



# Rockingham Planning Commission

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## MEMORANDUM

**TO:** *Jeff Brillhart, P.E., Director of Project Development, NHDOT  
Bill Cass, P.E., Project Manager, NHDOT  
Marc Laurin, Sr, Environmental Manager, NHDOT*

**FROM:** *Cliff Sinnott, Executive Director*

**DATE:** *November 12, 2002*

**SUBJECT:** *Comments on I-93 Interstate Improvements Draft EIS*

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### **I-93 PROJECT BACKGROUND**

*The I-93 Expansion project was begun more than a decade ago, in 1991. Its purpose was improve an existing interstate corridor that was and remains seriously deficient relative to capacity and safety. For a variety of reasons, most relating to the need to develop modeling capacity to test alternative transportation scenarios in the corridor, the project was halted for most of a decade before beginning again in 1998; the public process did not begin again until early 2000. The issuance of the Draft EIS in late September was preceded by the publication of several documents. These included: 1) the project Scoping Report (where major issues to be considered in the EIS are defined) in May 2000; 2) a Rail Alternatives Evaluation Report in November of 2000; 3) the Rationale Report (which defined the set of project alternatives to be studied in the EIS) in January of 2001; and finally 4) a Secondary Impacts Report (which estimated the additional growth that will occur in a broad corridor area if the project is completed) in December of 2001. Assuming successful completion of the Final EIS and issuance of all permits required, construction on the project is scheduled to begin in 2004, and be completed, at the earliest, in 2010— nearly 20 years after it began, and at least that many after it was needed.*

*The MPO has been a strong supporter of the project from the beginning, believing that it is long overdue and needed to address long-standing deficiencies in the highway. This is a project that will, in effect, address growth in traffic and growth in development that has already occurred in the corridor. We support the project and believe it should happen as soon as possible, with a premium placed on minimizing any further delay. At the same time we have advocated building into the project aggressive transit alternatives, believing that they are necessary to move us toward a more balanced transportation system overall and allow the region to maintain conformity with the State's mobile source emissions budget established in the State Implementation Plan for air quality attainment. The latter is a strict legal requirement under the Clean Air Act, with which we must comply or risk losing access to Federal transportation funds. Lastly, although we do not believe that the expansion of I-93 will alone be the "cause" additional growth in the corridor, certainly it will make that growth more possible, more likely, and of greater magnitude than would otherwise be the case. Therefore we would propose a partnership of effort between local governments, conservation organizations and the NHDOT to come together and share in the responsibility of managing and directing the growth that has occurred, is occurring and will continue in this corridor.*

## KEY ISSUES AND MPO POSITIONS

### Environmental Stream Lining

The I-93 project is one of, if not the, first major highway project in the country to be the subject of environmental stream lining. Environmental stream lining is intended to shorten the typical timeframe required to fully permit a major infrastructure project by ensuring early coordination among all Federal and State permitting agencies. The stream lining process created a high level "Board of Directors" to oversee this coordination effort. The idea, as we understand it, is to attempt to resolve potential conflicts early in the process and to coordinate the timing and prerequisites for permits to foster a smooth flow of project milestones. Our one complaint is that the MPO was not part of the process. Technically, the MPO does not fit the definition of a participant: federal or state agencies with permitting authority over the project. On the other hand the MPO must eventually agree to include the permitted project in our TIP, and in that sense we also must "approve" the project. Technicalities aside, we feel the process would benefit from MPO participation. We are the natural middle ground between project proponents and environmental advocates, and might have played a constructive role in bridging the differences that developed. Our recommendation is that MPOs be included as participants in environmental stream lining in any future projects where it is applied.

### Rail Alternative

The decision made by the NH DOT not to carry forward a project alternative for commuter rail has been controversial. Many observers and participants in the process expected that it would be considered since the highway parallels an existing abandoned rail line. The decision to omit this from the EIS alternatives was made based on a Rail Alternatives Evaluation Report, which concluded that, no matter how successful rail service was likely to be, it would not remove enough traffic from I-93 to meet the purpose and need of the project.

We agree with this assessment for two reasons:

- The ridership data shows that commuter service would not measurably change the congestion that exists on I-93 today, let alone what it would be in 2020. Even a doubling or tripling of the study's ridership estimates would not alter this conclusion.
- The rail alternative requires much more careful and extensive study in its own right as a stand alone project. This is not something that could be adequately accomplished within this EIS. We have advocated for nearly two years that, it be treated instead as the subject of a parallel study to determine first, whether rail service is the best transit alternative in the corridor, and second whether the in corridor or Lawrence-Manchester line alternative is preferable. Including it would have significantly delayed the preparation of the EIS, even though the outcome in terms of effectiveness as an alternative was already known.

