRIDOR AND THE ROUTE 236 CORRIDOR

December 1999

# **Members:**

Sen. Mark W. Lawrence, Chair
Rep. Gary Wheeler Chair
Sen. Vinton Cassidy
Rep. Mary Black Andrews
Rep. Ronald F. Collins
Jim McMahon
Roland Fernald
John C. McCrillis
Bruce Locke
Mark Green
Gerald MacPherson, Sr.

**Staff:** 

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# **EXECUTIVE SUMMARY**

#### **FINDINGS**

The Commission to Review Traffic Issues along the Route One Corridor in York and the Route 236 Corridor held 6 meetings during the months of October, November and December of 1999. All of the meetings, except one, were conducted in the study area of southern York County. Two meetings were public hearings at which the Commission received testimony about the traffic issues in the study area. This testimony was very useful to the Commission and aided in shaping the content of this report. Based on the Commission's consideration of data presented, the testimony heard at public hearing and each members' own experience with traffic issues in the towns they represent, the Commission finds the following:

- Additional road capacity is necessary on Route One from York to Wells;
- The traffic circle located at the southern end of Route One in Kittery was constructed prior to the development of the shopping district and does not have the capacity to handle the current volume of traffic;
- Heavy truck traffic and oversize loads are causing serious traffic congestion problems and premature road deterioration along Route 236, particularly in South Berwick;
- The road design of Route One in Kittery is poorly suited to handle its dual-use as a through-route and shopping destination point;
- Recent toll increases on the Maine Turnpike have contributed to traffic congestion along Route One and Route 236;
- Route 236 is no longer safe and easy to use as a commuter route because of the increasing number of curb cuts from North Berwick to Kittery;
- Greater awareness and incentives are necessary to promote carpooling for commuters;
- Because there is no alternate route for traffic traveling Route One through the Village Square in Ogunquit and no land exits to allow for widening, a Turnpike interchange may be an appropriate solution to relieve traffic congestion there;
- Safety is a major concern for motorists turning onto residential roads from Route One or onto Route One from residential roads, from Kittery all the way to Ogunquit;
- Route 236 may need a center turning lane from Kittery to the Eliot-South Berwick Line
  to promote greater overall safety and to accommodate traffic increases and truck traffic
  diverted by weigh station operation;
- State Police staffing is insufficient to properly operate weigh stations, patrol Route One and 236 and manage oversize load traffic; and

 The section of Route 236 from South Berwick to Berwick needs to be widened or realigned beyond the limits of its current public easement.

#### RECOMMENDATIONS

As a result of this comprehensive study of traffic congestion along the Route One and Route 236 Corridors the Commission makes the following recommendations:

- The Maine Department of Transportation and The Maine Turnpike Authority should create better access to Interstate 95 from the north end of the Kittery Route One corridor;
- Where feasible and necessary, the Maine Department of Transportation should widen the Route One corridor to four lanes and add a center turning lane;
- The speed limit on Route 236, from Route 101 to Route 91, should be uniformly posted at 45 mph;
- When issuing overlimit permits, the Secretary of State-Bureau of Motor Vehicles should give greater consideration to approving routes that avoid town centers;
- If the MDOT study finds that an Interstate 95 interchange north of Ogunquit Village is warranted and no land use or environmental prohibitions exist, the Maine Turnpike Authority and the MDOT should construct one;
- The State of Maine should acquire an extended right of way along Route 236 from South Berwick to Berwick beyond the current public easement so that MDOT can widen or realign the road;
- The Maine Department of Transportation should construct a center lane on Route 236 from Kittery to the intersection with Route 101;
- State Police staffing of the weight enforcement stations should be increased along with general increases in patrolling of Route 236 and Route One;
- The Maine Turnpike Authority and the MDOT should offer greater incentives for and awareness of carpooling, such as discount toll fares and Park and Ride advertising;
- State and local policies pertaining to allowance of curb cuts should be more restrictive to protect the capacity of Route One and Route 236;
- The Governor should examine the economic impact of the burden and inconvenience caused by traffic safety and congestion problems along Route One and Route 236 and the feasibility of placing restrictions on through truck traffic; and

• The Maine Department of Transportation should include in its Planning Study of the Kittery to Wells Route One Corridor, traffic congestion and safety issues at the following intersections:

<u>KITTERY</u>	<u>OGUNQUIT</u>
Route 236 and Route One southbook Signalized curb cut at the Maine Owilson Road and Route One	
YORK YORK	SOUTH BERWICK
Route One and: Beech Ridge Road Orchard Farm Road (and Suffina' Route 91 River Road Southside Road Shop n' Save Entrance Old Post Road	Route 236 and: Lower Main Street Route 4 (Portland St.) Elementary School lot Vine and Academy (Middle school lot) Route 91 (Old South Rd) Norton Street Academy Street Route 4 (Maine St.) Old Mill Road (Quarry Dr.) Marshwood High School lot
ELIOT	
Route 236 and: Depot Road Bolt Hill Road	

# I. INTRODUCTION

### **ENABLING LEGISLATION**

Legislative Document number 1638, an emergency bill entitled, *Resolve to Review Traffic Congestion Including Truck Traffic along the Route 1 York Corridor and Route 236 Corridor*, was sponsored by President of the Senate, Mark Lawrence, to review traffic congestion issues along Route One and Route 236 in Kittery, York, Ogunquit, Wells, Berwick, Eliot, North Berwick, and South Berwick. The study's purpose it to improve safety and convenience for all travelers and the quality of life for residents living along the U.S. Route 1 York corridor, the Route 236 corridor and area roadways. The 119th Maine Legislature passed the resolve in amended form as Resolves 1999, Chapter 64 on June 6, 1999 during its first regular session. The effective date of the resolve was June 10, 1999.

#### **COMMISSION MEMBERSHIP**

As specified in the resolve, Commission membership consisted of:

- A. Two members of the Senate, appointed by the President of the Senate, one of whom represents a district in York County;
- B. Two members of the House of Representatives, appointed by the Speaker of the House, one of whom serves on the Joint Standing Committee on Transportation, and one who represents a district in York County; and
- C. Local representatives designated by managers of the towns of Berwick, Eliot, Kittery, Ogunquit, South Berwick, Wells and York.

For a list of Commission members see Appendix B.

#### **COMMISSION CHARGE**

Resolves 1999, Chapter 64 charged the Commission to conduct a comprehensive review of traffic flows and patterns along Route One and 236, vehicular accident rates in the study area, commercial truck weigh station activities, current local roadway conditions and state and local law enforcement coverage of the study area. In conducting this review, the Commission was directed to invite participation of the Commissioner of the Department of Public Safety, the Commissioner of Transportation, and the Executive Director of the Maine Turnpike Authority or their designees. Furthermore, the resolve charged that at least two of the meetings held by the Commission during the course of this study be held in York county.

#### **COMMISSION MEETINGS**

The Commission was convened on October 5, 1999 and held a total of six meetings, all but the first organizational meeting were held in the study area. The Commission conducted two public hearings in late October. The first, which was preceded by a trolley tour of the study area, was held at the new Marshwood High School in South Berwick. The second public hearing was held in the Town

Council chambers at the Grant House in York and was televised locally. Both public hearings were well attended and provided valuable information for the Commission as they commenced the study. Subsequent meetings were held at the York Chamber of Commerce and the South Berwick Town Hall.

At these meetings, the Commission focused their efforts by reviewing numerous reports and presentations of data in order to report findings and make recommendations. The following section of this report outlines the information and data collected and examined by the Commission.

# II. REVIEW OF TRAFFIC ISSUES: ROUTE ONE AND ROUTE 236

# TRAFFIC FLOWS

Many comments received at the public hearings held in South Berwick and York, related to the overall increase in traffic along Route One and Route 236 (Appendix D). Residents and the area Chiefs of Police attributed many safety and congestion problems to the recent increases in overall traffic flow and possibly the recent toll increases on the Maine Turnpike. They expressed concerns, shared by the Commission, that these routes no longer have the capacity to handle such increasing volumes of traffic. The Maine Department of Transportation presented information detailing average annual daily traffic along key points on Route One and Route 236 from 1987 to 1997 (Appendix E). Though the State line-Route One point and the York-Ogunquit line point realized decrease in traffic over this ten-year period, all other points counted saw an increase.

According to data provided by the Maine Department of Transportation, both Route One, from the State line to Wells and Route 236 from the Kittery/Eliot line into the Town of Berwick, realized increases in annual average daily traffic from 1987 to 1997. Route One traffic increased by 7.5% during this period and Route 236 traffic increased by 15.7%. The following Route One and Route 236 intersections or points on these roads saw an increase of at least 10%:

Route One* Average Annual Daily Traffic Location	Percent Increase 1987 to 1997			
A4 Course Cuesta in 17/44	15.7			
At Spruce Creek in Kittery	15.7			
North of Old Post Road in York	22.1			
At Cape Neddick River in York	21.6			
North of Route 9B in Wells	17.5			
* Intersections noted are from a list of 9 points counted by MDOT				

Location	Percent Increase 1987 to 19
Kittery/Eliot Line	16.7
Southeast of Depot Road in Eliot	14.9
Eliot/South Berwick Line	12.1
South Berwick/Berwick Line	12.2
Southeast of Powerhouse Road in Berwick	28.3

This data, provided by the Maine Department of Transportation (Appendix E), supports anecdotal information communicated to the Commission by local residents and members of local law enforcement who offered comments at the public hearings (Appendix D).

Route One in Kittery was highlighted at many meetings of the Commission as an example of traffic flow problems that affect the entire length from Kittery to Wells. The road serves two purposes, (1) as a local service road, and (2) as an arterial for through traffic. As a local service road, it sees heavy pedestrian movement and substantial amounts of turning traffic in the commercial district. As an arterial, it handles a high volume of through vehicles. The traffic circle at the southern end of the strip also causes serious traffic congestion. Constructed several years before the shopping district was established, its design is insufficient for the volume of traffic that currently navigates it.

Turning traffic along the shopping district strip is managed by strategically placed, synchronized traffic lights. However, these control measures pose other problems regarding traffic destined for the Interstate highway. The only entrance to the Interstate highway from the Kittery shopping area is at the southern end of the strip. Vehicles traveling in the northbound lane have to turn into a parking lot to reverse direction and head for the confusing rotary interchange to I-95. For those vehicles heading south and not wishing to access Interstate 95 or Route One at the southern end of the strip, there exists no way to reverse direction. These vehicles are forced to enter the congested and poorly marked traffic circle, furthering congestion and confusion. Awareness of the interchange just north of town in York appears to be limited.

In order to provide for a steady traffic flow along the Route One shopping district, the posted speed limits allow vehicles to travel at a reasonable speed and traffic signals are timed to avoid long queues. Once again, efforts to manage traffic on this Kittery section of Route One, have negative side effects. Pedestrian movement can be treacherous due to the high volume of vehicle traffic and back-ups from traffic signals can interfere with designated crosswalks.

