

DRAFT

**SECTION 61 FINDINGS
MASSACHUSETTS HIGHWAY DEPARTMENT**

PROJECT NAME: Naval Air Station Development Project

PROJECT LOCATION: Abington, Rockland, and Weymouth

PROJECT PROPONENT: South Shore Tri-Town Development Corporation
and
LNR South Shore LLC

EOEEA NUMBER: 11085R

I. Project Description

The Naval Air Station Redevelopment Project (the “Project,” or “SouthField”) is a mixed-use, smart growth, transit-oriented redevelopment of a Superfund site by a public-private partnership of the South Shore Tri Town Development Corporation (the Corporation or SSTTDC) and master developer LNR South Shore LLC (LNR), collectively referred to as the Proponents.

SouthField has been planned as an environmentally-sensitive, master-planned community with 2 million square feet of commercial space and 2,855 residential units built around a pedestrian friendly Village Center. The development includes a Science Park, a variety of residential neighborhoods with thousands of new homes, a recreation complex, and hundreds of acres of undisturbed open space. SouthField has officially been designated as one of 16 “growth districts” in Massachusetts by Governor Deval Patrick; these growth districts are targeted areas in which the Commonwealth has committed to work closely with the community and property owners to make the district “development ready” with respect to state permitting, local permitting, site preparation, infrastructure improvements, and marketing.

As part of the Project, a new East-West Parkway will be constructed. The Parkway is designed to facilitate regional travel and enhance public safety by establishing an east-west connection between Route 3 and Route 18; currently, there are no east-west highways connecting the major north-south arterials in this area and east-west connectivity opportunities in this area were precluded by the Navy when the Base was built.

The Parkway will be a new facility extending from Route 18 in the west to Weymouth Street/Reservoir Park Drive in the east. Connectivity to Route 3 will then be completed by a series of off-site “Connectivity Improvements” between Weymouth Street and Route 3, including intersection improvements at:

- ◆ Weymouth Street/Parkway/Reservoir Park Drive;
- ◆ Reservoir Park Drive/Hingham Street;
- ◆ Hingham Street/Commerce Road; and
- ◆ Hingham Street/Route 3 ramps (two locations).

The Connectivity Improvements also include the intersection of Parkway/Route 18 and limited widenings of Reservoir Park Drive and Hingham Street.

The locations of the Connectivity Improvements are shown on Figure 13.3-12 of the FEIR. The Connectivity Improvements are an essential part of the Parkway Project, and do not represent separate measures to mitigate impacts of the Parkway.

MassHighway will provide design review for the Parkway. It will be constructed by the Corporation. Bonds will be issued by the Massachusetts Development Finance Agency and secured by a general obligation pledge of the Commonwealth. The Project requires access permits from MassHighway for the intersection of the Parkway with Route 18, and for construction by the Corporation of certain improvements on State Highway Layout, particularly at the Hingham Street/Route 3 ramps.

MassHighway is or has also constructed intersection improvements at five intersections on Route 18 and Route 53 (enumerated in Section III.2, below), pursuant to a Phase I Waiver issued under MEPA. These improvements have been completed by MHD, and are not included in this Section 61 Finding. MassHighway also plans the widening of portions of Route 18 from Route 3 south to a point just north of Route 139; that Route 18 widening is a project having independent utility and is not included in this Section 61 Finding.

II. MEPA History

- ◆ An Environmental Notification Form (ENF) was filed with the Secretary of Environmental Affairs (the Secretary) on July 17, 2000. In May, 2002, the Corporation filed a Phase I Report requesting a Phase I waiver to develop a portion of the Project in advance of the completion of the EIR. This was granted on August 9, 2002. On December 15, 2005, a Notice of Project Change presenting changes in the Master Plan was filed with the Secretary. On October 16, 2006, a Draft Environmental Impact Report (DEIR) was filed, and on May 31, 2007, a Final Environmental Impact Report (FEIR) was filed. On July 18, 2007, the Secretary issued a Certificate stating that the FEIR adequately and properly complied with MEPA.