That said, the rail alternatives analysis appears to have a number of flaws, especially in the assumptions used to forecast ridership. In estimating rail and bus ridership, the DEIS makes a series of assumptions about the cost of driving relative to using transit. These include an incremental cost of driving of \$.20/mile, and an average cost of parking in Downtown Boston of \$.50/day.

Based on information from the Artery Business District Transportation Management Association (TMA), which provides commuter transportation consulting to Boston downtown businesses, current downtown parking prices range from 60% to 400% higher than estimated in the DEIS. Parking in the

Seaport District, the cheapest in downtown Boston, averages approximately \$8.00/day, while parking in the financial district ranges from \$18.00-\$22.00/day.

Regarding marginal cost of driving, for 2002 the American Automobile Association (AAA) estimates the national average cost per mile to drive at \$0.45. A more conservative "perceived" per mile cost is \$0.30, which is the current state and federal reimbursement rate.

The study includes a limited sensitivity analysis of how ridership (on East Rail Service only) would change with parking costs of up to \$15.00/day, and per mile costs of up to \$0.25. The sensitivity analysis found that ridership more than doubled from 957 to 2,126 with a parking cost of \$15.00/day. However, the analysis does not look at cost higher than \$15.00/day for parking or \$0.25/mile; nor does it assess these changes in tandem, look at transit alternatives beyond the East Rail, or look at future costs and ridership projections for 2020.

The effect of these flaws is to underestimate the ridership potential, especially that of the Lawrence-Manchester line service. Although higher ridership estimates would not, in our judgment, have made commuter rail a viable alternative to widening I-93, they might have affected the determination that a widening to four lanes rather than three north of Exit 3 is needed. More accurate estimates would also build a stronger case for funding rail and ongoing bus service to address future need in the corridor.

Both Commissioners Murray and Kenison have stated that any future expansion to the I-93 corridor will have to be accomplished through alternative transportation, and not through additional road widening. The NHDOT has indicated their support in conducting a future transit alternatives study of the I-93 corridor (in conjunction with Massachusetts) to determine what rail alternative or other transit alternatives will be feasible and most effective. We strongly support this study and consider it to be high priority for transportation planning in this corridor.

In summary, we agree with the decision not to carry the rail alternative forward as part of the preferred alternative. However, we believe the DEIS should contain a firm commitment by the NHDOT to proceed with the transit alternatives/feasibility study for the corridor, and should specify a general timeframe for completion. The purpose of the study should be to carry out a detailed analysis and feasibility study of various transit alternatives to address future travel demand and growth in the corridor.

#### **Transportation Demand Management & Transit**

The preferred alternative includes what the DEIS refers to as both "Expanded" and "Enhanced" bus service. The Expanded bus service is an expansion of the existing Concord Trailways intercity commuter bus schedule that currently serves the Exit 4 Park & Ride in Londonderry. This service would be expanded to headways of 30 minutes all day on weekdays and 60 minutes all day on weekends. Additional stops will be added at newly constructed Park & Ride lots at Exits 5, 3, and 2. To limit the total trip time, no individual bus would stop at more than two of the four Park & Rides.

The Enhanced bus service will be a commuter service connecting Park and Ride lots at Exits 5, 4, and 3 to employment centers in Northern Massachusetts at Exits 45 (River Road), Exit 42 (Dascomb Road), Exit 38 (Route 129), and Exit 37 (Anderson Transportation Center in Woburn).

The DEIS ridership projections indicate these to be the most effective of the transit and TDM measures considered. They are consistent with the type of commuter-oriented projects the MPO has supported in the past. We believe they are important traffic growth mitigation components to the I-93 project and should be integral to it – that is, considered a formal part of the project with full commitment to

implement. In general more detail is called for in the DEIS about how and when these alternatives will be implemented. We have a range of questions and concerns regarding these services as defined:

- 1) Funding for Operations: First and foremost is the question of how these services will be paid for. The DEIS does not indicate where funding for either service will come from. Nor does it indicate whether funding will be ongoing or available only as a mitigation measure during construction. This should be clarified, and a commitment made by NHDOT to dedicate ongoing funding for both services. Also, while the language of the DEIS suggests that NHDOT's commitment to the Expanded bus service is firm, the DEIS indicates that the Enhanced bus service will be implemented "as practicable." The implications of this are not clear, and a clear commitment should be spelled out.
- 2) Funding for Marketing: A lack of adequate marketing, due in part to a general lack of available non-federal match for transit funding, has been a problem for many commuter transit services in the state. The DEIS should spell out a commitment to develop and fund implementation of a strong marketing program for transit service in the corridor. More broadly, we recommend that transit and TDM measures be planned for, implemented and marketed as a coherent package so that the critical mass of services and "message" can be reached to effect behavior.
- 3) Headways & Use of Buses: It is unclear from the DEIS whether the 30 minute headways for the Expanded bus service apply for each Park & Ride lot, or to the overall bus service. If 30 minutes applies to the service as a whole, service to any one Park & Ride lot will be only every 60 minutes. Headways of 60 minutes are inadequate for commuter bus service. NHDOT should clarify this point and ensure that peak hour headways at each Park and Ride are not greater than 30 minutes.

Outside of commute hours, buses running on 30 minute headways are not likely to be very productive through the middle of the day. Longer mid-day headways may not decrease the number of buses needed, given short commute-hour headways, but more cost effective use of some buses may be possible mid-day. Some options include 1) bringing some buses back to NH to provide transit service in the Derry-Salem corridor, 2) use of buses in Boston for charter work to offset costs, if FTA funds are not used for capital bus purchase; or 3) lay-over in Boston. On their return trips buses can also be used for reverse commute services for Massachusetts workers who work in retail jobs in NH.

- 4) Local Reverse Commute Service on Route 28: The potential should be examined for making use of the commuter bus services to provide reverse commute transit alternatives to Massachusetts residents travelling on I-93 or NH 28 to Salem (Exit 1 - major retail employment site; Exit 2 major manufacturing and business employment site).
- 5) Dedicated Busway: The joint New Hampshire-Massachusetts rail study described in the DEIS should be broadened to include assessment of a dedicated busway in the median to support Bus Rapid Transit service; as well as a more comprehensive analysis of the potential for HOV lanes in NH and Massachusetts.
- 6) Assumptions in Modeling Ridership: We have outlined a series of weaknesses in the transit ridership estimates as part of the rail discussion above. These concerns also apply to bus ridership estimates. As noted above, while the results of more accurate estimation would be unlikely to show that the widening project isn't necessary, they would build a stronger case for funding rail and ongoing bus service to address future need in the corridor.

7. Park and Ride Lots: We support the NHDOT's plan to construct park and ride lots in the corridor to support both the Expanded Bus service and as potential future rail stations. We ask however that Exit 1 be considered once again as a park and ride location due to the recent announcement by the Rockingham Race Track that this site will be redeveloped.

#### **Bicycle & Pedestrian Facilities**

The DEIS describes a multi-use path running 12 miles from Exit 2 to Exit 5 in the highway right of way. As shown in the conceptual design it would connect to each of the Park & Ride lots as well as local connector roads, and cost approximately \$8.4 million to construct. One concern with the current design is its close proximity to the interstate in many locations, and lack of barrier between the path and the roadway as shown in Figure 2.3-21. While this will not likely be a problem for some potential bike commuters it will raise safety concerns for others, the proximity to the interstate is not likely to provide an atmosphere that encourages recreational use.

NHDOT has contracted with Rizzo Associates and Alta Transportation to assess two other potential alignments for such a north-south bicycle route that would connect Salem to Concord. These include NH Route 28, and the Lawrence-Manchester rail right of way used as a rail-trail facility, or, as a rail-with-trail facility, should that alignment also be selected for rail service. Results of this study are expected in March 2003. We commend the NHDOT for including a bicycle facility in the project design, and support further study to determine the best type and location for this facility.

#### **Traffic Management/Congestion Mitigation During Construction**

The DEIS does not appear to adequately address the impact of traffic diversion and congestion that can be expected to occur during the active construction of the highway expansion. It is likely that some motorists normally traveling on I-93 will seek to avoid perceived construction related delays and divert to local roads, especially NH 28 and the interconnecting east-west roads (Rockingham Boulevard, Pelham Road (NH 97) NH 111, and others such as South and North Lowell Roads, and well as Londonderry Rd.) This is a major concern of both Salem and Windham. Salem has taken steps to prepare for this by proposing to build a Town-wide traffic management system which will enable the Town to monitor and adjust traffic signal timing and other flow control to respond to increased local traffic. The PE portion of this project has been approved for CMAQ funding and an earmark for federal funding is proposed in the federal transportation appropriation bill for FY03. Windham has been considering how to augment their emergency response capabilities to deal with the expected increased call volume from incidents on I-93.

