

I-90 Interchange Study



I-90 Interchange Study Working Group Meeting No. 4

February 7, 2019 - 5:00-7:00 PM
District 1 Conference Room, Lenox, MA

Summary

Purpose: The fourth meeting of the I-90 Interchange Study Working Group focused on the results of the travel demand model on demographic projections, zoning, background growth and traffic diversion mapping. The team updated three interchange concepts and provided 3D versions of the concepts; and looked ahead at next steps for the study.

Present: Cassandra Gascon and Ethan Britland of the Massachusetts Department of Transportation (MassDOT) Office of Transportation Planning (OTP); David Derrig, Dave Patnaude, Jeff Toussaint, AECOM; and Nancy Farrell, Regina Villa Associates (RVA). The following members of the Working Group attended, with members of the public listed at the end of the notes:

Working Group Members

Betsy Andrus, Southern Berkshire Chamber of Commerce
William Caldwell, Town Administrator, Becket
Jim Consolati, Tyringham Board of Selectmen
William Elovirta, Selectman, Becket
Peter Frieri, District 1 Alternate
Francesca Hemming, District 1
Joshua Garcia, Blandford Town Administrator
Colleen Henry, Lee Chamber of Commerce
Clete Kus, Berkshire Regional Planning Commission Alternate
Ray LaMotta, MassDOT
Rich Masse, District 2
Eric McVey, Town of Blandford
Jeanne LeClair, Economic Development, Hill Towns
Elizabeth Murphy, MassDevelopment
Kate Phelon, Greater Westfield Chamber of Commerce
Hardy Patel, MassDOT
Derek Poirier, Town of Otis, Highway Superintendent
Gary Roux, Pioneer Valley Planning Commission
Rebecca Stone, Otis Town Administrator
Kathe Warden, Chester Town Administrator

Introduction

MassDOT Project Manager Cassandra Gascon opened the meeting and welcomed the attendees. She said the team will be presenting results of the travel demand modeling, which are based on the updated

state model. Other agenda items included presenting updated Interchange concepts and next steps. She asked the participants to introduce themselves.

Nancy Farrell, RVA, asked the attendees to hold their questions until the end of the presentation. Members of the public will be able to ask questions during a comment period at the end of the meeting.

Traffic Modeling Data

David Derrig, AECOM, presented the traffic modeling data. (See the companion slides for additional details.) He said that the presentation shows travel demand across the study area in the 2040 Build and 2040 No-Build conditions. This information was developed from background traffic growth. The data includes growth at the borders of the study area; uses new demographic data projections from the Pioneer Valley Planning Commission (PVPC) and the Berkshire Regional Planning Commission (BRPC); and also incorporates local zoning as a projection factor. (See slide 3.)

Demographic projections were also produced. Slide 4 shows projected employment change between 2020 and 2040 in MA; Berkshire, Hampden and Hampshire Counties; and in the I-90 Study Area. The projection is negative for Hampden and Hampshire Counties (-0.26% for both) and is projected at -1.17% in the study area. The rate for the state is an increase of 2.33%.

Projected population change for the Study area (2020-2040) is 0.79% (with 6.44% projected for the state as a whole; see slide 5). Households are projected to grow by 11.36% statewide, with a growth of 6.45% for the study area (see slide 6).

As a part of the state model update, PVPC and BRPC identified Priority Development areas. The map on slide 9 shows the projected land use.

Mr. Derrig turned to a discussion of traffic diversion. The model estimates how many cars and trucks will be on the roadway in 2040 based on the demographic data cited above and projected regional traffic growth. For each interchange alternative, the model reassigns driving routes of both existing and new trips based upon origins, destinations and travel time. The model shows that some roadways will see more traffic and others will lose traffic. (See slide 10.)

