# Memorandum for the Record Regional Transportation Advisory Council Meeting

January 9, 2019, Meeting Minutes

3:00 PM–4:30 PM, State Transportation Building, Conference Room 4, 10 Park Plaza, Boston

Tegin Teich, Chair, representing the City of Cambridge

## Meeting Agenda

### 1. Introductions

Chair Tegin Teich called the meeting to order at 3:00 PM. Members and guests attending the meeting introduced themselves. (For attendance list, see page 7.)

### 2. Chair's Report—T. Teich, City of Cambridge

T. Teich explained how it is core to the Advisory Council's mission to review and comment on the MPO's Long Range Transportation Plan (LRTP), the Transportation Improvement Program (TIP) and the Unified Planning Work Program (UPWP). For this reason, the Council will spend the next several months focusing on the three planning processes. First, the Council's 3C Committee will meet to discuss the three Universe of Projects included in the TIP and then later, to draft comment letters to the MPO. Afterward, the Council will vote whether to approve the letters. T. Teich reminded members that Jen Rowe had shared three Universe of Projects via email earlier this week and solicited questions from Council members.

Ana Cristina Fragoso suggested water taxis and electrification of the commuter rail as possible UPWP study topics. T. Teich noted that water taxis have been raised as an area of interest at previous Advisory Council meetings. She added that electrification of the commuter rail is part of Rail Vision.

## 3. Approval of Meeting Minutes

T. Teich made a motion to approve the minutes of the October 10, 2018, meeting (*posted*) and the motion carried. The minutes were approved with three abstentions.

## 4. Approval of Meeting Minutes

T. Teich made a motion to approve the minutes of the November 14, 2018, meeting (*posted*) and the motion carried. John McQueen noted that the location of the meeting should be changed to Boston City Hall. With that change, the minutes were approved with three abstentions.

- 5. Intermodal Warehouses in Massachusetts, *Bill Kuttner, Transportation Planner, MPO Staff*
- B. Kuttner thanked the Advisory Council for inviting him to speak and expressed his appreciation for the Council's engagement with his work during past visits.

Since 2014, the MPO's Freight Program has proactively addressed freight-related transportation issues. Annual funding has allowed MPO staff to look for planning and study opportunities. Efforts have included topical studies such as trucks in Everett and Chelsea and rest locations for long-distance truck drivers. Additionally, the Freight Program conducts stakeholder outreach and helps develop the MPO's freight model. B. Kuttner is currently collecting ideas for additional Freight Program activities.

The majority of domestic long-distance freight enters the Boston region by truck. However, some freight enters by rail and then is distributed locally by truck. This transfer occurs at commercial intermodal warehouses. In both cases, reliance on truck means that the Boston region's road congestion becomes freight congestion since shippers are internalizing elevated transportation costs.

The Federal Highway Administration (FHWA) has made a database of intermodal warehouses available to MPOs. While the FHWA database was a useful starting point, it needs to be reviewed and expanded on in order to understand the industry.

B. Kuttner used the FHWA database to identify ten commercial intermodal warehouses in Massachusetts. These warehouses have both road and rail access and provide value-added logistic services such as inventory management, local and regional pickup and delivery, and import-export customs compliance.

Barry Steinberg asked whether the intermodal warehouses were public or whether they served particular industries. B. Kuttner explained that they are for-profit businesses providing services to railroad operators. Some warehouses specialize in categories like consumer goods or food (the latter requires certification from the Food and Drug Administration).

B. Kuttner discussed three case studies in Wilmington, Woburn and Winchester, Devens; and Westfield. In these the case studies, B. Kuttner observed that commercial intermodal warehouses operate successfully with a variety of sizes and in diverse locations in order to provide value-added services to customers. Available and affordable land is a critical factor in warehouse siting. While different warehouses have different business emphases, they tend to partner with major railroads and capitalize on the economies of scale. (B. Kuttner's full report is available on the MPO website.)

#### Discussion

Marilyn Wellons asked about Amazon's freight logistics. B. Kuttner explained that Amazon probably does not use rail because they sell an incredible variety of smaller consumer goods. In contrast, Home Depot and Lowe's know they need to move particular products at a certain time of year in predictable (and often large) quantities. The controlled flow lends itself well to intermodal warehouses and their economies of scale.

J. McQueen asked whether double-stack trains run anywhere in Massachusetts and if there would be benefits to running more of these trains. B. Kuttner stated that double-stack trains do run to Worcester. However, the Norfolk Southern Railway runs through the eight-mile-long Hoosac Tunnel. A large investment would be needed to expand the tunnel to accommodate double-stack trains because the Hoosac Range is made of famously hard rock.