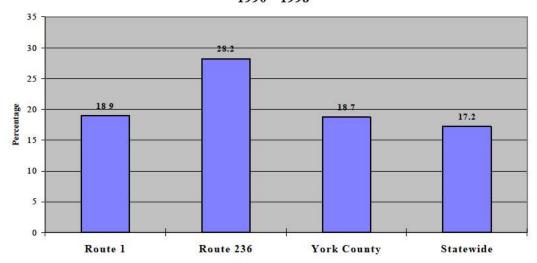
Despite the focus toward defining the traffic issues along the Kittery section of Route One, the Commission recognizes that similar traffic issues exist in York, Ogunquit and Wells. In Ogunquit, no alternate route from Route One exists for vehicles traveling north of the Village Square. During times of heavy traffic, there is no relief for residents, visitors or commuters. Congestion in this area may cause serious problems during emergencies when an emergency vehicle must pass through Village Square. The Commission concludes that anywhere Route One travels through a town center or shopping destination point the pedestrian and vehicle traffic issues are virtually the same.

### **ACCIDENT RATES**

In addition to congestion issues, the Commission received testimony expressing serious concerns about the safety of traveling along Route One and Route 236. In particular, residents who live in neighborhoods or developments on roads that intersect with Route One, noted the lack of safety for travelers when turning onto residential roads from Route One and turning onto Route One from residential roads. Several residents reported at the hearings that they observed increases in the number of minor and serious motor vehicle accidents at numerous points or intersections along Route One and Route 236. Those who testified proposed that the high number of accidents observed is attributed to the increase in traffic and inadequate capacity of the roads to handle these increases.

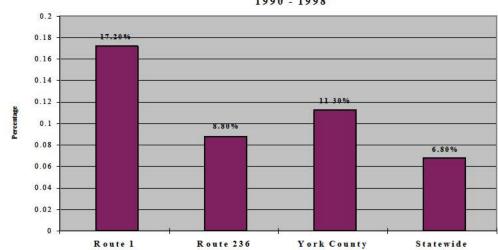
Crash rate figures, high crash location data and crash trends provided by the Maine Department of Transportation support observations stating where accidents occur most and that the number of crashes is increasing. Though it is unclear what factors actually cause these crashes, the Commission sees a correlation between the increase in traffic counts and the higher rate of crashes along Route One and Route 236.

Percentage Changes in Highway Crashes 1990 - 1998



Data provided by the Department of Transportation Graph created by the Office of Policy and Legal Analysis

Percentage Changes in Injury Crashes 1990 - 1998



Data provided by the Department of Transportation Graph created by the Office of Policy and Legal Analysis

#### TRUCK TRAFFIC AND WEIGH STATION DIVERSION

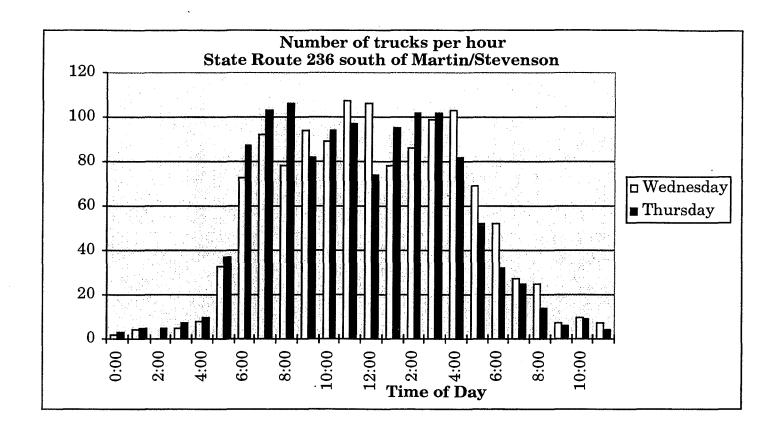
Members of the Commission representing the local towns and Police Chiefs who testified at the public hearings centered many of their comments on the issue of heavy truck traffic and over-sized loads traveling on the sections of Route One and Route 236 that travel directly through the center of the area towns. Truck traffic congestion issues seemed to occur most along the Route 236 corridor. Those who testified claimed that the increase in truck traffic contributes to congestion problems along the towns' main streets and causes premature wear and tear to those roads. This would result in the need for more frequent road repair work.

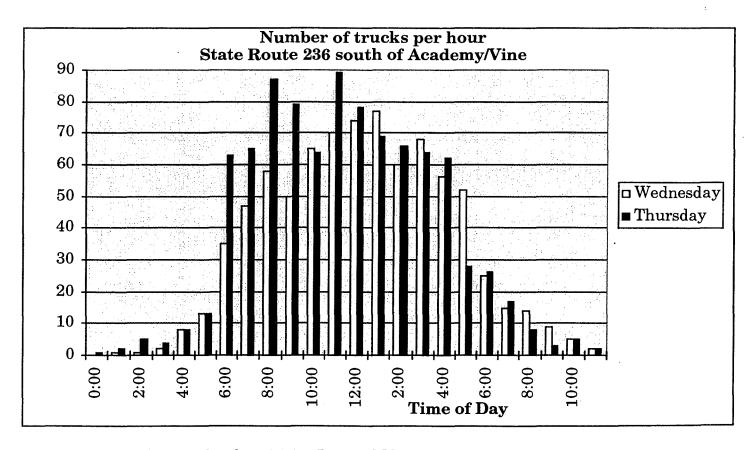
Recently, the State Police have operated weigh stations on Route One and the Turnpike concurrently in response to complaints about the diversion of truck traffic to Route One when the Turnpike weigh station was open alone. Communication among commercial truckers is so sophisticated that a carrier can be informed that a weigh station is operating at a point many miles before reaching it. Some avoid the weigh station because they be traveling illegally (over weight limits). Others avoid it simply because of the delay it causes. The delay is cited as a primary reason why the Route One weigh station is avoided. It only has the capacity for two trucks at a time and staffing is often minimal. Nonetheless, operating both locations concurrently has been reported by local police and residents to be successful in dealing with truck traffic diversion to Route One.

There is no reliable data to show trends in the average annual daily traffic of trucks along Route One or Route 236 in the study area. However, reliable data does show that truck volumes have increased at the York Toll Plaza of the Maine Turnpike 26.4% from 1987 to 1997 (Appendix E). This information coupled with the data from a commercial truck weigh station diversion study by Southern Maine Regional Planning Commission for *KACTS*, the Kittery Area Comprehensive Transpiration Committee (Appendix I) supports the testimony which claimed a marked increase in truck traffic, particularly along Route 236.

The weigh station diversion study measured truck traffic at specific points on Wednesday, September 1st and Thursday, September 2nd of 1999. The weigh stations on Route One and the Turnpike were operating on Thursday from 5:00 a.m. to 11:00 a.m. and 12:00 noon to 2:00 p.m. Data from the report shows that Route 236, south of Academy and Vine Street and south of Martinson and Stevenson Road were strongly affected by truck traffic diverted by the operation of the weigh stations. The study found that:

- During the hours of weigh station operation, all locations <u>off</u> the Maine Turnpike experienced an increase in truck traffic of 15% (353 vehicles);
- The highest increase during hours of weigh station operation occurred on Route 236; and
- All locations <u>on</u> the Turnpike experienced an increase in truck traffic during the hour that the weigh station was <u>not operating</u> on Thursday compared to that same hour on Wednesday.





Source: Southern Maine Regional Planning Commission, 1999.

Oversized loads also present serious challenges to traffic flow. Depending on the size, some large loads traveling state and local roads require and overlimit permit issued by the Secretary of State, Bureau of Motor Vehicles (Appendix H). Though certain times of travel are restricted, oversize loads often travel through town centers at peak traffic congestion times such as the beginning and end of the school day. There are nine schools along the length of Route 236 from North Berwick to Kittery, seven are public and two are private. Frequently, traffic is completely stopped to allow an oversize load to negotiate a tight turn or proceed through a difficult intersection. Often the person who stops traffic is either the driver of the oversize load or the driver of an escort vehicle when one is present. Police or traffic control officers are usually unaware that an oversize load is passing through town until it has already caused a traffic problem. Congestion resulting from oversize loads greatly decreases the ease of travel along Route 236 and the quality of life of local residents.

### **CURRENT LOCAL ROADWAY CONDITIONS**

Specific intersections and stretches of road were often the focus of comments heard by the Commission at the public hearings. Complaints ranged from the topic of too many curb cuts along Route One in Kittery and along Route 236 in Eliot to the need for traffic lights at certain points. Those giving testimony presented numerous traffic issues that caused great concern to them.

Since the testimony received was so specific, it was difficult to find reliable data that supported individual comments. The Maine Department of Transportation has programmed \$150,000 to study the Route One corridor from Kittery to Wells. The Commission feels strongly that the data collected for this study will support the testimony received at the public hearings. As noted in the Recommendations section of this report (Page 12), the Commission is suggesting that MDOT to include several specific intersections in the upcoming study. The Department reports that this study will be complete in time so that any proposed road improvements will be considered in the next biennial budget.

# III. FINDINGS

Based on the Commission's consideration of the data presented, the testimony heard at public hearing and each member's own experience with traffic issues in the towns they represent, the Commission finds the following:

- Additional road capacity is necessary on Route One from York to Wells;
- The traffic circle located at the southern end of Route One in Kittery was constructed prior to the development of the shopping district and does not have the capacity to handle the current volume of traffic;
- Heavy truck traffic and oversize loads are causing serious traffic congestion problems and premature road deterioration along Route 236, particularly in South Berwick;

- The road design of Route One in Kittery is poorly suited to handle its dual-use as a through-route and shopping destination point;
- Recent toll increases on the Maine Turnpike have contributed to traffic congestion along Route One and Route 236;
- Route 236 is no longer safe and easy to use as a commuter route because of the increasing number of curb cuts from North Berwick to Kittery;
- Greater awareness and incentives are necessary to promote carpooling for commuters;
- Because there is no alternate route for traffic traveling Route One through the Village Square in Ogunquit and no land exits to allow for widening, a Turnpike interchange may be an appropriate solution to relieve traffic congestion there;
- Safety is a major concern for motorists turning onto residential roads from Route One or onto Route One from residential roads from Kittery all the way to Ogunquit;
- Route 236 may need a center turning lane from Kittery to the Eliot-South Berwick Line to promote greater overall safety and to accommodate traffic increases and truck traffic diverted by weigh station operation;
- State Police staffing is insufficient to properly operate weigh stations, patrol Route One and 236 and manage oversize load traffic; and
- The section of Route 236 from South Berwick to Berwick needs to be widened or realigned beyond the limits of its current public easement.