Mr. Derrig showed a map of traffic diversion related to Alternative 1, Algeria Road in Otis. The data shows that traffic will decrease on some roadways, such as Route 20. Traffic from the northwest drives more directly to the Interstate on Route 8, and there is a similar pattern from the south (see slide 11). Mr. Derrig explained that the figures are trips per day. He was asked if the data differentiates cars from trucks; he said that data is not available at this level of presentation but will be in the final report. He cited a volume decrease regarding Route 20 near Bonny Rigg Road where the daily traffic volume is predicted to decrease by 25%. (See slide 11.)

Alternative 2, Blandford Maintenance Facility, again shows fewer trips on Route 20 based on better travel time options using other direct roadways. The team continues to look at the changes in travel patterns; at this level, the data is showing orders of magnitude near 1,000 vehicles. (See slide 12.)

Alternative 3, Blandford Maintenance Facility, is the current Service Plaza. It shows reduced traffic volume on Route 20, with increases on Route 23 and roads leading to the Interchange location. (See slide 13.)

The next set of analyses Mr. Derrig presented shows the volume of traffic diversion to both the on/off ramps of each potential interchange and diversion from the edges of the study area. The diagrams show the 2040 No-Build; 2040 Build; and the change in volumes at the exits on the west (Exit 2) and east (Exit 3) for each alternative.

- For Algeria Road, there would be 5,700 trips per day in four directions, which is the sum of on and off ramp trips. At exit 3, there would be 500-600 fewer trips per day using that Interchange, resulting in a potentially positive impact to Route 10/202. Mr. Derrig was asked if the difference would impact the on-ramp backup; he suggested there would be some change. Exit 2 in Lee would see similar reductions in trips observed at the exit 2 interchange. There might be some secondary impact reductions on traffic in Westfield and in Lee. (See slide 14.)
- For the Blandford Maintenance Facility, there would be 6,200 trips per day showing a slight increase in volume compared to the other alternatives. (See slide 15.)
- For the Blandford Service Plaza, the estimate is 5,700 trips per day, with a bigger reduction in trips seen at exit 3, which is closer to the proposed exit. (See slide 16.)

Mr. Derrig summarized the daily diversions of the new interchange locations (slide 17), which would attract an estimated 5,700 to 6,400 trips per day:

- Alternative 1, Algeria Road: 5,700 trips
- Alternative 2, Blandford Maintenance Facility: 6,400 trips
- Alternative 3, Blandford Service Plaza: 6,000 trips

For each alternative, the adjacent interchanges would see traffic reductions, with the changes at exits 2 and 3 estimated to be net reductions. Traffic patterns on local roads will also see changes. The new ramp volumes reflect a combination of new I-90 users and existing users choosing different travel routes. The table below from slide 18 summarizes the data. There is more of an impact on exit 3 than exit 2 for all alternatives.

	Alt. 1 Algeria Road	Alt. 2 Blandford Maintenance Facility	Alt. 3 Blandford Service Plaza
Diversion to:	5,771 trips/day	6,412 trips/day	5,922 trips/day
Diversion from:			
Exit 2, Lee	-64 trips/day	-346 trips/day	-134 trips/day
Exit 3, Westfield	-597 trips/day	-1,044 trips/day	-1,433 trips/day

Mr. Derrig summarized the changes in vehicle-miles traveled (VMT) and vehicle-hours traveled (VHT) based on reductions in time spent driving (slide 19).

- Reductions in vehicle-miles traveled (VMT) of 12,500 to 17,500 miles/day
- Reductions in vehicle-hours traveled (VHT) of 900 to 1,300 hours/day

Overall, reduced driving time results in significant annual benefits in VMT and VHT:

- There are fuel savings of 200,000 to 282,000 gallons/year (using EPA factors)
- 328,000-475,000 fewer hours per year are spent in vehicle travel time
- Greenhouse gas reductions of 1,775 to 2,500 metric tons/year

Updated Interchange Concepts

Dave Patnaude, AECOM, presented Interchange concepts that have been developed since the last meeting. In addition, using an engineering software, Jeff Toussaint presented 3 dimensional views of each alternative depicting the key features; it is not possible to share them online.

