I-91 Viaduct Study Working Group Meeting #3
August 6, 2015, UMass Springfield Center, Springfield MA

Summary

Purpose: The third meeting of the I-91 Viaduct Study Working Group provided an update on the existing conditions data collection effort of the consultant team, and introduced the Health Impact Assessment process led by of the Department of Public Health (DPH).

Handouts: Copy of the meeting agenda and PowerPoint presentation

Presentation: See the attendance list below; representatives of Massachusetts Department of Transportation (MassDOT) Office of Transportation Planning (OTP) and MassDOT District 2; the project study team led by Milone & MacBroom (MMI); and the following members of the Working Group:

- **Rana Al-Jammal**, Pioneer Valley Planning Commission
- **Michael Bolduc**, MassDOT District 2
- **Ann Burke**, Western Massachusetts Economic Development Council
- **Jennifer Carrier**, Capital Region Council of Governments
- **Jim Czach**, City of West Springfield
- **Jeanne Galloway**, West Springfield Board of Health
- **Eileen Gunn**, MassDOT OTP
- **James Hoey**, MassDOT
- **Rhonda Latney**, Resident of Springfield
- **Douglas Mattoon**, City of West Springfield
- **Jay Minkarah**, Develop Springfield
- **Catherine Ratte**, Live Well Springfield/Pioneer Valley Planning Commission
- **Margaret M. Round**, Massachusetts Department of Public Health
- **Gary M. Roux**, Pioneer Valley Planning Commission
- **Dave Stein**, Connecticut River Watershed Council
- **Kathleen Szegda**, Partners for a Healthy Community/Baystate Health
- **Nikki Tishler**, MassDOT OTP
- **Ben Wood**, Massachusetts Department of Public Health
- **Thomas Yarsley**

MassDOT Project Manager Ethan Britland opened the meeting and welcomed the participants. He reviewed the agenda for the meeting and noted that at the last meeting Working Group members requested an opportunity to be more involved in the alternatives development process, so the project team has arranged an interactive activity after the presentation. Mr. Britland noted that meetings are not typically planned during the summer, but due to a delay regarding demographic data availability,
this meeting was postponed by a couple of months. Mr. Britland asked members of the Working Group and consultant team to introduce themselves.

Mark Arigoni, Principal-in-Charge of MMI, summarized the data collection efforts to date. MMI is developing a TransCAD model by inputting the existing conditions and demographic data collected so far. Mr. Arigoni reviewed opportunities for the I-91 Viaduct Study, including reconfiguration of the highway and improved connections between the city and Connecticut River waterfront. Mr. Arigoni also reviewed transportation issues and constraints; at the last meeting MMI pointed out that there are only three connections between the downtown core and the Connecticut River.

Mr. Arigoni quickly summarized economic development/land use and environmental/public health issues and constraints. He introduced Van Kacoyannakis, MMI, to present new traffic/safety and planning data.

Mr. Kacoyannakis said the freeway segments in and around Springfield’s I-91 Viaduct were rated based on levels of service “A” (best) through “F” (worst) based on vehicle density (passenger cars per mile per lane). He stated that of the segments analyzed, the level of service was “C” or better for the morning peak periods, and called out segments that received a rating of “D”: I-90 eastbound west of Exit 5 (Chicopee) and I-90 eastbound west of Exit 4 (Chicopee).

Mr. Kacoyannakis explained that the study analyzed the traffic on a total of 42 ramps within the primary study area, and each ramp was graded similarly, based on traffic during the morning (AM) and afternoon (PM) peak periods. He highlighted the ramps that received a grade of “D” or worse, which included the I-91 southbound on-ramp from W. Columbus Ave (PM), the I-291 southbound Exit 2B off-ramp to Dwight Street (AM), the I-291 northbound Exit 2B off-ramp to Dwight Street (AM), and the I-291 southbound ramp to I-91 northbound (AM and PM).

Mr. Kacoyannakis noted that the study analyzed and rated a total of 16 weaving sections along I-91. He highlighted the weaving segments that received a grade of “E” or lower. The I-91 northbound exit 3 off-ramp (AM), the I-291 eastbound ramp from I-91 southbound (AM and PM), I-91 northbound between E. Columbus Ave on-ramp and exit 8 off-ramp (AM and PM), and I-91 southbound between W. Columbus on-ramp and on-ramp to Rt. 5 northbound (AM) all received a grade of “E.” I-91 southbound between W. Columbus on-ramp and Rt. 5 northbound on-ramp (PM hours) received a grade of “F.”

Mr. Kacoyannakis reviewed crash data for ten locations along I-91, which MMI is analyzing in addition to the crash data presented at the previous meeting for the primary study area. He noted that 50% of the intersections experienced a crash rate higher than the statewide average. He called out areas where the crash rates are higher than the statewide average, including at the Longmeadow Curve of I-91.