# IV. RECOMMENDATIONS

As a result of this comprehensive study of traffic congestion along the Route One and Route 236 Corridors the Commission makes the following recommendations:

- The Maine Department of Transportation and The Maine Turnpike Authority should create better access to Interstate 95 from the north end of the Kittery Route One corridor;
- Where feasible and necessary, the Maine Department of Transportation should widen the Route One corridor to four lanes and add a center turning lane;
- The speed limit on Route 236, from Route 101 to Route 91, should be uniformly posted at 45 mph;
- When issuing overlimit permits, the Secretary of State-Bureau of Motor Vehicles should give greater consideration to approving routes that avoid town centers;

- If the MDOT study finds that an Interstate 95 interchange north of Ogunquit Village is warranted and no land use or environmental prohibitions exist, the Maine Turnpike Authority and the MDOT should construct one;
- The State of Maine should acquire an extended right of way along Route 236 from South Berwick to Berwick beyond the current public easement so that MDOT can widen or realign the road;
- The Maine Department of Transportation should construct a center lane on Route 236 from Kittery to the intersection with Route 101;
- State Police staffing of the weight enforcement stations should be increased along with general increases in patrolling of Route 236 and Route One;
- The Maine Turnpike Authority and the MDOT should offer greater incentives for and awareness of carpooling, such as discount toll fares and Park and Ride advertising;
- State and local policies pertaining to allowance of curb cuts should be more restrictive to protect the capacity of Route One and Route 236;
- The Governor should examine the economic impact of the burden and inconvenience caused by traffic safety and congestion problems along Route One and Route 236 and the feasibility of placing restrictions on through truck traffic; and
- The Maine Department of Transportation should include in its Planning Study of the Kittery to Wells Route One Corridor, traffic congestion and safety issues at the following intersections

KITTERY	OGUNQUIT
Route 236 and Route One southbound Signalized curb cut at the Maine Outlet Wilson Road and Route One	Route One and: Bourne Avenue Shore Road and Route 1A (Ogunquit Sq.) Captain Thomas Road Tatnic Road Agamenticus Road Berwick Road Ocean Street

<u>YORK</u>	SOUTH BERWICK
Route One and: Beech Ridge Road Orchard Farm Road (and Suffina's Restaurant) Route 91 River Road Southside Road Shop n' Save Entrance Old Post Road	Route 236 and: Lower Main Street Route 4 (Portland St.) Elementary School lot Vine and Academy (Middle school lot) Route 91 (Old South Rd) Norton Street Academy Street Route 4 (Maine St.) Old Mill Road (Quarry Dr.) Marshwood High School lot
ELIOT	
ELIOT	
Route 236 and:	
Depot Road	
Bolt Hill Road	

# V. APPENDICES

- A. Enabling Legislation
- B. Commission membership
- C. Map of the study area
- D. Synopsis of public hearing testimony
- E. Traffic growth trends
- F. Vehicular crash data
- G. Maine Turnpike traffic data
- H. Bureau of Motor Vehicle overlimit permit information
- I. Kittery Area Comprehensive Transportation Committee weigh station diversion study
- J. Bibliography of reports reviewed by Commission members

# APPENDIX A

**Enabling Legislation** 

APPROVED	CHAPTER
JUN 10'99	6 4
BY GOVERNOR	RESOLVES

## STATE OF MAINE

# IN THE YEAR OF OUR LORD NINETEEN HUNDRED AND NINETY-NINE

#### S.P. 571 - L.D. 1638

## Resolve, to Review Traffic Congestion Including Truck Traffic along the Route 1 York Corridor and Route 236 Corridor

Emergency preamble. Whereas, Acts and resolves of the Legislature do not become effective until 90 days after adjournment unless enacted as emergencies; and

Whereas, traffic congestion, including heavy truck traffic, along U.S. Route 1, Route 236 and other roadways in York County increases greatly each year during the summer and fall months; and

Whereas, the traffic congestion slows travel for Maine residents and tourists, creates noise and other environmental problems along the U.S. Route 1 York corridor, the Route 236 corridor and other area roadways and adversely affects area lodging and other commercial establishments; and

Whereas, review and study of issues related to traffic congestion are necessary to improve safety and convenience for all travelers and the quality of life for residents living along the U.S. Route 1 York corridor, the Route 236 corridor and area roadways; and

Whereas, emergency legislation is needed to begin the study promptly and to ensure that the issue is carefully considered; and

Whereas, in the judgment of the Legislature, these facts create an emergency within the meaning of the Constitution of Maine and require the following legislation as immediately necessary for the preservation of the public peace, health and safety; now, therefore, be it

- Sec. 1. Commission established. Resolved: That the Commission to Review Traffic Congestion Along the U.S. Route 1 York Corridor and the Route 236 Corridor, referred to in this resolve as the "commission," is established; and be it further
- Sec. 2. Membership. Resolved: That the commission consists of 11 members appointed as follows:
- 1. The President of the Senate shall appoint 2 members from the Senate, one of whom serves on the Joint Standing Committee on Transportation and one of whom represents a Senate district in York County;
- 2. The Speaker of the House shall appoint 2 members from the House of Representatives, one of whom serves on the Joint Standing Committee on Transportation and one of whom represents a House district in the York County area;
- 3. A representative of each of the following towns, designated by the manager of each town: Berwick, Eliot, Kittery, Ogunquit, South Berwick, Wells and York; and be it further
- 4. The chiefs of police for the towns of Kittery, Ogunquit, Wells and York or their designees; and be it further
- Sec. 3. Chairs. Resolved: That the first named Senate member is the Senate chair and the first named House member is the House chair of the commission; and be it further
- Sec. 4. Convening of commission. Resolved: That all appointments to the commission must be made no later than 30 days following the effective date of this resolve. The appointing authorities shall notify the Executive Director of the Legislative Council upon making their appointments. When the appointment of all members is completed, the chairs of the commission shall call and convene the first meeting of the commission, which may occur no earlier than 5 days following adjournment sine die of the Legislature but no later than July 15, 1999; and be it further
- Sec. 5. Duties. Resolved: That the commission shall conduct a comprehensive review of the following:
- 1. Past, current and projected traffic flows and patterns along U.S. Route 1, Route 236, the Maine Turnpike and other major roadways in the York County area between Kittery and Berwick and between Kittery and Wells;
- 2. Vehicular accident rates in the U.S. Route 1 York and the Route 236 corridors;

- 3. Noise and dust pollution resulting from traffic and its effects on area businesses and residents;
- 4. Traffic weigh station activities, truck violations and the extent of traffic diverted from the Maine Turnpike in the York County area to avoid weigh station inspections;
- 5. Current local roadway signage, traffic signals, local traffic conditions and patterns and the increased number of curb cuts and their effect on traffic congestion;
- 6. Traffic patterns of nonlocal traffic, including long-distance carriers that may affect traffic congestion; and
- 7. State and local law enforcement coverage along the U.S. Route 1 York and the Route 236 corridors; and be it further
- Sec. 6. Participation by state departments. Resolved: That, in studying these matters, the commission shall invite the participation of the Commissioner of Public Safety, the Commissioner of Transportation and the Executive Director of the Maine Turnpike Authority, or their designees. The commission may require the Department of Transportation, the Department of Public Safety and the Maine Turnpike Authority to provide the commission with such highway, traffic and other information as it determines necessary and beneficial to conduct its study of traffic congestion. In addition, the commission may seek relevant information from experts and interested persons; and be it further
- Sec. 7. Meetings. Resolved: That, in conducting its duties, the commission may meet at such times and locations as approved by the President of the Senate and the Speaker of the House of Representatives, except that at least 2 informational meetings of the commission must be held in York County; and be it further
- Sec. 8. Staff assistance. Resolved: That, upon approval from the Legislative Council, the Office of Policy and Legal Analysis shall provide staffing services to the commission; and be it further
- Sec. 9. Compensation. Resolved: That legislative members are entitled to receive the legislative per diem and reimbursement of necessary expenses for their attendance at authorized meetings of the commission. Public members not otherwise compensated by their employers or other entities whom they represent are entitled to receive reimbursement of necessary expenses for their attendance at authorized meetings of the commission; and be it further

Sec. 10. Reporting date. Resolved: That the commission shall conclude its review and submit a report of its findings and along with any suggested legislation, to recommendations, Standing Committee on Transportation Transportation by November 15, 1999. Commissioner of Ιf the commission finds it is unable to meet its reporting date, chairs shall submit to the Legislative Council, in writing, request for extension of the reporting date, the reasons extension is requested and a proposed new reporting date prior to reporting date. The Legislative Council may grant Upon the submission of its required report, extension. commission terminates; and be it further

Sec. 11. Commission budget. Resolved: That the chairs of the commission, with assistance from the commission staff, shall administer the commission's budget. Within 10 days after its first meeting, the commission shall present a work plan and proposed budget to the Legislative Council for its approval. The commission may not incur expenses that would result in the commission exceeding its approved budget.

Upon request from the commission, the Executive Director of the Legislative Council or the Executive Director's designee shall provide the commission chairs and staff with a status report on the study budget, expenditures incurred and paid and available funds; and be it further

Sec. 12. Appropriation. Resolved: That the following funds are appropriated from the General Fund to carry out the purposes of this resolve.

1999-00

### **LEGISLATURE**

Commission to Review Traffic Congestion Along the U.S. Route 1 York Corridor

Personal Services
All Other

\$1,100 3,500

Provides funds for the per diem and expenses of legislative members of the Commission to Review Traffic Congestion Along the U.S. Route 1 York Corridor and funds to hold 2 public meetings and print the required report.

# LEGISLATURE TOTAL

\$4,600

Emergency clause. In view of the emergency cited in the preamble, this resolve takes effect when approved.

# APPENDIX B

**Commission Membership** 

# COMMISSION TO REVIEW TRAFFIC CONGESTION ALONG THE U.S. ROUTE 1 YORK CORRIDOR AND THE ROUTE 236 CORRIDOR

Chapter 64, Resolves of 1999

# Membership 1999

## Appointments by the President

President Mark W. Lawrence, Chair Maine State Senate 3 State House Station Augusta, Maine 04333 Tel: 287-1500

Senator Vinton Cassidy RR 1, Box 75 Calais, Maine 04619

## Appointments by the Speaker

Representative Gary Wheeler, Chair 29 ½ Frost Hill Road Eliot, Maine 03903 Tel: 439-0177

Representative Mary Black Andrews 121 Old Post Road York, Maine 03909 Tel: 363-4714

#### **Town Managers**

Jim McMahon, Town Manager Town of Berwick PO Box 696 Berwick, Maine 03901

Roland Fernald, Selectman Town of Eliot 117 State Road Eliot, Maine 03904

John C. McCrillis 3 Rogers Lane Kittery, Maine 03904

Bruce Locke, Town Manager Town of Ogunquit PO Box 875 Ogunquit, Maine 03907 Representing Berwick