Alternative 1, Algeria Road: Mr. Patnaude detailed the following data for Alternative 1, Algeria Road, based on the finalized concept design:

- Wetland impacts: Less than 500 square feet (SF)
- Open space/Article 97 impacts: Approximately 3,100 SF
- ROW impacts: Approximately 17,000 SF
- Residences within ¼ mile: 7
- Potential property taking: 4 parcels (2 owned by the Commonwealth of Massachusetts)

Slide 21 shows a view of the concept and surrounding parcels. Slides 22 and 23 show features of the Interchange, including the I-90 bridge and piers (which would require reconstructing the bridge), and a steep grade from Algeria Road onto the existing I-90 eastbound emergency ramp.

Mr. Patnaude listed issues related to the concept and a cost estimate for the Interchange work:

- Bridge piers are a constraint
- High truck traffic component
- Construction estimate (not including ROW takings):
 - Interchange: Approximately \$26.3 million
 - Local Road upgrades: Approximately \$11.5 million
 - Algeria Road: 5.5 miles from interchange to Route 23 and to Bonny Rigg Road
 - Bonny Rigg Road: 1.25 miles from Algeria Road to Route 8
- Total: Approximately \$37.8 million

There are two private property takings associated with the location. There are issues related to the slope and the need to fill the steep grade along the access road (slide 24 provides the summary).

Alternative 2, Blandford Road Maintenance Facility: Mr. Patnaude introduced the issues related to this site (slide 25), including:

- Wetland impacts: Less than 500 SF
- Water resources impacts: Approximately 106,000 SF
- Open space/Article 97 impacts: None
- ROW impacts: Approximately 21,000 SF
- Residences within ¼ mile: 15
- Potential property taking: 2 parcels

Slides 26 and 27 show Chester Road views, which would require upgrades to serve vehicles exiting at this location. There are also questions about the Chester Road/Old Chester Road intersection and bridge. Mr. Patnaude listed the issues and cost estimates associated with Alternative 2 (slide 28), including:

- Condition of bridge over I-90

- Integration with existing maintenance function
- Construction estimate (not including ROW takings):
 - Interchange: Approximately \$19.4 million
 - Local Road upgrades: Approximately \$10.1 million
 - Old Chester Road: 4 miles from interchange to Route 23
 - Chester Road: 3.5 miles from interchange to Route 20
- Total: Approximately \$29.5 million

Alternative 3, Concept Design: Blandford Service Plaza, Blandford: Mr. Patnaude outlined the elements of Alternative 3 (slide 29), including:

- Wetland impacts: Less than 500 SF
- Water resources impacts: Approximately 106,000 SF
- Open space/Article 97 impacts: None
- ROW impacts: Approximately 21,000 SF
- Residences within ¼ mile: 15
- Potential property taking: 2 parcels

Photos on slides 30-33 depict the off-ramps to the service plaza, steep grades and low areas behind the plaza, internal activities at the plaza, North St. behind the service plaza and a drainage ditch and ledge also behind the service plaza. There are multiple points where they could be conflict to be resolved within the service plaza.

Mr. Patnaude noted this concept would require reconfiguring the service plaza and separating vehicle moves for safety reasons. He summarized the features and cost of the concept (slide 34), including:

- Condition of North Street bridge over I-90
- Integration with existing plaza functions
- Construction estimate (not including ROW takings):
 - Interchange: Approximately \$20.4 million
 - Local Road upgrades: Approximately \$13.6 million
 - Chester Road: 6.8 miles from interchange to Route 20 via North Street and Chester Road
 - North Street: 1.3 miles from interchange to Route 23 via North Street
- Total: Approximately \$34.0 million

Eric McVey, Blandford, suggested that one of the travel options from this configuration off Chester Road to take a direct line to Route 23 North would put drivers on a gravel road. He doesn't see the community paving the road. The team noted that the project is some time away, if built, and it wouldn't be MassDOT's intent to send drivers via an unpaved road; should that condition remain unchanged, work with GPS providers would be undertaken to direct them appropriately.