III. Overall Project Traffic Impacts

The Central Planning Transportation Staff (CTPS) conducted extensive regional traffic modeling of the project for the DEIR and FEIR, with a Study Area comprising 2,727 traffic zones

representing over 100 municipalities in eastern Massachusetts, including the seven communities (Weymouth, Rockland, Abington, Whitman, Norwell, Hingham, Braintree) in close proximity to the Base. The CTPS modeling process developed trip tables representing traffic between all of those zones.

III.1. The Parkway

In the design year (2030), CTPS modeling projects that average daily trips (adt) will be 36,500 vehicles for the western (four-lane) section of the Parkway and 30,800 vehicles for the eastern (two-lane) section. Morning Peak Hour trips from the Parkway exiting onto Route 18 are projected to be 835, with 1,071 vehicles entering onto the Parkway from Route 18. Corresponding volumes for the evening Peak Hour are 1,436 exiting and 1,181 entering trips. On the east end of the Parkway at Weymouth Street in 2030, morning Peak Hour trips exiting the Parkway are estimated to be 719, with 927 trips entering. Corresponding volumes for the evening Peak Hour are 1,230 exiting and 984 entering trips.

Capacity analysis was performed for the Parkway for year 2030, for the four-lane portion (east of Route 18) and the two-lane portion (west of Weymouth Street). Results are set forth in Tables 1 and 2:

Table 1 2030 Build Analysis – Four-lane Parkway East of Route 18

	Morning Peak Hour		Evening Peak Hour	
	Density ¹	LOS	Density	LOS
Eastbound	13.2	B	14.5	B
Westbound	10.3	A	17.7	B

¹ Vehicles per lane mile

² Level of Service

Table 2 2030 Build Analysis – Two-lane Parkway West of Weymouth Street

Morning Peak Hour		Evening Peak Hour	
v/c ¹	LOS ²	v/c	LOS
0.59	E	0.80	E

¹ Volume-to-capacity ratio

² Level of Service

In 2030, the signalized intersections of the two on-Base termini of the Parkway, and of the off-Base intersection of Reservoir Park Drive with Hingham Street, are expected to operate as shown on Table 3:

Table 3 2030 Signalized Intersection Capacity Analysis Results

	AM Peak Hour			PM Peak Hour		
	v/c	Delay (in seconds)	LOS	v/c	Delay	LOS
Parkway at Route 18	0.99	32	C	0.91	36	D
Parkway at Weymouth Street and Reservoir Park Drive	1.03	57	E	0.90	36	D
Reservoir Park Drive at Hingham Street	0.91	20	C	0.99	46	D

¹ Volume-to-capacity ratio

² Level of Service

III.2 Phase One Waiver Intersection Improvements

MassHighway has implemented its plans to reconstruct five key signalized intersections along the Route 18 corridor in Weymouth and Abington, improving safety and traffic operations at those locations. These five intersections, as well as others, were studied in MassHighway’s South Weymouth Access Study (August 2000) and were identified as locations requiring safety and capacity improvements. As noted in that Study, the normal regional traffic growth, without the redevelopment of the Base, will cause these five intersections to experience unsatisfactory levels of congestion. The South Weymouth Access Study Study identified and recommended critical improvements for each of the intersections.

Route 18 (Main Street) and West Street/Middle Street

At the Route 18 intersection with West Street/Middle Street, all four approaches have been widened to accommodate four lanes each. The approaches will contain exclusive left-turn lane, two through lanes, and one exclusive right-turn lane. A new traffic controller, new signals with pedestrian accommodations, and new bicycle loop detectors are provided at this location.

In addition to the intersection improvements, widening and re-striping from Route 3 to the intersection has also taken place. The improvements provide two general purpose lanes in both the northbound and southbound directions on Route 18. Finally, an acceleration lane for the Route 3 southbound off-ramp to Route 18 southbound has been provided.