Representing Eliot

Representing Kittery

Representing Ogunquit

Representative Ronald F. Collins 401 Harriseckett Road Wells, Maine 04090

Representing Wells

Mark Green, Town Manager Town of York 186 York Street York, Maine 03909

Representing York

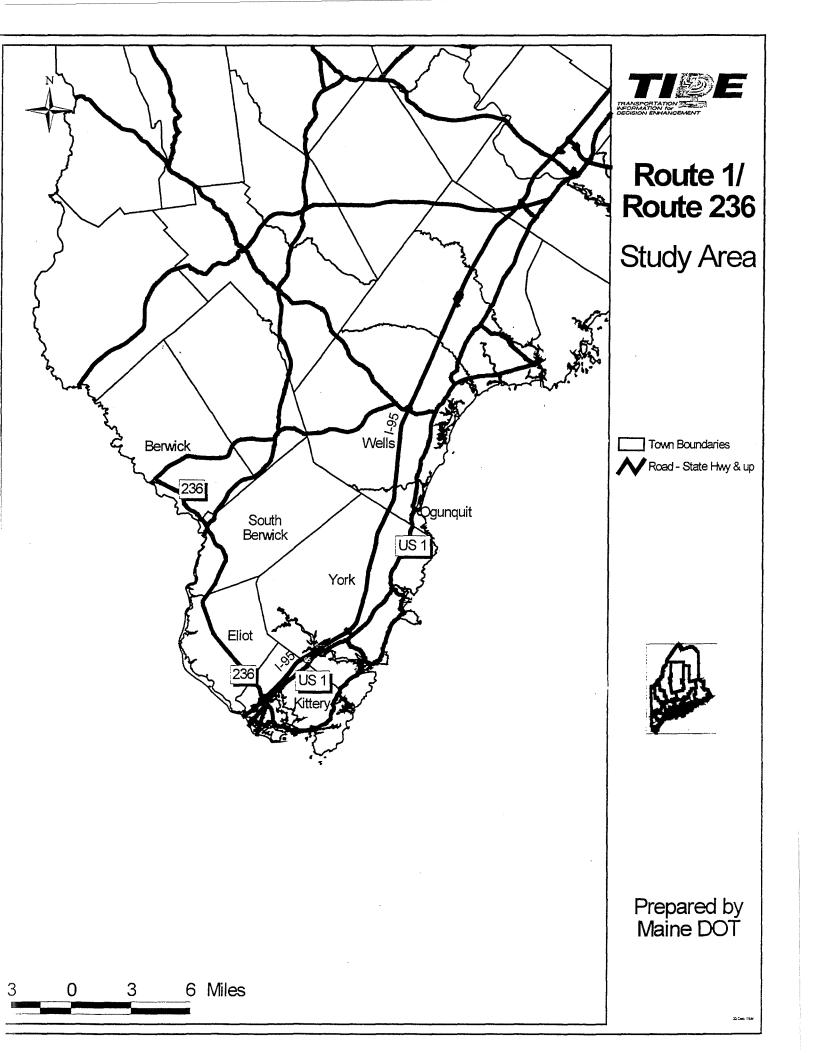
Gerald MacPherson, Sr. Chair, Town Council Town of South Berwick 180 Main Street South Berwick, Maine 03908-1535 Representing South Berwick

Staff: Danielle Fox, Office of Policy and Legal Analysis

287-1670

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# APPENDIX C Map of the Study Area



# APPENDIX D

**Synopsis of Public Hearing Testimony** 

# **Synopsis of Testimony**

Commission to Study Route One and Route 236 Corridors

Public Hearings - October 20th and 26th and Commission member testimony

## **ROUTE 236**

- This road has experienced a huge increase in traffic...especially heavy traffic. Results in many negative impacts, such as; diminished character of the neighborhood, safety concerns (especially at the new H.S. entrance), damage to roads (pavement has slipped to now resemble a rumble strip), slowing of school bus commute (due to tractor trailer and oversized load traffic) and especially quality of life.
- Congestion has increased dramatically especially during peak morning and evening times. The stretch where 236 goes into Berwick or meets Route 4 should be widened.
- An unofficial observation: 800 to 1000 commercial vehicles travel Main Street in South Berwick each day. The roads are poorly designed to handle the kind of traffic experienced present day.
- South Berwick roads are being overly burdened with oversized loads, such a cranes and modular homes. They will not be able to withstand such traffic for long. Such traffic should be on Interstate 95 which is built to handle these loads.
- At the Routes 236 and 101 junction (Southbound?) a left hand turn must be made from the middle of the intersection. This poses many safety concerns.
- A recent serious accident on the Turnpike backed up traffic all around York, Kittery and the Berwicks. This raises serious questions regarding ability to travel these roads in case of a concurrent emergency somewhere else of if assistance is requested from another town.

# Route One

- Traffic congestion is progressively worse and extending longer into each end of the season.
- Lower end of route one in Kittery is the problem because this is the only way into Maine aside from the Turnpike when coming directly from the South. This stretch is a major route for shops and further destinations...it is only 4 lanes until you reach Haley rd. and then it turns into 2. The entire stretch should be 4 lanes.
- The exit to head North from Kittery is at the southern end of the strip which causes traffic confusion from traffic "doubling back." We need an interchange at the northern end of the strip and/or signs indicating the York interchange to the Turnpike.
- At the new Shop n' Save, two lanes turn into one at the turn to enter the parking lot. This is a disaster waiting to happen not only regarding safety but congestion as well. This Shop n' Save turn is only 300 feet from the route 91 intersection.
- Before the two weigh stations were opened concurrently, diversion traffic was a real problem. When commercial trucking enforcement is present it makes a welcome difference.
- The Chamber of Commerce responds to a lot of requests from some of its 90,000 annual visitors about alternate routes to destinations to the north. They are given suggestions to use

- routes 236 and 4. They don't want to look like route one in Saugus MA but expansion is necessary. Also have concerns regarding emergency travel evacuation plans.
- There are currently 9 traffic lights from the "Welcome to Maine" sign to the Old Post Rd...if all proposals are accepted there will be 13! Entrance and exit roads to this stretch of route one should run parallel even if it does require widening. The barrier toll system should be eliminated and a new exit at Ogunquit should be built.
- People that live in areas and roads off of this stretch of route one can't go anywhere in the summer because of the traffic. Why can't the Kittery Trading Post give up some of its land to to make a left hand turn lane?
- Those making a left hand turn onto Orchard Farm Road from route one are sitting ducks for the speeding traffic coming from behind since there is no turning lane. Simply turning onto a residential street where I reside results in obscene gestures and fear for well being because of the impact on flowing traffic. Those turning into nearby restaurant (Sufina's?) exacerbate the problem.
- There are no indicators to help change the mindset of motorists in this area. Without some sort of sign or signal people continue as though they are still on the highway. People are surprised when they come upon this intersection and traffic is interrupted....they simply don't know what to do.
- Residents are not able to enjoy and take advantage of the area that they help pay for.
- You can't just cater traffic plans to the business development in the area. These roads serve another purpose...people do use them to travel to work or other destinations beyond this corridor.
- All turns off of this corridor are problematic...not just the few highlighted here. Getting into traffic at any point is dangerous.
- It is difficult to make a turn out of the lots from the Kittery shops unless you have a compact car or ability to complete a tight turning radius...otherwise you're on the median.
- The entrance to the new housing development near the Kittery information center is beyond the 25 mph section of the road and will cause more traffic issues.
- Avoidance of the tolls since the increase and due to congestion at the barriers is a real contributor to all of the traffic problems in the area.
- There have been many accidents and complaints at the intersection at Beech Ridge road.

#### Other

- Route 91 has become a main artery for the Berwicks and N.H. to head to the beach and other destinations. It is very hazardous in the winter because of the winding, hilly nature of the road.
- York Hospital has seen an increase in patients with its growth and expansion and 91 is the Eliot and Berwicks access to the hospital.
- Route 1A and Route 103 have also seen dramatically increased traffic and should be considered in this study as well.

## APPENDIX E

**Traffic Growth Trends** 

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### **Traffic Growth Trends**

Growth in A	nnual Average Daily Traffic	AADT		10-Year Inc	rease
Route	Location	1987	1997	Veh./Day	% Increase
_	_				
Route 1	State Line	13550	11980	-1570	
Route 1 Byp.		15440	14560	-880	
Route 1	at Spruce Cr. (Kittery)	14950	17300	2350	
	n/o Lewis Rd. (Kittery)	11970	12170	200	
	n/o Old Post (Nason) Rd. (York)	11770	14370	2600	
	at Cape Neddick R. (York)	11740	14280	2540	
	York-Ogunquit Line	7780	7770	-10	-0.1%
	n/o Capt. Thomas Rd. (Ogunquit)	13466	14396	930	6.9%
	n/o Route 9B (Wells)	14000	16450	2450	17.5%
Route 236	Kittery-Eliot Line	13080	15270	2190	16.7%
	se/o Depot Rd. (Eliot)	11660	13400	1740	14.9%
	Eliot-S.Berwick Line	8700	9750	1050	12.1%
]	S.Berwick-Berwick Line	4030	4520	490	12,2%
	se/o Powerhouse Rd. (Berwick)	3210	4120	910	28.3%
Route 4	State Line	7610	9310	1700	22.3%
	S.Berwick-Berwick Line	7560	8900	1340	17.7%
Route 9	State Line	14580	16840	2260	15.5%
	at Coffin Br. (Berwick)	5300	7270	1970	37.2%
	w/o Route 9B (Wells)	5440	7190	1750	32.2%
Route 91	e/o Route 236 (S.Berwick)	2710	3410	700	25.8%
Route 103	Kittery-Eliot Line	2180	2370	190	8.7%
	Kittery-York Line	1470	1510	40	2.7%
Interstate 95	State Line	55663	66044	10381	18.6%
	York Toll Plaza	31701	41472	9771	30.8%

Growth in Regional Vehicle-Miles Travelled	Annual VMT	,		
Area	1987	1997	Million VMT	% increase
York County	1526	1799	273	17.9%
Statewide	10646	13024	2378	22.3%

Growth is	n Daily Truck Volumes	Truck AADT		10-Year Inc	rease
Route	Location	1987	1997	Veh./Day	% Increase
Interstate	95 York Toll Plaza	4248	5371	1123	26.4%

Daily Truck Route	Volumes at Selected Locations Location	Year		AADT	Truck ADT	Truck % of AADT
Route 1	at Spruce Cr.		1998	16620	725	4.4%
	n/o Old Post (Nason) Rd.		1992	10351	310	3.0%
Route 236	S.Berwick-Berwick Line		1992	4379	121	2.8%
	se/o Powerhouse Rd.	:	1997	4170	123	2.9%
Interstate 95	York Toll Plaza		1987	31701	4248	13.4%
	York Toll Plaza	3	1997	41472	5371	13.0%

Notes:

Locations in bold have 365 days of annual data. All others have one or two days of data. Data in italics was obtained in 1995, not 1997.

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## APPENDIX F

**Vehicular Crash Data** 

### TREND IN HIGHWAY CRASHES

3-Year Periods	Route 1	Route 236	York County	Statewide
1990, 1991, 1992	931	408	13618	105247
1993, 1994, 1995	957	423	14544	111751
1996, 1997, 1998	1107	523	16164	123317
% Increase				
1990-92 to 1996-98	18.9%	28.2%	18.7%	17.2%

### TREND IN INJURY CRASHES

3-Year Periods	Route 1	Route 236	York County	Statewide
1990, 1991, 1992	290	137	4451	33854
1993, 1994, 1995	289	137	4626	35533
1996, 1997, 1998	340	149	4956	36146
% Increase				
1990-92 to 1996-98	17.2%	8.8%	11.3%	6.8%

Data Provided by Maine Department of Transportation

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## APPENDIX G

Maine Turnpike Traffic Data

### APPENDIX G

### Provided by the Maine Turnpike Authority

### Average Daily Traffic Volumes Exit 2 – Wells

36 2,644 2,228 9,737
31 2,826 2,173 9,937 2.1%
90 3,326 1,930 10,364 4.3%
3

### Average Daily Traffic Volumes Exit 1 – York l

Year	NB Enter	SB Exit	Total	Growth
1996	17,925	18,183	36,107	
1997	18,892	18,943	37,836	4.8%
1998	20,381	20,233	40,614	7.3%

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## APPENDIX H

**Bureau of Motor Vehicle Overlimit Permit Information** 

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				AND THE RESIDENCE OF THE PROPERTY OF THE PROPE

### **Overlimit Permits**

207-287-8632

Any vehicle transporting nondivisible loads in excess of legal dimension and weight limits must obtain an overlimit permit from the Bureau of Motor Vehicles, Commercial Vehicles Division. After initial contact with the Commercial Vehicles Division these permits may be obtained by fax or by going to the nearest Bureau of Motor Vehicles branch office. Permits are valid for a stated route and for a limited period of time. For a copy of the application form (in Lotus WordPro), click here.