Next Steps

Cassandra Gascon said that the next step will be to complete the remaining future conditions analyses for local intersections, economic and health impacts and mobility. The team will draft a feasibility report for review, which may or may not include a recommendation. The next Working Group meeting will take place in the spring, with an Open House scheduled in the spring as well. The goal is to finish the draft plan in May. (See slides 36 and 37.)

Discussion

Ms. Gascon opened the discussion to the public.

Chris Bouchard, Becket Highway Department, expressed concern about Chester Road, its ability to accommodate more traffic, pressure on the town's highway department to maintain the roadway and plow it in the winter. MassDOT should look at all of the roads within a ten-mile radius and examine them for suitability to handle more traffic. Mr. Derrig responded that if the study moves forward and concept 2 is recommended, MassDOT will look at these issues in greater detail and would invest in improvements.

Rebecca Stone, Otis Town Administrator, suggested that some of the local road estimates are not accurate and the upgrades would have a higher cost.

A member of the audience asked if the presentation will be made available and how detailed is the model, as he didn't see many local roadways on the maps and is concerned about local bridges. Ms. Gascon said the presentation will be available within two weeks or perhaps sooner on the project website. Mr. Derrig said the model does not have every roadway in the state but includes primary roadways in the communities. If there are pathways that should be reviewed, the team can do so. The team is well aware of the posted bridges as well.

A member of the audience suggested that 5,000 trips per day will double or triple the demand on local roadways. Mr. Derrig reminded the audience that the 5,000 figure represents current trips that will be diverted to the proposed interchange locations based upon more efficient travel. The model is not estimating 5,000 trips on top of all of the current trips but showing the attraction of existing drivers to more desirable routes.

A member of the audience asked if the team members have driven the local roadways. Mr. Derrig said yes, the team has done so. But he appreciates any information that towns and residents have to share.

A member of the audience asked if the criteria that will be used to make a recommendation will be weighted? Ms. Gascon said the team hasn't reached that point yet. Will local communities vote on a preferred alternative? Ms. Gascon and Ethan Britland, MassDOT, said that public comments are taken into consideration in the decision process. The analysis is not complete yet, and there will be more opportunities to review the study this spring. If the project moves forward, there will be many more ways for the public to be involved, beginning with the environmental process.

A member of the audience suggested that bringing 5,000 more cars to the area will only create more traffic and will be bad for the environment. Ms. Gascon reminded the audience that these trips are already happening, they are not new, but they are being redirected, in most cases to roadways that link directly to the proposed Interchange location.

There was a question about improving public transit as opposed to building an Interchange. Mr. Derrig noted that the Interchange may provide space for a park-and-ride locations for carpooling or an intercity bus line. It would make sense to discuss other transit possibilities with the regional planning agencies.

Eric McVey, Blandford Selectman, noted that there are historic sites on North Street that are of concern for the Blandford Historic Society. Mr. Derrig thanked him and said that would be a subject for discussion going forward.

Bill Elovirta, Becket Selectman, asked if there will be public hearings in each town during the design phase. Mr. Elovirta noted he doesn't see a lot of interest in inter-city transit. Mr. Derrig reminded the audience that the study is currently at a conceptual level and there would be a separate outreach process beginning with an Environmental Notification Form (ENF) if it goes forward. There would be

coordination with the Conservation Commission, Planning Board and Board of Selectmen. Comments from this phase of work will be addressed in a future more detailed study, if the Interchange advances.

A member of the audience asked if there is a list of property owners who would be impacted and if they have they been notified. Mr. Derrig said it's too early in the process to begin such notice, as there is not a preferred alternative or set of alternatives. If the project advances, there would be further design considerations that may change the approach and the information is conceptual at this stage. The project team does have property information displayed on some of its more detailed resource mapping.

A member of the audience asked in the final report in May will include a recommended site. Ms. Gascon said it is too soon to know at this point. One or more alternatives could advance or there may be no recommendation.