**Question: Can you review the A through F rating for segments of I-91, and does “F” mean failure or more delays?** Mr. Kacoyannakis explained that the rating is based upon the number of cars per mile per lane. The higher the number of cars per section during peak travel hours, the worse the rating. An “F” means there are significant delays and traffic congestion. Mr. Arigoni clarified that it is impossible to receive “A” ratings across the board, and that a rating of “C” can be perfectly acceptable in urban environments. Mr. Kacoyannakis also added that the reason it is crucial to study the ramps and weaving segments with poor ratings today is that 40 years from now, in a no-build scenario, the ratings will likely get worse.
Rebecca Augur, MMI, presented maps of existing zoning in Springfield, Agawam, and Longmeadow. In Longmeadow and Agawam, the zoning is primarily low-density residential. However, Springfield has a variety of zoning, including residential, commercial, industrial, and multi-use zones. Ms. Augur explained that the Riverfront Zone is intended to promote redevelopment. She presented a table of data on the types of uses, density of uses, and floor area ratios for each of Springfield’s zones.

Ms. Augur reviewed the socioeconomic projections from 2010 to 2040 in West Springfield, Springfield, Agawam, and Longmeadow. MMI staff will feed these data into the study’s traffic models. Western Springfield has the highest projected population growth, with much of the primary study area projected to grow approximately 9 to 10% in 25 years. Springfield also has the highest projected household growth compared to West Springfield, Agawam, and Longmeadow. The most common household type in much of the Primary Study Area is a one-person household. Employment growth is projected to be highest in Springfield, with strong growth (30-200%) in service sector employment.

Ben Wood, DPH Bureau of Community Health and Prevention, and Margaret Round, DPH Bureau of Environmental Health, introduced themselves. Mr. Wood began with a participatory exercise to introduce Health Impact Assessments (HIA). The exercise illustrated how health determinants and health behaviors lead to health outcomes. To start, Mr. Wood asked the group to provide examples of health outcomes (including childhood asthma, cardiovascular disease, and diabetes). Participants then suggested ideas of health behaviors (such as smoking, diet, and exercise), and brainstormed health determinants (jobs, air quality, housing, race, etc.).

Mr. Wood explained that the point of carrying out an HIA for the I-91 Viaduct Study (and any other transportation or planning project) is to identify and illustrate the relationships between, and consequences of, potential changes to the I-91 Viaduct and the health of the affected population. He stressed the importance of including community stakeholders, including Working Group members, in a transparent decision making process, and to inform the public throughout the study of potential health impacts.

Mr. Wood outlined the basic steps of an HIA; currently, the team is scoping to determine which health impacts need to be evaluated, and beginning to complete an assessment of the baseline health conditions.

Ms. Round explained that during the scoping stage, DPH works with stakeholders to help frame the scope of the HIA. Detailed data will be provided to members of an HIA Subcommittee of the Working Group. Ms. Round explained that the HIA is designed to work in tandem with the MassDOT transportation planning study. She stressed that DPH will be working closely with the consultant to share data and coordinate efforts as the HIA develops.

Ms. Round reviewed an example HIA flow chart that illustrated the various immediate impacts, intermediate impacts, and outcomes of a new transit-oriented development. Ms. Round presented the example of a change in the McGrath Highway structure in Somerville which caused various physical and
social changes, which in turn had impacts on public health. For example, a change in the highway structure leads to a change in sidewalk space, which affects mobility and connectivity, which leads to a change in access to open space, parks, and recreation, which impacts access and usability of public resources, which can lead to an increase in physical activity, which finally results in a change in cardiovascular disease and other health outcomes.

Ms. Round shared some data sources for a baseline health assessment of the I-91 Viaduct Study area, including Behavioral Risk Factors Surveillance System (BRFSS) data for Springfield and surrounding zip codes, as well as hospitalizations for asthma and heart attacks. DPH will carry out a comparative analysis of this data compared to statewide data.

**Question:** Thomas Yarsley asked if the zip code data refers to residents within the zip codes. Ms. Round responded affirmatively; the BRFSS data pertains to residents in the identified zip codes.

Ms. Round also noted that demographic census data is also crucial to the HIA, as well as the consideration of Environmental Justice populations, as defined by the 2010 Census.

Ms. Round reviewed the available baseline health datasets, along with their sources, that DPH will analyze as part of the HIA. DPH will work closely with MassDOT and MMI to ensure data consistency. Ms. Round provided examples of BRFSS data for two zip codes in Springfield and one zip code in Longmeadow and compared the obesity rates in each location. She reviewed the rates of hospitalizations for asthma and heart attacks in the towns of Agawam, Chicopee, Holyoke, Longmeadow, Springfield, and West Springfield, as compared to the statewide rate. She noted that pediatric asthma prevalence is higher than the statewide rate in the towns of Agawam, Chicopee, Holyoke, and Springfield.