Maine, along with the States of Massachusetts, New Hampshire, Rhode Island and Vermont, is a member of the New England Transportation Consortium Overlimit Permit Program. Under this program, one state may issue an overlimit permit for an interstate move in two or more states. To qualify, the vehicle and load may not exceed:

- 1. 90 feet in length;
- 2. 13 feet 6 inches in height;
- 3. 14 feet in width (with an additional 6 inch overhang allowed for modular or mobile homes)
- 4. 108,000 pounds for 5-axle and 120,000 pounds for 6-or-more axle tractor-semitrailer combination vehicles.

Vehicles exceeding these limits must obtain separate permits in each applicable state.

Vehicles transporting overlimit loads are subject to certain safety, routing, time of day, and holiday restrictions, as well as escort requirements. A complete copy of overlimit permit rules, 29-250 CMR Chapter 156, is available <u>by clicking here</u> (in WordPerfect 5.1 for DOS) or <u>here</u> (in Lotus WordPro. A summary of the rule is below.

The Maine Turnpike has its own specified size and weight limitations. For more information, contact (800) 698-7747 or (207) 871-7771. Turnpike oversize and overweight permits may be obtained at any Maine Turnpike toll plaza for a fee of \$10 (not including the applicable toll). Vehicles must also have a separate oversize-overweight permit from the Bureau of Motor Vehicles for travel on all non-Turnpike highways.

Permits issued by the Bureau of Motor Vehicles apply only to those highways or bridges under the jurisdiction of the Maine Department of Transportation. Permission for the use of other highways under the jurisdiction of towns and municipalities must be obtained, if required, directly from those local authorities.

The following is a summary of the rules for the movement of overdimension vehicles. These are meant to be a quick reference guideline and do not replace rules as written in Chapters 155 and 157.

Overview

### **Overdimension Safety Rules**

- 1. O/L moves not permitted sunset to sunrise, Sundays, Legal Holidays, and Saturdays in July and August.
- 2. Subject to ALL road postings
- 3. State-issued permit does not override municipal laws and ordinances. Mover must contact local jurisdictions for permits and special conditions for local streets and roads, if required.

- 4. Permits must be in vehicle.
- 5. If following traffic exceeds seven (7) vehicles, as soon as safely possible the overdimension vehicle must pull over to the right as far as is safely possible to allow traffic to safely pass.
- 6. No movement allowed in adverse weather conditions.
- 7. Vehicles 14 ft. or more in width must have a 5 second following distance on divided highways
- 8. Signage
  - 1. "Oversize Load" in ten inch (10") high black letters on yellow background;
  - 2. Seven (7) feet wide by eighteen (18) inches high;
  - 3. Front and rear;
  - 4. When not oversize remove or cover sign.
- 9. Flags
  - 1. Four 18" by 18" red or fluorescent orange;
  - 2. Position at extreme corners
- 10. Radio (if accompanied by pilot(s)
  - 1. Two-way mobile;
  - 2. One-half mile radius range
  - 3. Responsible for State Police escort communication between load and state police vehicle(s) when permit requires police escorts.
- 11. Lights
  - 1. Headlights on low beam; flashing, rotary, light bar, amber lights on top of cab.

### Pilot Vehicle(s)

- 1. Needed, if
  - 80 feet or more long; or
  - 12 feet wide or over
- 2. Vehicle
  - Pick-up truck or automobile;
  - Mirrors: Interior, Right outside, Left outside
  - Special lighting
    - Amber, flashing, rotary, or light bar
    - Extreme top left and right or left to right
- 3. Signage
  - "Oversize load" in black 10 inch high letters on yellow background
  - Five feet wide by 12 inches high
  - Rear bumper when following load
  - Front bumper when preceding load
  - Roof mounted is an option with sign facing appropriate direction
  - Remove or cover when not in escort service
- 4. Knowledge of pilot vehicle rules
- 5. Radio
  - Two-way mobile
  - One-half mile radius
- 6. Driver
  - Minimum age 18 years
  - Two years driving experience
- 7. Position of single pilot vehicle
  - o Divided highway to the rear of the load
  - Undivided highway to the front of the load.

### Additional Requirements for Mobile Home and Modular Homes

- 1. Loads 11 feet 6 inches or wider
  - Power Unit
    - Truck tractor
    - Dual wheels on drive axle
    - 26001 GVWR or greater (unless grandfathered)
- 2. Loads 13 feet 6 inches or wider in addition to the previous part of this section.
  - Lighting on mobile home or modular unit
    - Amber, flashing, or rotary
    - Extreme left rear above oversize sign
    - Extreme right rear above oversize sign

Return to the Division of Commercial Vehicles home page.

Return to the Bureau of Motor Vehicles home page.

Return to the Department of the Secretary of State home page. •

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## **APPENDIX I**

Kittery Area Comprehensive Transportation Committee Weigh Station Diversion Study

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# Kittery Area Comprehensive Transportation Committee

(KACTS)

## Weigh Station Diversion Study

Prepared by
Southern Maine Regional Planning Commission
for the KACTS Metropolitan Planning Organization
November, 1999

KACTS MEMBERS

Kittery (2) • Eliot • South Berwick • Berwick • Lebanon • Maine Department of Transportation • Maine Turnpike Authority • Public

Transportation Agencies • Southern Maine Regional Planning Commission

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### Appendix A:

Vehicle Classification Data for each study location

Prepared in cooperation with the Federal Highway Administration and the Federal Transit Administration of the U.S. Department of Transportation. The contents of this study reflect the views of the Kittery Area Comprehensive Transportation Study who is responsible for the facts and the accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the Maine Department of Transportation, the Federal Highway Administration, or the Federal Transit Administration.

### I. Introduction

This report was developed by the Southern Maine Regional Planning Commission (SMRPC) under the direction of the Kittery Area Comprehensive Transportation Committee (KACTS).

Since 1982, the KACTS Committee has been the designated Metropolitan Planning Organization (MPO) for the Kittery area, responsible for planning and programming all Federally funded transportation projects. The MPO area contains portions of Kittery, Eliot, South Berwick, Berwick, and Lebanon Maine. Technical and administrative support to the Committee is provided by SMRPC and the Maine Department of Transportation (MDOT).

KACTS is composed of the following municipalities and agencies:

<u>Committee Members</u>: Kittery (2 voting members), Eliot (1), South Berwick (1), Berwick (1), Lebanon (1), MDOT (1), SMRPC (1), Maine Turnpike Authority (1) and (1) public transportation representative.

Further information concerning the MPO transportation process or this report can be obtained by contacting SMRPC (207-324-2952)

In 1996, KACTS conducted a Freight Study of the region, during which the Committee looked at major freight facilities and movements within and around the KACTS area. Of particular concern to the KACTS Committee was the perceived diversion of truck traffic from Interstate 95 and U.S. Route 1 when truck weigh stations were open on these roadways. This issue came up at meetings held during the course of the study, and was also mentioned repeatedly by municipal officials.

As a result of these concerns, KACTS worked with the Maine Turnpike Authority, the Maine Department of Transportation (MDOT) and the Commercial Vehicle Enforcement Division of the Maine State Police to coordinate traffic counts around the weigh station schedule for the month of September, 1999. The idea was to compare a "typical" day of traffic with a day when truck weigh stations were open, and recording traffic flow at several locations on and off Interstate 95/Maine Turnpike.

### II. Methodology

Vehicle classification counts were conducted on Wednesday, September 1 and Thursday, September 2. The Maine State Police operated the weigh stations on September 2 during the hours of 5:00 a.m. – 11:00 a.m., and 12:00 p.m. – 2:00 p.m.. During these times, both the northbound and southbound stations were open on Interstate 95, and also the stations on U.S. Route 1. The scales were not open during the hour of 11:00 a.m. – 12:00 p.m. The locations of the weigh stations can be seen on Map 1 on the following page.

KACTS staff worked with local officials and MDOT to determine five locations for classification counts around the region. These five locations are listed below and can also be seen on Maps 1 & 2.

### **Locations of Vehicle Classification Counts**

Kittery
State Route 236 south of Martin & Stevenson Roads
South Berwick
State Route 236 south of Academy & Vine Streets
Berwick
State Route 4 north of Blackberry Hill Road
North Berwick
Sate Route 9 at the Wells town line
Lebanon
U.S. Route 202 east of the N.H. border

The Maine Turnpike Authority also provided vehicle classification counts by hour for three separate locations along the Maine Turnpike. These locations are;

- between Exit 1 in York and Exit 2 in Wells
- between Exit 2 in Wells and Exit 3 in Kennebunk
- between Exit 4 in Biddeford and Exit 5 in Saco.