Jim Adams, a property owner on Algeria Road, said that the study is not factoring in wetlands or safety issues. He noted the presence of a Girl Scout Camp in the area for years and suggested that 5,700 new vehicles per day would present a safety risk. Mr. Derrig thanked Mr. Adams and reminded him that the trips per day builds on current trips and does not represent thousands of new trips.

Kate Phelon asked if the Interchange would be incorporated in the new tolling system. Ms. Gascon said it has been taken into consideration, although the cost of a new toll station is not in each concept estimate. Ms. Phelon asked where the final report will go. Ms. Gascon said it will be shared with the public, across MassDOT and with the Legislature.

A member of the audience asked if MassDOT will disclose lobbying efforts regarding the study and if she will reveal contacts with legislators who are for or against the project. Ms. Gascon said the legislative members of the Working Group are a matter of public information and their comments are on the record in the meeting summaries. The project team also has received letters from interested parties that have been placed on file. The speaker asked when the project will happen. The team suggested it could take ten years to advance a concept, presuming that is the determination.

A member of the audience suggested that a portion of a potential travel route from the Algeria Road alternative is a snowmobile trail and the town is not likely to pave it. He suggested there will be a 30% increase in local traffic.

A member of the audience asked how quality of life fits into a decision. Many people moved to the Hill towns because they prefer the life style. This should be an important element in any decision. Ms. Gascon said that cultural impacts are part of the assessment and she appreciates the comment.

A speaker said that diverting traffic from Routes 8 and 20 was characterized as a positive result, when in fact those are the roads that traffic should be using instead of local roads.

A member of the audience suggested that the low growth rate predicted for the Hill towns is a reason not to add an Interchange.

A member of the audience said if this is supposed to help the Hill towns – how so? Ms. Gascon said she is interested in all opinions. There are benefits in travel time and savings in vehicle miles travelled and air quality.

A speaker suggested looking more deeply into environmental issues, including local woodlands and forests, Big Pond and other streams and lakes. Another audience member listed wildlife such as moose and bears who would be affected. Indian Lake was raised as another concern. When will people be notified of the plans? Ethan Britland said those issues would be addressed during project development, if it moves forward.

Gary Roux, PVPC, suggested that the team address the potential for growth around a new Interchange as a result of travel time and other improvements. Mr. Derrig said the team has talked to chambers of commerce and economic development agencies to start that conversation. There will be more information on economics at the next WG meeting. Mr. Roux asked if there could be comparisons to housing and development over the last 20 years? Mr. Derrig said this study is not going to be at that level of detail. At this point, the zoning maps show largely residential use.

Eric McVey suggested that the concept maps show more layers to include natural resources, demographics and other information of interest to the communities. Mr. Derrig said the concept maps were simplified at this meeting to show the site configurations, but going forward, he agrees that including more layers and issues is important.

Rebecca Stone said this meeting was a better format and she got a lot of information. She appreciates the idea of diverting traffic and reducing congestion on local roadways, which would ease her commute. She noted that the population of Otis swells substantially in the summer by 8,000 to 12,000 people and everyone is working around the longest exit gap on the turnpike. A Westfield full-time resident noted that there is a similar increase in his town (8,000-10,000 more homeowners) in the summer. He asked if the modeling is for peak periods or for the average? Mr. Derrig said the modeling is for average travel conditions, but that the project team has the information necessary to identify a seasonal adjustment.

Ms. Gascon thanked all of the participants and the meeting was adjourned.

PUBLIC ATTENDANCE

J.R. Adams, Algeria Road
Kevin and Nancy Cornell
Eileen Fitzgerald, Chester
David G. (illegible)
Rich Gallup
Matt Gamelli, City of Westfield
Jon Gould, Senator Hinds office
Edward Herbst, Algeria Road
Lynn Herzog
James Higby, Chester
Neil Toomey
George Townsend
Barbara Wacholder
Dave Waldron
K. Williams