There are no additional feasible means to avoid or minimize the project's traffic impacts at this location that the Proponent could be required to implement.

Route 18 (Main Street) and Park Avenue

At the intersection of Route 18 and Park Avenue, all four approaches have been widened to accommodate proposed improvements. The Route 18 northbound and southbound approaches are modified to provide one exclusive left-turn lane and two general-purpose lanes. On Park Avenue, the westbound approach includes an exclusive left-turn lane, a through lane, a bike lane, and one exclusive right-turn lane. The eastbound approach provides an exclusive left-turn lane and two general-purpose lanes. A new traffic controller, new signals with pedestrian accommodations, and new bicycle loop detectors are provided. The signal is coordinated with the signals at the Route 18 intersections with Columbian Street and Pond Street/Pleasant Street. There are no additional feasible means to avoid or minimize the project's traffic impacts at this location that the Proponent could be required to implement.

Route 18 (Main Street) and Columbian Street:

At the Route 18 and Columbian Street intersection, all four approaches have been widened to accommodate proposed improvements. The Route 18 northbound and southbound approaches are modified to provide one exclusive left-turn lane and two general purpose lanes. The Columbian Street approaches are modified to provide one shared lane for left-turn and through movements, one bike lane, and one lane for exclusive right-turn movements. A new traffic controller, new signals with pedestrian accommodations, and new bicycle loop detectors are provided. The signal is coordinated with those at the Route 18 intersections with Park Avenue and Pond Street/Pleasant Street. There are no additional feasible means to avoid or minimize the project's traffic impacts at this location that the Proponent could be required to implement.

Route 18 (Main Street) and Pond Street/Pleasant Street

The improvements to the Route 18/Pond Street/Pleasant Street intersection have been completed. At this intersection, all four approaches were widened to accommodate improvements. Route 18, both northbound and southbound, was modified to provide two through lanes and an exclusive right turn lane. As was the case prior to construction of these improvements, left turns are prohibited from the Route 18 northbound and southbound approaches.

The Pond Street eastbound approach was modified to provide one exclusive left-turn lane, one shared left/through lane, and one shared through/right lane. The Pleasant Street westbound approach was also modified to provide one exclusive left-turn lane, one shared left/through lane

and one shared through/right lane. A new traffic controller, new signals with pedestrian accommodations, and new bicycle loop detectors were provided. The signal is coordinated with the signals at the Route 18 intersections with Park Avenue and Columbian Street. There are no additional feasible means to avoid or minimize the project's traffic impacts at this location that the Proponent could be required to implement.

Route 18 (Bedford Street) and Route 139 (North Avenue/Randolph Street)

The improvements to the Route 18 and Route 139 intersection have been completed. At this intersection, all four approaches were widened to accommodate the improvements. Route 18 northbound and southbound approaches each provide one exclusive left-turn lane and two general-purpose lanes. The Route 139 westbound approach (North Avenue) provides general-purpose lanes. The Route 139 eastbound approach (Randolph Street) provides one exclusive right-turn lane and two general-purpose lanes. A new traffic controller and new signals with pedestrian accommodations have been provided. There are no additional feasible means to avoid or minimize the project's traffic impacts at this location that the Proponent could be required to implement.

III.3 Off-site Traffic Mitigation

The Proponents have committed to a series of off-site intersection capacity improvements and traffic calming measures to mitigate the off-site traffic impacts of the Naval Air Station Redevelopment Project. As shown on FEIR Figure 13.2-9, capacity improvements at the following seven intersections are mitigation for impacts of Phase I of the Project:

- ◆ Route 58/Randolph Street (Route 139)
- ◆ Route 18/Randolph Street (Route 139)
- ◆ Route 18/Route 58/Pond Street
- ◆ Pond Street/Derby Street/Hollis Street
- ◆ Randolph Street/Forest Street/Hollis Street
- ◆ Columbian Square (Pond Street/Pleasant Street/Union Street); and
- ◆ Columbian Street/Forest Street.