Vehicle information for each location was separated into five different truck classifications, a data in this report is presented by hour for each day. The truck count data was divided using the

following categories:

Class 2 = vehicles with two axles and six tires (dual tires in rear)

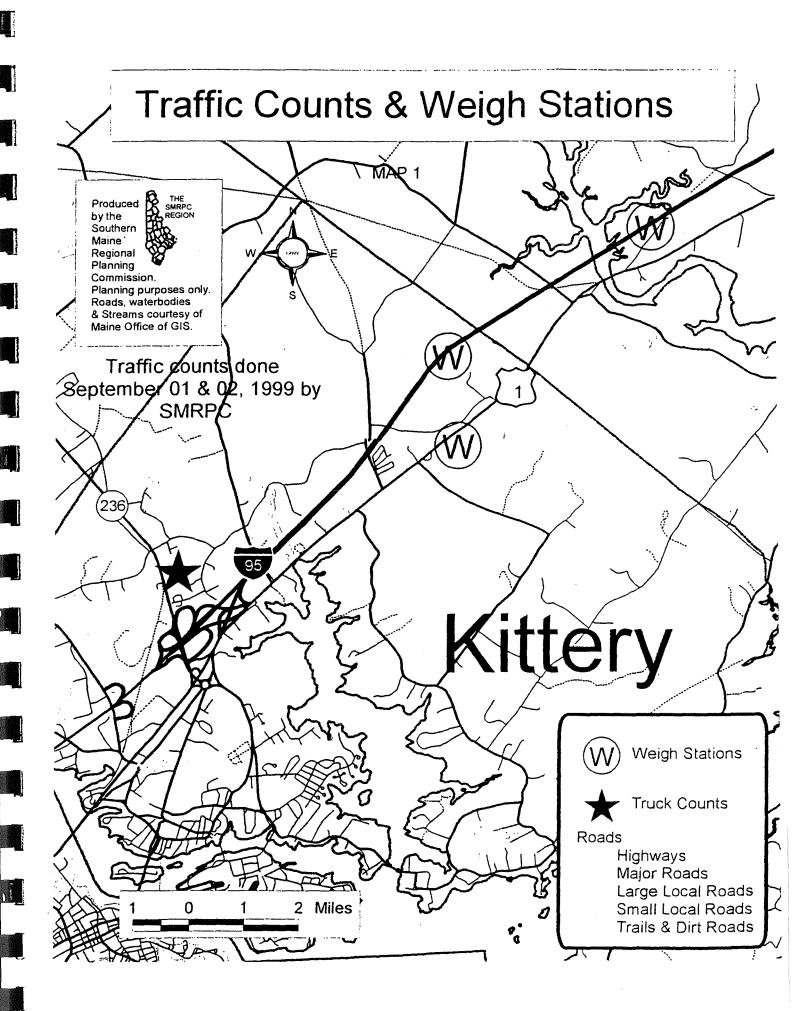
Class 3 = three axles Class 4 = four axles Class 5 = five axles Class 6 = six axles

### III. Presentation of Data

Results for each location are given in the form of two bar graphs. The data is also included fo each location in Appendix A. The first bar graph breaks down the total trucks (all five classes) thour, and compares Wednesday hours to Thursday hours. The second bar graph compares the total amount of trucks by vehicle class for Wednesday and Thursday. It also gives the overall totals (all five classes) for Wednesday and Thursday.

### IV. Summary of Data Results

- All but one location off the Maine Turnpike experienced more daily (total for the day) truck traffic on Thursday than on Wednesday. The exception was on State Route 236 in Kittery, where there was a decrease of 26 vehicles (-2%). The total daily increase on Thursday for a locations combined was 318 vehicles, or 7%.
- The highest daily increase occured at U.S. Route 202 near the N.H. border at 16.3% (114 vehicles)
- All three locations on the Maine Turnpike experienced a daily decrease in truck traffic on Thursday. The total decrease for all locations combined was 235 vehicles, or -1.2%.
- During the hours of weigh station operation, all locations off the Maine Turnpike experienced increases in truck traffic, 15% overall (353 vehicles). On the Turnpike, the number of vehic decreased during the hours of operation by -9.3% overall (785 vehicles).
- The highest increase during hours of operation occurred on State Route 236 (23.6%).
- When compared to Wednesday, all locations on the Maine Turnpike experienced less truck traffic on Thursday during each hour betweeen 5:00 a.m. 11:00 a.m. and 12:00 p.m. 1:00 p.m.
- All locations on the Turnpike experienced an increase in vehicles during the hour of 11:00 a.: 12:00 p.m. on Thursday when compared to Wednesday.



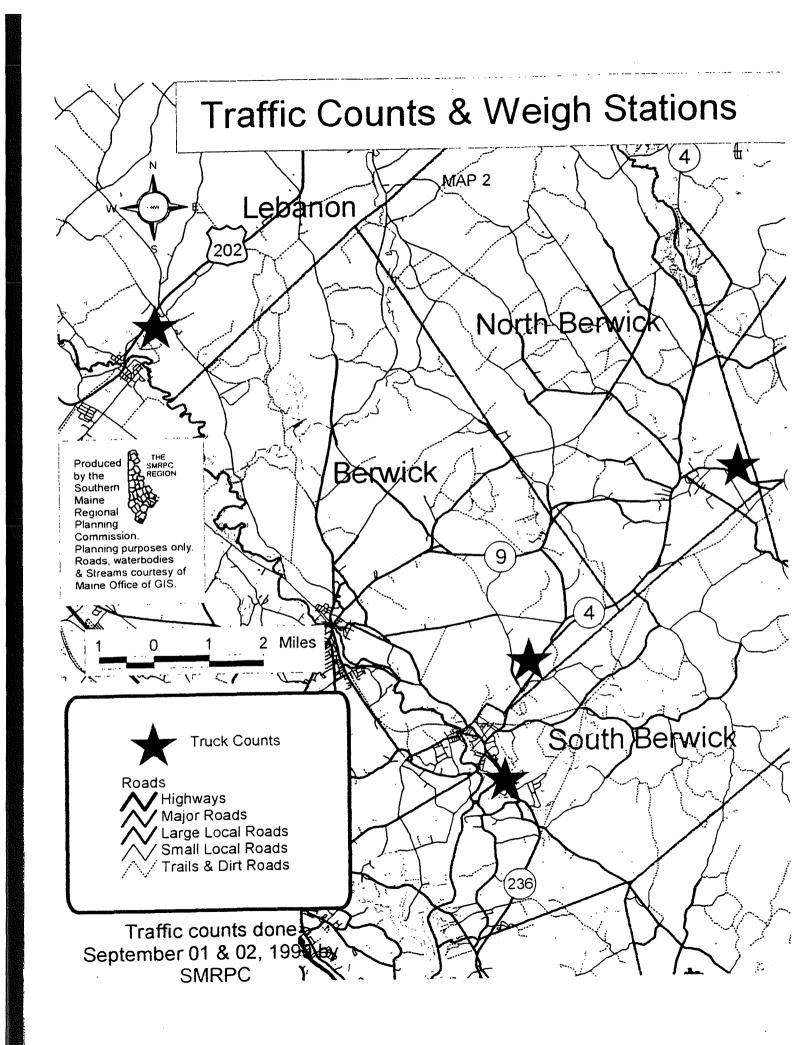


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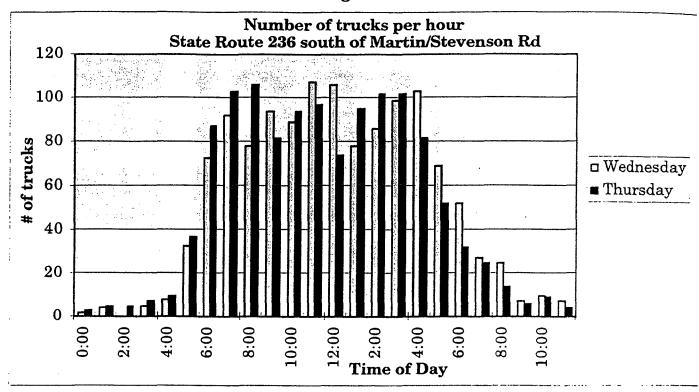


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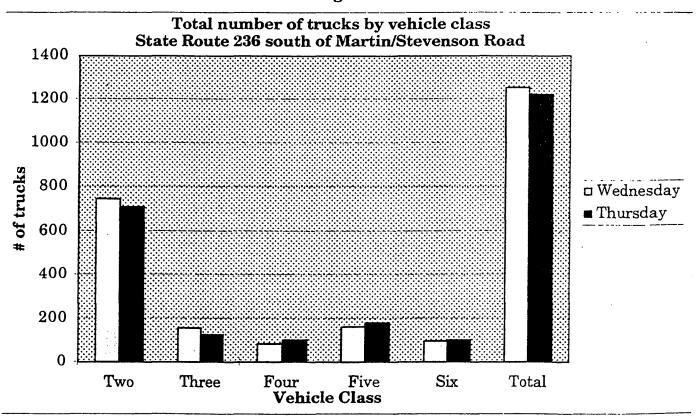


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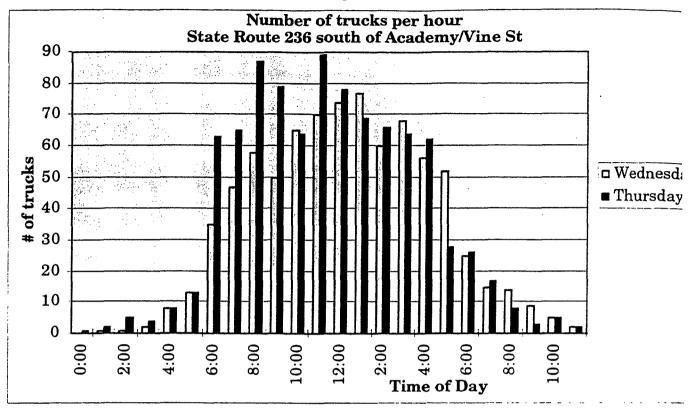


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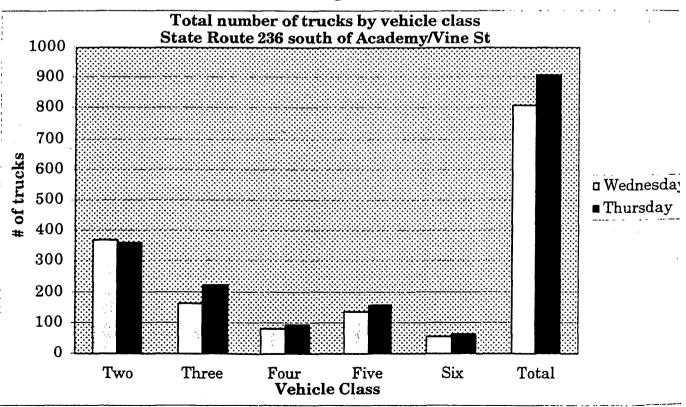


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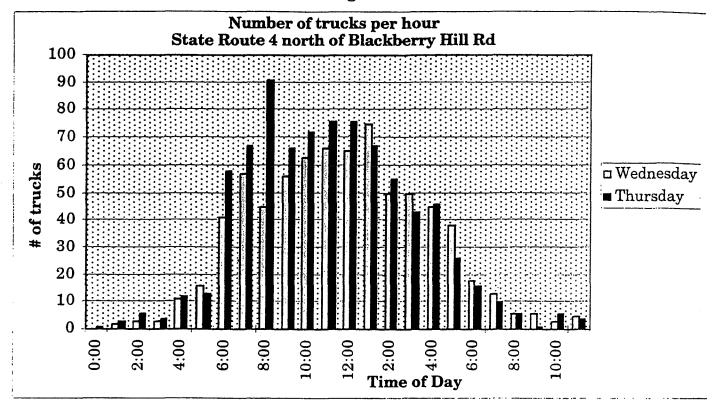


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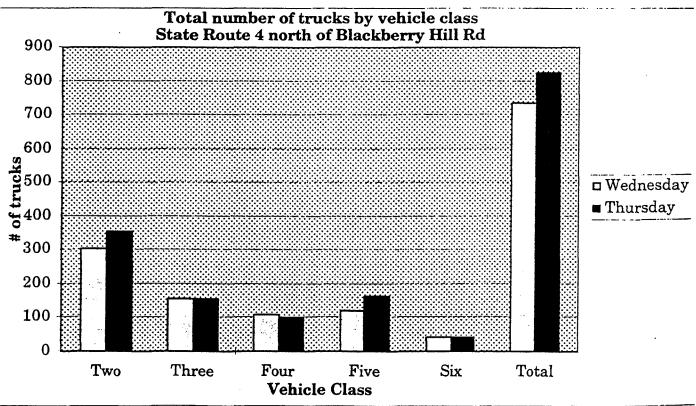