Ms. Round and Mr. Wood concluded their presentation with a take home message: There are regional differences in health behaviors and outcomes in the study area that are meaningful for understanding the impacts of transportation projects, especially when looking at No-Build and different potential alternatives. The next steps of the HIA involve the establishment of an HIA Subcommittee made up of Working Group members. A meeting or conference call will likely be convened in September.

**Question:** Rhonda Latney asked if Ms. Round has looked at any other western Massachusetts HIAs, including the MGM Casino HIA. Mr. Wood and Ms. Round said they have reviewed the MGM Casino HIA and will review any other existing local HIAs as well.

**Question:** Rhonda Latney commented that the CO2 emissions reports she has read only analyze the air 40 feet above the street level, but she would be interested in an analysis of 5 feet and below to analyze childhood asthma resulting from car exhaust. She is concerned these impacts will be worse due to the MGM Casino project. Ms. Round said the analysis of air quality in the HIA includes vehicle emissions at the street level.

**Question:** Rhonda Latney asked if any HIA subcommittee participants will be paid. Ms. Round responded that no participants will be paid, but meetings will accommodate each member’s schedule as much as possible.

**Question:** Dave Stein asked about the Census data slide, specifically regarding Springfield’s median household income. Ms. Round explained that the slide was included strictly as an example of data
typically used in a health assessment. Data used will be consistent with that used by MassDOT and MMI for the rest of the study.

Mr. Britland provided some background about how MassDOT is shifting the way it conducts conceptual planning studies. Previously, studies have taken into account health data but have not made direct connections between transportation infrastructure changes and community health outcomes. Now, MassDOT and DPH are attempting to merge an HIA with the I-91 Viaduct Study. This enables MassDOT to more directly connect transportation planning decisions with health outcomes.

John Hammer, MMI, and Mr. Arigoni talked through a three-dimensional simulation of the I-91 viaduct existing conditions. Mr. Arigoni noted that the simulation allows for a visualization of the viaduct from all angles, which offers more than a two-dimensional map. This tool will be used to show the different alternatives later in the process.

Mr. Arigoni reviewed some previous studies of the I-91 viaduct, including a 1998 study by Vollmer Associates and a 2014 study by the Pioneer Valley Planning Commission. MMI will incorporate work from existing studies and ideas.

**Breakout Session:** Mr. Arigoni asked the meeting attendees to walk around the room and visit the four breakout stations: Transportation and Traffic, Public Health, Planning and Land Use Economics, and Connectivity. Each of these stations included maps, data displays, and the presence of MMI staff to discuss each of these issues with participants. After Working Group members participated in the breakout session, the larger group reconvened to review the main points discussed at each station.

At the Planning and Land Use Economics station, the group asked and answered questions about the data and what the data mean. Mr. Arigoni added that these data will be used to better understand the area and ultimately evaluate alternatives.

Mr. Kacoyannakis recapped the conversation at the Traffic and Transportation station. The group discussed connecting bike paths in Agawam, West Springfield, and along the Connecticut River. Working Group members drew lines on a map to indicate a more direct path I-91 could take through the region. The group discussed the option of keeping the existing alignment of I-91, and only fixing troubled areas to improve safety.

Mr. Arigoni noted that any changes to the viaduct would affect connectivity in downtown Springfield. The redevelopment of Union Station, upgrade of local passenger rail services, and relocation of Peter Pan Bus Lines to Union Station could open up downtown land parcels for redevelopment.

Ms. Round described conversation topics at the Public Health station: air quality, access to exercise, asthma, safety for traffic, demographics, residential areas, housing, and more. She added that the Casino project includes a planned children’s daycare center near the Viaduct that could be impacted. Mr. Arigoni said he will look into this further, and noted that the project team is meeting with Develop Springfield to be informed of development plans. Mr. Wood added that a No-Build scenario was discussed. Nikki Tishler, MassDOT, listed some additional stakeholders who should be involved in the study, including churches on Maple Street, residents of Springfield, the New North Citizens Council, and Armoury Quadrangle Civic Association, and the Western Massachusetts Refugee and Immigrant Consortium. Sarah Paritsky, RVA, pointed out that the neighborhood groups are already invited to
participate in the Working Group, and additional outreach will be conducted leading up to the first public meeting.

Mr. Arigoni and Mr. Britland concluded the meeting by outlining next steps. These include the fourth Working Group meeting, followed by a public meeting planned for the fall, and the first meeting or call of the HIA Subcommittee. Mr. Britland noted that presentation and summary will be available for download on the project website, and thanked everyone for attending.