The DEIS does describe the possible and proposed use incident management and ITS technology in managing pre-, during and post-construction conditions in the corridor. However, it is not clear whether or which of these will be implemented to manage construction related traffic congestion. We recommend that additional attention be given in the Final EIS to the localized impacts of construction related congestion, and where specifically pre-construction roadway alterations will be needed to accommodate altered traffic patterns. The Final EIS should also specify how Salem's town wide traffic management system should be integrated with construction mitigation measures planned by the NHDOT. Finally, NHDOT should ensure that the active construction phases of the I-93 improvements near Exits 2 and 3 are timed not to overlap active construction of the NH 111 Bypass.

#### **Lane Configuration**

The Rationale Report issued in January 2001 stated that from a Level of Service (LOS) perspective, four lanes or more are justified for the southern portion of the study area (Exit 3 south). Using the

operational analysis criteria of looking for a LOS of "D" or better during peak hour, it also states that a fourth lane is not necessary north of Exit 3 (page 4-4). The DEIS preferred alternative is to construct 4 lanes in each direction for the entire length of the project, including north of Exit 3. While we understand the "common sense" reasons for this (it is less costly both in time and money to construct the 4 lane now than at some future point when it may be needed; most if not all of the roadbed required for the fourth lane will be built as part of the temporary travel lanes required to maintain two open lanes during all phases of construction), the decision raises a number of questions which should be considered:

1. How soon after project completion would the 4th lane be justified, according to the criteria used in the rationale report?
2. What are the additional environmental impacts of retaining the width required for four lanes?
3. What is the incremental cost of building the 4th lane north of Exit 3 versus the 3 lane alternative?
4. If these additional costs are large, how will this affect the state's ability to move forward on other important projects in the regional and the state?

As the agency responsible for looking at regional transportation needs and priorities, the MPO must examine this project in context with other regional priorities. With financial constraint being a key consideration, it is important to make sure that the additional costs, as well as any additional environmental impact, are fully justified.

#### HOV Lane Alternative

Regarding the presence of an HOV lane, staff agrees with the NH DOT assessment that building a semi-separated HOV lane to the NH/MA state line does not make sense. However, we feel that the HOV alternative in general was dismissed without adequate study of a full range of scenarios. Specifically we recommend that an alternative should be studied which examines the feasibility and effectiveness of a shared HOV facility that extends from I-293 in Manchester to I-495 in Massachusetts. The recent study of I-93 improvement in Massachusetts conducted by the Merrimack Valley Planning Commission (MVPC) shows a large turnover in the traffic at the I-93/495 interchange. Many cars leave the I-93 corridor at that point, while others join, due to the large employment and population centers located both east and west of I-93 in the 495 corridor. Because of this, an HOV facility in New Hampshire that ends at 495 may have greater utility than the HOV options formally examined in the EIS. The decision to include 4 lanes for the length of the project may also improve the practicality of such a HOV facility – especially if it is a shared lane facility designated for HOV use only during peak hours and used as a general purpose lane at other times. This would make the facility more acceptable to the public, more flexible, and more easily changed if proven to be ineffective. We believe this additional HOV scenario warrants further study, either in the Final EIS, or as part of the broader transit alternatives study to be undertaken by both states.

#### Conservation and Planning Mitigation

Perhaps the most publicly controversial aspect of the DEIS is the proposal for "conservation mitigation;" It has been the most difficult for our agency to wrestle with as well.

We consider conservation mitigation to be land acquired for conservation purposes in addition to the "compensatory mitigation" required to mitigate for direct project impacts on wetlands and flood hazard areas. Conservation mitigation, which takes the form of the acquisition of land or development rights for use as conservation land, can help mitigate for the project's direct impacts on wildlife habitat, farm land, and aquifer recharge areas as well as for the project's secondary impacts which will occur

as an indirect consequence of the project. It appears that the NHDOT is willing to mitigate for direct impacts (including an amount over and above compensatory mitigation) but not for secondary impacts. The direct project impacts are approximately 100 acres of wetlands and floodplains. The mitigation package as presently proposed by the NHDOT would include 645 acres at eleven sites in the five immediate corridor communities at a cost of \$15.3M.

It was determined through the Secondary Impact Study that, as an indirect result of the highway expansion, approximately 35,300 more people will live and 15,700 more jobs will be added within the 23 New Hampshire towns by the year 2020. Looking at population, with no project, the New Hampshire communities were expected to grow by 101,376 or 27% by 2020. With the build scenario, the same communities are expected to grow by 136,690 or 37% by 2020. This additional growth will certainly have environmental impact on the affected area. This growth, in our view, is not be caused directly by the project, but rather by the region's propensity to grow, now induced to grow more by the removal of capacity constraints on I-93.