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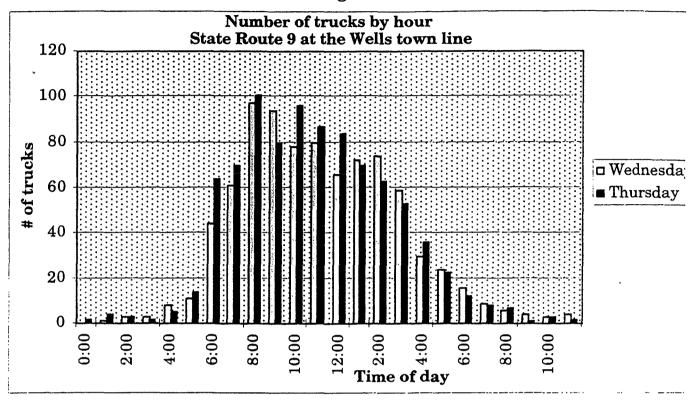


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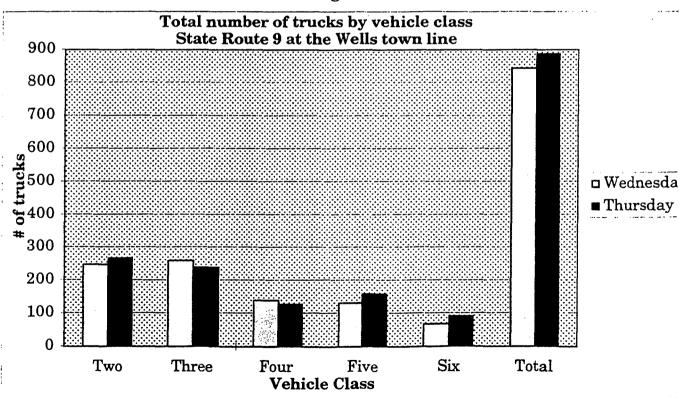


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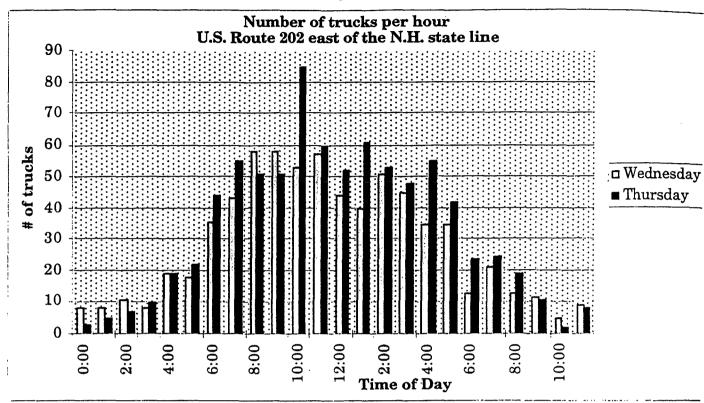


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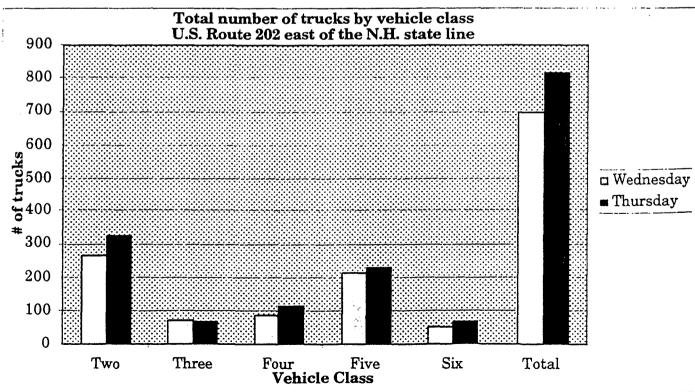


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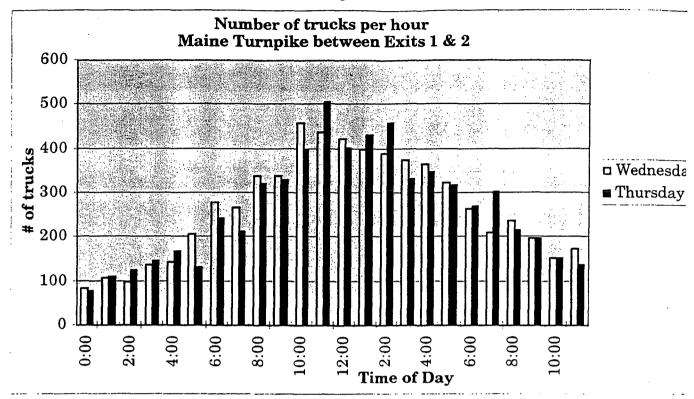


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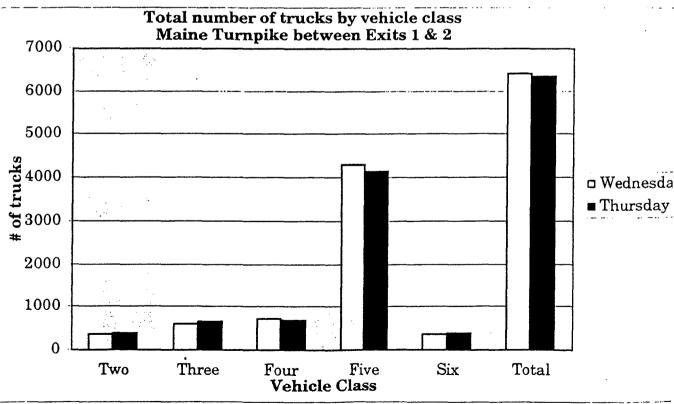


Figure 13

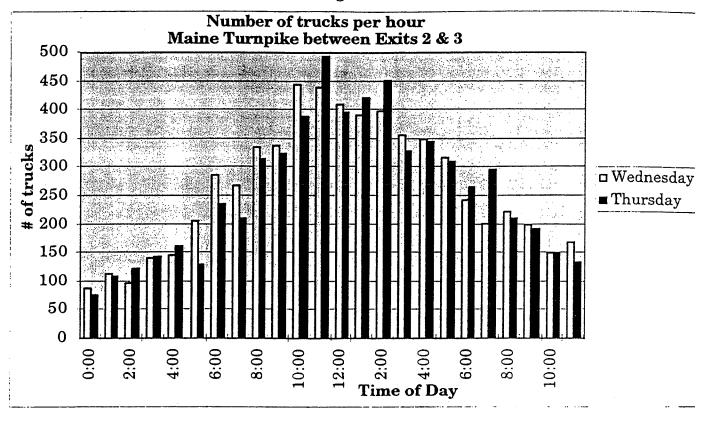


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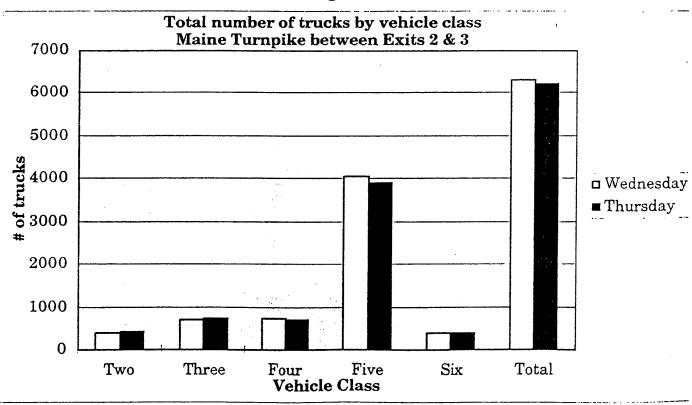


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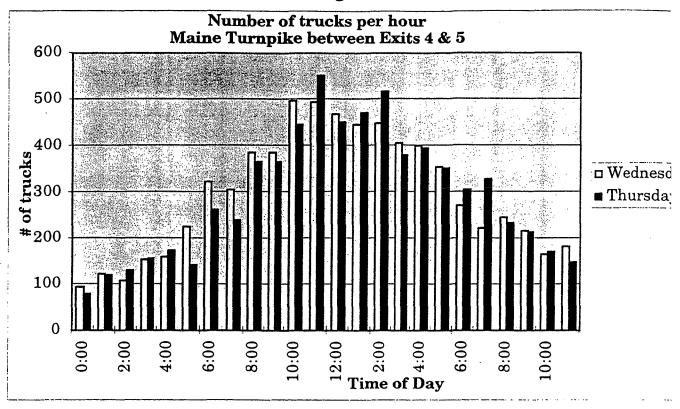
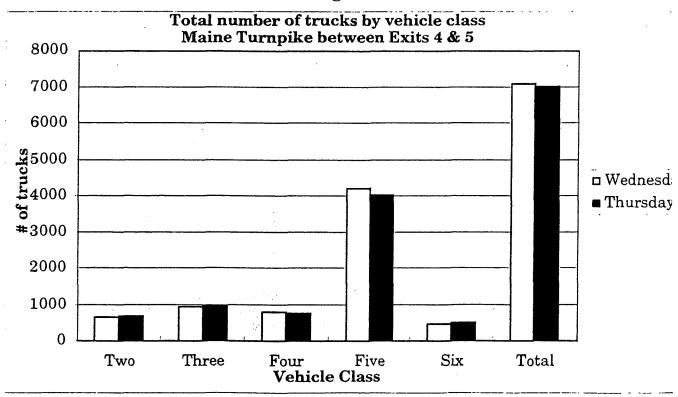


Figure 16



Appendix A
Kittery - Route 236 south of Martin/Stevenson

	Vehic	les by Hour		To	tal Vehicles by	Class
Time	Wednesday		Change	Two	Wednesday	Thursday
0:00	2	3	1	Two	749	712
1:00	4	5	1	Three	158	127
2:00	0	5	5	Four	86	101
3:00	5	7	2	Five	164	183
4:00	8	10	2	Six	97	105
5:00	33	37	4	To	tal 1254	1228
6:00	73	87	14			
7:00	92	103	11			
8:00	78	106	28			
9:00	94	82	-12		!	
10:00	89	94	5		1	
11:00	107	97	-10			
12:00	106	74	-32			
1:00	78	95	17		!	
2:00	86	102	16	**		
3:00	99	102	3			
4:00	103	82	-21			
5:00	69	52	-17			
6:00	52	32	-20			
7:00	27	25	-2			
8:00	25	14	-11			
9:00	7	6	-1		1	
10:00	10	9	-1			to the more on to a reason and account
11:00	7	4 :	-3			
Total	1254	1233	-21			