Robert McGaw explained that intermodal warehouses were sited to minimize the cost of local truck transport to Boston and to suburban commercial centers. B. Kuttner emphasized the impact of land values on the economies of freight transport and warehouse siting.

A. Fragoso asked whether the MPO's models could predict the impact on warehouses due to unforeseen circumstances, such as storms. B. Kuttner explained that the MPO's models do not approach that level of detail. The various freight operators, even those in competition with one another, tend to help each other out during crises.

Chris Porter asked whether MPO staff would do a case study about the proportion of goods arriving by rail within an industry. B. Kuttner expressed interest, while also acknowledging the Freight Program's staffing and budgetary constraints.

David Montgomery asked about data captured while preparing this report. B. Kuttner explained that, to date, all he has done is describe a business plan. Eventually, he would like to develop trip generation rates, survey warehouse owners, and recommend strategies for supporting the intermodal warehouse industry through transportation planning and policy.

Noting that the Governor's Commission on the Future of Transportation did not consider freight concerns, Len Diggens asked what the Commission was missing. He also asked how the region's growing population would impact the intermodal warehouse industry. B. Kuttner explained that intermodal warehouses are private, for-profit businesses. As such, they are forced to be highly efficient and to adapt to changes in transportation markets, property values, fuel prices, and roadway congestion. The Commission was not set up to make decisions about how intermodal warehouses operate. At the same time, the Commission could reflect on the market signals sent by its recommended policies and about how the industry might adapt to those.

- M. Wellons noted that despite recent delays in federal infrastructure funding, Congress passed funding for highways servicing an Amazon warehouse on the Ohio River. B. Kuttner explained that the Cincinnati region is a locus for air freight.
- 5. Comparing Large-Scale Transportation Mitigation Programs, *B. Kuttner, Transportation Planner, MPO Staff*
- B. Kuttner explained how the idea for this <u>study</u> about mitigation programs came from an <u>earlier study</u> about the capacity of road and transit facilities in the Boston region. MPO members wanted to understand how programs are mitigating increases in travel demand generated from new developments.
- B. Kuttner noted factors that complicate studies of mitigation programs. First, mitigation programs invite debate; stakeholders have strong opinions about how much mitigation is appropriate to require of developers. Second, development projects vary greatly in scale and context, and third, much of the analysis is necessarily qualitative.
- B. Kuttner described the analytical framework for this study. He began by selecting a sample of sixteen large and diverse developments and defined the local areas. He then calculated demographic profiles of each local area and related these profiles to the development impacts published by the Massachusetts Environmental Policy Act Office (MEPA). Finally, he described the mitigation programs mandated for each development.

Local areas are assembled from transportation analysis zones (TAZs), which are the geographical basis of the MPO's travel demand model set. TAZs are typically within 0.7 miles of a development. Local area population and employment data are then calculated. With this specific data, population and employment densities are calculated. The "combined density" of a local area is the sum total of residents and workers of a local area divided by the size of the local area in square miles. As a result, combined density reflects stresses on the local area's transportation system.

MEPA requires developers to submit project details for proposed developments, including the projected increase in population and employment. As examples, B. Kuttner stated that South Station Air Rights, with a combined density of 137,200, has projected increases of 9 percent and 2 percent in population and employment, respectively. Conversely, Westwood Station, with a combined density of 2,700, has projected increases of 84 percent and 150 percent. If a development has a large impact to the local area that cannot be eliminated, developers need to implement mitigation programs. These mitigation programs can include Traffic Systems Management (TSM), Transportation Demand Management (TDM), providing transportation services, and building new transportation infrastructure. T. Teich noted that in the City of Cambridge, developers would need to join the Charles River Transportation Management Association (TMA) or provide their own transportation service. B. Kuttner added that developers along Route 128 are required to join the 128 Business Council TMA.

- B. Kuttner noted several limitations of TSM. Traffic growth has made it more difficult to achieve roadway level-of-service targets, and moving drivers to transit increases stress on the transit system. Locally mitigated projects can also add congestion at distant locations, after vehicles leave areas where local congestion has been mitigated; congestion will ultimately increase when they enter the regional roadway network.
- B. Kuttner stated that all development projects are different. Activities and trip generation rates as well as transportation facilities in the local area all vary by project. Furthermore, "large" development projects range widely in actual size. Mitigation measures can be implemented in several ways: whether the projects are within a development, at the edge of a development, or at some distance from a development. Larger developments present more opportunities for mitigation; for example, Assembly Row in Somerville resulted in the Assembly Orange Line station, and the Boston Landing development resulted in the Boston Landing Commuter Rail station.