The EPA maintains that the project should include substantial conservation mitigation to address secondary impacts, reasoning that the additional development will inevitably result in additional impacts to wetlands, flood hazard areas, wildlife habitat and other resources. The EPA has proposed that approximately 2850 acres of additional conservation land be protected as part of an overall mitigation package, including areas both inside and outside the five corridor communities. The believes that the mitigation sites proposed by NHDOT are too small and too isolated to provide protection to the wetlands dependent species that will be impacted by the project. In addition to direct impacts, they believe the package should include acquisition of ecologically important conservation lands to help preserve habitats and to mitigate for the secondary (growth related) impacts of the project, including impacts outside the immediate highway corridor.

The NHDOT has rejected mitigation of this magnitude, maintaining that their primary responsibility for mitigation is to address direct project impacts on wetlands, flood storage and water quality (as opposed to wildlife habitat impact and secondary impacts). While their mitigation "package" includes areas above and beyond "compensatory mitigation" they consider EPA's secondary mitigation recommendations to be invalid and believe their package is appropriate for the direct impacts of the project and that they are not required to mitigate for secondary impacts. The NHDOT also believes that mitigation sites, where available and suitable, should be located as close the project impacts as possible, and be distributed within the communities in rough proportion to the impacts made.

#### **MPO Position**

We are not qualified to judge whether or not secondary mitigation is required of this project if at all, and if so, at what magnitude. There is no question that the I-93 project will stimulate a substantial increase in the growth over that which would otherwise occur. Yet this project is primarily addressing a past deficiency in the highway. The growth that it would have brought if addressed 20 years ago is already here. I-93's expansion now will enable still more growth, but will not cause it per se. There are many other factors at work determining when and where growth occurs, as evidenced by a simple comparison with the I-95 corridor in NH.

One of our highest objectives as a planning Commission is to work toward the preservation of open space and functional ecological communities as this region continues to develop. To understate the situation, neither we nor our communities have been very successful so far in achieving this. Naturally we would be pleased to see the preservation of 3000 acres of ecologically important conservation land. To have large areas of ecologically important land acquired for conservation purposes would clearly be a great benefit to the communities and the region.

*We see the distinction between direct and indirect impacts, compensatory and conservation mitigation to be largely a technical one, and perhaps not all that important in the long run. We view EPA's and NHDOT's respective positions on this issue to be different more in degree than in type. EPA's recommendations appear to exceed what has been mitigated for in comparable projects in New England; yet other highway projects in New Hampshire have involved considerably greater mitigation than offered here. The NHDOT is increasingly asked to look beyond direct transportation needs and impacts in the development of its projects and to consider the needs of communities from a broader perspective – and increasingly they have taken this broader view. We agree that a substantial mitigation effort is warranted but believe that the NHDOT should not be the sole bearer of this responsibility.*

*Our recommendation on this is simple: that the EPA and NHDOT each come back to the table and reach a compromise that will provide a significant but reasonable degree of mitigation for all communities involved. As a starting point we suggest that both parties go back to earlier position that both (apparently) nearly agreed to that would add \$5 million in additional funds allocated to conservation mitigation. We would further suggest these funds be provided on a matching basis, as in the model of the LWCF and LCHIP, with the match to be shared between the EPA, municipalities and land trusts or other private sources.*

*We commend the NHDOT for including a "planning mitigation" component to their mitigation package. Dramatically improved land use planning can have a far greater and ongoing effect on reducing impacts of development and preserving ecologically important lands. We encourage that additional emphasis, more detail, and stronger linkage in the overall mitigation package be placed on this measure. This planning assistance should be focused on helping communities to re-orient development patterns to emphasize a multi-density approach to development, trading off higher development densities in and around new and existing town and village centers with large areas of very low density development and open space protection in others.*

*Components of this assistance should include: ongoing training, education and outreach; assistance in the development of improved zoning ordinances, including multi-density zoning approaches, parcel specific open space plans, water resource management and protection plans, and highway access management plans; access to improved planning tools such as GIS, and GIS-based buildout analyses, and, for smaller communities, access to part time planning staff assistance.*

### *Closing*

*Lastly, we wish to commend the NHDOT on the sincere and largely effective effort they have made in working with the communities in the corridor to address their specific concerns. They have been extremely responsive on issues ranging from economic impact to noise to flood hazard mitigation etc. We continue to be strong supporters of the project, and are ready and willing to work with the Department and other agencies to help address the issues raised.*