## South Berwick - Route 236 South of Academy/Vine

	Vehic	les by Hour		* Tota	l Vehicles by (	Class
Time	Wednesday	Thursday	Change		Wednesday '	<b>Thursday</b>
0:00	0	1	1	Two	372	362
1:00	1	2	1	Three	163	226
2:00	1	5	4	Four	80	95
3:00	2	4	2	Five	137,	159
4:00	8	8	0	Six	57	66
5:00	13	13	0	Tota	1 809	908
6:00	35	63	28		1	
7:00	47	65	18		!	
8:00	58	87	29	•		
9:00	50	79	29		i :	
10:00	65	64	-1		1	
11:00	70	89	19			
12:00	74	78	4			
1:00	77	69	-8		!	
2:00	60	66	6			
3:00		64	-4			
4:00		62	6	*		
5:00		28	-24			
6:00		26	1		ļ	
7:00	15	17	2			
8:00	14	8	-6			
9:00		3	-6			
10:00		5	0			
11:00		2	0			
Total	807	908	101	\$.A		

Berwick - Route 4 north of Blackberry Hill Rd

Г	Vehic	les by Hour		Total	Vehicles by	Class	
Time	Wednesday		Change	Class		Wednesday	Thursday
0:00	0	1	1	Two		306	358
1:00	2	3	1	Three		158	157
2:00	3	6	3	Four		109	101
3:00	3	4	1	Five		120	166
4:00	11	12	1	Six		44	43
5:00	16	13	-3		Total	737	825
6:00	41	58	17				
7:00	57	67	10				
8:00	45	91	46				
9:00	56	66	10				
10:00	63	72	9				
11:00	66	76	10				
12:00	65	76	11				
1:00	75	67	-8				
2:00	50	55	5				
3:00	50	43	-7				the same of the same same to the same of the same same
4:00	45	46	1				
5:00	38	26	-12	*			
6:00	18	16	-2	44			
7:00	13	10	-3	7.			
8:00	6	6	0		:		
9:00	6	<b>1</b> i	-5				
10:00	3	6	3		•		
11:00	5	4	-1				
Total	737	825	88	21			•

### North Berwick - Route 9 at the Wells town line

	Vehic	les by Hour		Tota	d Vehicles by	Class
Time	Wednesday	Thursday	Change	Class	Wednesday	Thursday
0:00	0	2	2	Two	248	268
1:00	1	4	3	Three	260	239
2:00	3	3	0	Four	139	129
3:00	3	2	-1	Five	132	162
4:00	8	5	-3	Six	67	91
5:00	11	14	3	Tota	d 846	889
6:00	44	64	20			
7:00	61	70	9		!	
8:00	97	101	4			
9:00	94	80	-14			
10:00	78	96	18			
11:00	80	87	7			
12:00	66	84	18		1	
1:00		70	-2		:	
2:00	74	63	-11			
3:00		53	-6			
4:00	30	<b>36</b> :	6			
5:00	24	23	-1			
6:00		12	-4			
7:00	9	8 ;	-1		:	
8:00	6	7	1			
9:00	· · · · · · · · · · · · · · · · · · ·	1	-3		:	
10:00	3	3	0			
11:00	4	2	-2			
Total	847	890	43			

Lebanon - Route 202 east of the N.H. state line

<u> </u>	Vehic	les by Hour				Total	Vehicles by	Class
Time	Wednesday	Thursday	Change		Class		Wednesday	Thursday
0:00	8	3	-5	1	Two		267	327
1:00	8	5	-3		Three		72:	71
2:00	11	7	-4		Four		88	115
3:00	8	10	2		Five		217	233
4:00	19	19	0		Six		56	68
5:00	18	22	4			Total	700	814
6:00	36	44	8					
7:00	43	55	12	T)A				
8:00	<b>5</b> 8	51	-7					
9:00	58	51	-7			:	:	
10:00	53	85	32			:	:	
11:00	57	60	3					
12:00	44	52	8			, !		!
1:00	40	61	21					
2:00	51	53	2					
3:00	45	48	3					
4:00	35	55	20					
5:00	35	42	7			:		
6:00	13	24	11					
7:00	21	25	4	24		į		
8:00	13	19	6					
9:00	12	11	-1					
10:00	5	2	-3			:		
11:00	9	8	-1			i		
Total	700	812	112					

### Maine Turnpike Commercial Vehicle Travel Summary September 1&2, 1999

Location	D-1-	Vehicle	 											Tir	ne												Dally
LOCATION	Date	Class	12:00am	1:00am	2:00am	3:00am	4:00am	5:00am	6:00am	7:00am	8:00am	9:00am	10:00am	11:00am	12:00pm	1:00pm	2:00pm	3:00pm	4:00pm	5:00pm	6:00pm	7:00pm	8:00pm	9:00pm	10:00pm1	1:00pm	Total
		2	1	1	3	4	6	10	16	24	29	23	30	30	30	30	21	29	23	18	13	9	11	5	4	4	374
		3	7	7	9	9	13	12	24	22	34	40	31	30	63	39	48	40	52	25	27	24	19	18	14	11	618
		4	1	5	6	6	17	12	35	31	48	57	50	58	51	42	37	49	37	23	30	19	26	31	30	40	741
	01-Sep-99	5	73	94	78	116	103	163	187	166	198	195	318	289	248	257	264	227	232	240	180	150	169	139	102	115	4303
		6	1	1	3	4	6	10	16	24	29	23	30	30	30	30	21	29	23	18	13	9	11	5	4	4	374
Between		Total	83	108	99	139	145	207	278	267	338	338	459	437	422	398	391	374	367	324	263	211	236	198	154	174	6410
Exit 1 & 2		2	1	3	3	5	8	9	13	19	27	28	32	31	34	29	31	32	25	17	16	10	9	10	7	3	402
		3	3	3	5	9	6	7	12	31	41	29	42	34	44	46	60	45	55	37	37	42	24	24	20	15	671
	02-Sep-99	4	5	12	15	11	14	15	25	- 26	30	35	58	56	44	50	61	41	52	42	26	27	26	18	18	11	718
	0%-28b-83	5	66	81	92	118	134	91	173	131	182	217	240	352	254	295	270	195	201	201	162	214	152	140	92	95	4148
		6	3	13	11	5	5	11	21	5	40	21	27	35	27	11	37	21	16	21	29	11	5	. 5	16	13	409
		Total	78	112	126	148	167	133	244	212	320	330	399	508	403	431	459	334	349	318	270	304	216	197	153	137	6348
		2	1	111	3	4	7	11	17	25	31	24	31	32	31	32	22	31	24	19	13	10	12	6	4	4	395
		3	8	8	10	10	16	14	28	26	40	47	36	35	74	45	56	47	61	30	31	28	22	21	17	13	723
	01-Sep-99	4	1	5	6	6	17	12	35	31	47	56	50	58	51	42	37	49	37	23	29	19	26	31	29_	40	737
	0. OUP 35	5	69	89	74	110	97	154	177	157	187	184	301	273	235	243	250	214	220	227	170	141	159	132	96	108	4067
		6	8	11	5	11	8	14	30	30	30	27	27	41	19	30	33	16	8	19	0	3	3	8	5	5	391
Between		Total	87	114	98	141	145	205	287	269	335	338	445	439	410	392	398	357	350	318	243	201	222	198	151	170	6313
Exit 2 & 3		2	_2_	4	4	5	8	10	14	21	29	31	35	34	37	32	34	35	28	19	17	11	10	11	8	4	443
		3	3	3	6	10		8	14	35	45	33	46	38	48	51	66	50	61	42	42	46	27	27	23	17	748
	02-Sep-99	4	5	12	15	11	14	15	24	26	29	34	56	54	43	49	60	39	50	40	26	27	26	17	17	11	700
		5	63	76	87	112	127	86	164	124	172	204	226	333	240	278	255	184	189	189	153	202	143	132	87	90	3916
	1	6	3	13	11	5	5	11	21	5	40	21	27	35	27	11	37	21	16	21	29	11	5	5	16_	13	409
	<u> </u>	Total	76	108	123	143	161	130	237	211	315	323	390	494	395	421	452	329	344	311	267	297	211	192	151	135	6216
	l	2		2	4	6	11	18	29	42	51	40	52	53	52	53	37	51	41	31	22	16	20	9		6	654
	İ	3	10	10	14	14	20	19	37	34	52	61	47	46	96	59	73	61	80	39	41	37	29	27	22	17	945
	01-Sep-99	4_	11	6	7		18	13	38	33	52	61	54	63	56	46	40	53	40	25	32	21	28	33	32	43	802
	1	5	71	93	77	114	101	159	184	162	194	191	312	283	243	252	259	222	228	235	177	147	165	137	100	112	4218
_		6	10	13	6	13	10	16	36	36	36	32	32	49	23	36	39	19	10	23	0	3	3	10	6	6	467
Between		Total	93	124	108	154	160	225	324	307	385	385	497	494	470	446	448	406	399	353	272	224	245	216	167	184	7086
Exit 4 & 5		2	2	6	6	- 8	13	16	22	32	46	48	54	53	58	50	53	55	43	29	27	17	15	16	12	5	686
	]	3	4	4		13	9	10	18	46	60	43	61	51	64	67	88	66	81	55	55	61	36	36	30	22	987
	02-Sep-99	4	6	13	16	12	15	16	27	28	32	37	62	60	47	54	66	43	55	44	28	29	28	19	19	12	768
		5	65	79	90	116	131	89	169	128	178	211	234	344	248	288	264	190	196	196	158	209	148	137	90	93	4051
		6	3	17	13	7	7	13	27	7	50	27	34	44	34	13	47	27	20	27	37	13	7	7	20	17	518
	ine Turnpike	Total	80	119	132	156	175	144	263	241	366	366	445	552	451	472	518	381	395	351	305	329	234	215	171	149	7010

<sup>\*</sup> Source: Maine Turnpike Authority and HNTB

#### Notes:

<sup>\*</sup> Vehicle Class Description:

<sup>+++</sup> Class 2 · Two axles, six lires

<sup>+++</sup> Class 3 - Three axles

<sup>+++</sup> Class 4 - Four axies
+++ Class 5 - Five axies

<sup>+++</sup> Class 6 · Six axles

<sup>\*</sup> The times listed represent the beginning of the hour. For example, the column laceled \$ 00pm\* represents vehicles that were traveling between \$:00pm and 6:00pm

## APPENDIX J

**Bibliography of Reports Reviewed by Commission Members** 

## **Bibliography**

## Reports Reviewed By Commission To Review Traffic Congestion Including Truck Traffic along the Route 1 York Corridor and the Route 236 Corridor

Future	Traffic	Analysis

VHB/Vanasse Hangen Brustlin, Inc. Watertown, Massachusetts

1995

Kittery Area Comprehensive

Transportation Study

Southern Maine Regional Planning

Commission

Regional Transportation Advisory Committee Truck Route Report

Greater Portland Council of

Perrional

Governments Southern Maine Regional

Planning Commission

September 1999

Report of Conclusions of a Study of the Feasibility and Impact of Operating the York Commercial Vehicle Weigh Station on a Full Time Basis Maine Department of Public Safety Bureau of Maine State Police January 1996

Route 236 Land Use and Transportation Study

Southern Maine Regional Planning Commission for the Kittery Area Comprehensive Transportation

March 1999

U.S. Route 1 Corridor Traffic Analysis, Wells-Ogunquit

Wilbur Smith Associates

Committee

March 1993

Weight Station Diversion Study

Kittery Area Comprehensive Transportation Committee

November 1999

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