Increasing transit use depends on travel demand patterns and existing services and infrastructure. Moving drivers to transit is only feasible if local transit takes them in the direction of their destination. Regional mitigation practices recognize this caveat, and major transit investments are mandated only where viable opportunities exist. The Boston Landing Commuter Rail station, which is adjacent to the New Balance headquarters, has attracted substantial ridership. Notably, this ridership is not primarily New Balance employees, but rather Allston residents heading to Downtown Boston. This mitigation measure has alleviated other parts of the transportation network while also supporting workers from throughout the region.

As a case study for the mitigation process, B. Kuttner discussed Westwood Station. A four million square-foot development was approved in 2007 in Westwood and extensive mitigation was mandated. The proposed mitigation by developers was deemed adequate despite strong opposition in neighboring communities. Due to the recession, the original developer backed away from the project. Although new developers proposed a two million square-foot development instead, the already approved mitigation package stayed in place. Thus, the new plan was overwhelmingly approved at the Westwood Town Meeting, and the neighboring communities did not actively oppose the development.

Accommodating new demand for development is increasingly difficult, and even expansive mitigation programs are minimal when compared to regional transportation investment needs. Users of new developments generate a revenue stream by paying user charges such as fares, tolls, and gas taxes while also paying broad-based taxes on income and property. However, user charges and broad-based taxes are more closely aligned with transportation investment needs rather than mitigation programs because although mitigation programs may be successful locally, the programs do not largely impact statewide transportation needs. (B. Kuttner's full report can be found on the MPO website.)

### Discussion

A. Fragoso asked if any of the sixteen studied developments have incorporated Intelligent Transportation Systems (ITS), allowing B. Kuttner to study the data. B. Kuttner stated that while this was not part of his work, data collection (including ITS data) and analysis could be used to determine the success of mitigations efforts.

- R. McGaw stated that while developments are closely scrutinized prior to implementation, there tends to be little scrutiny following construction. He asked if any developers have been held accountable to promises made during project development and public hearings. B. Kuttner noted that certain elements of a development project, such as cost, are relatively simple to monitor. Other elements, such as TDM, are more difficult to quantify. Steve Olanoff noted that the Westwood Station development was built in pieces, and with each new proposed piece, the developer had to demonstrate that previous work met requirements. He also added that achieving TDM requirements has been difficult. T. Teich stated that when a developer is not meeting TDM goals, it becomes a conversation on how to get them into compliance, rather than simply "holding them accountable."
- J. McQueen observed that mitigation efforts have been more successful outside of government agencies. He noted that the Medical Academic and Scientific Community Organization (MASCO) in the Longwood Medical Area (LMA) and the Cambridge Redevelopment Authority in Kendall Square are examples. B. Kuttner noted that larger agencies have greater flexibility and the LMA has enough employees that MASCO can implement logical shuttle routes.

### 6. Old Business, New Business, and Member Announcements

T. Teich invited members to share announcements and also questions about the previously mentioned Universe of Projects.

## 7. Adjourn

With no announcements or questions, a motion to adjourn was made by T. Teich and seconded. The motion carried.

# **Attendees**

Member Municipalities	Representatives and Alternates
Belmont	Robert McGaw
Cambridge	Tegin Teich
Millis	Ed Chisholm
Needham	David Montgomery; Rhain Hoyland
Weymouth	Owen MacDonald

Citizen Advocacy Groups	Attendees
American Council of Engineering Companies	Fred Mosely
Association for Public Transportation	Barry Steinberg
Boston Society of Civil Engineers (BSCES)	Ana Cristina Fragoso
CrossTown Connect	Scott Zadakis
MassBike	Chris Porter
MBTA Ridership Oversight Committee (ROC)	Len Diggins
MoveMassachusetts	Jon Seward
Riverside Neighborhood Association	Marilyn Wellons
WalkBoston	John McQueen

Agencies	Attendees	
Three Rivers Interlocal Council	Steve Olanoff	
MassDOT	Maxwell Huber	
MBTA	Greg Thompson	

Other Attendees	Affiliation
Ed Lowney	Malden Resident
Dee Whittlesey	Boston Resident

# **MPO Staff/Central Transportation Planning Staff**

Matt Genova

Bill Kuttner

Jen Rowe