The Phase I improvements also include traffic calming measures on Thicket Street and Forest Street to reduce traffic increases in residential neighborhoods.

As shown on FEIR Figure 13.2-10, two off-site capacity improvements are mitigation for impacts of Phase II:

- ◆ Route 18/Route 123; and

- ◆ Weymouth Street/Sharp Street/Abington Street.

Phase II mitigation also includes traffic calming measures on Pine Street/Abington Street.

As shown on FEIR Figure 13.2-11, Phase 3 off-site traffic mitigation will include capacity improvements at one intersection – Columbian Street/Park Avenue West – and traffic calming measures on Gardner Street and Farm Hills Lane in Hingham and Rockland.

IV. Specific Project Impacts and Mitigation Measures

IV.1 Off-site Capacity Improvements

MassHighway has analyzed the safety and congestion impacts in the affected area due to the proposed development and has determined that the mitigation measures outlined below are required to minimize the traffic impacts of this project. The Proponent has committed to undertake the following mitigation measures in cooperation with the identified parties.

Phase I:

- ◆ Route 58 at Route 139: The recommended mitigation is to provide an exclusive left-turn lane on the Route 58 northbound approach and an exclusive right-turn lane on the Route 58 eastbound approach. (FEIR Fig. 31.2-4). Under Build without mitigation scenario, the intersection would operate at AM v/c (volume to capacity ratio) 0.87, delay 29 seconds, LOS C, and PM peak hour v/c 0.86, delay 30 seconds and LOS D. Under Build with Mitigation, the intersection will operate at AM v/c 0.91, delay 50 seconds, LOS D; PM v/c 0.85, delay 30 seconds and LOS C. There are no additional feasible means to avoid or minimize the project's traffic impacts at this location that the Proponent could be required to implement.
- ◆ Route 18 at Route 139: The recommended mitigation is to add a right-turn lane on the Route 18 southbound approach, re-designate the existing left/through lane on the Route 139 eastbound approach as an exclusive left-turn lane and restripe the existing Route 139 westbound approach to include an exclusive left-turn lane (no pavement widening is proposed). Other improvements include upgrading the existing signal equipment and pavement markings, as well as implementing a new signal timing and phasing plan to reflect the proposed lane modifications and additions at the intersection. (FEIR Fig. 31.2-8). Under Build without mitigation scenario, the intersection would operate at AM v/c 1.31, delay > (greater than) 100 seconds, LOS F, and PM peak hour v/c 0.86, delay 39 seconds and LOS D. Under Build with Mitigation, the intersection will operate at AM v/c 0.91, delay 50 seconds and LOS D; PM v/c 0.85, delay 30 seconds and LOS C. This work will be constructed by MHD as part of the (separate) Route 18 Widening Project but a portion is attributable to the impacts of the NAS Redevelopment Project. There are no additional feasible means to avoid or minimize the project's traffic impacts at this location that the Proponent could be required to implement.

- ◆ Route 18 at Route 58 and Pond Street: Recommended mitigation is to add an exclusive left-turn lane on the Pond Street eastbound approach, and construct an exclusive right-turn lane on the Route 18 southbound approach. (FEIR Fig. 13.2-2). Under Build without mitigation scenario, the intersection would operate at AM v/c 1.10, delay 75 seconds, LOS E, and PM peak hour v/c 1.07, delay 88 seconds and LOS F. Under Build with Mitigation, the intersection will operate at AM v/c 0.97, delay 51 seconds and LOS D; PM v/c 0.90, delay 43 seconds and LOS D. This work will be constructed by MHD as part of the (separate) Route 18 Widening Project, but a portion is attributable to the impacts of the NAS Redevelopment Project. There are no additional feasible means to avoid or minimize the project's traffic impacts at this location that the Proponent could be required to implement.
- ◆ Pond Street at Derby Street/Hollis Street: Recommended mitigation is to upgrade the existing signal equipment, upgrade existing pavement markings, and implement signal timing and phasing modifications to optimize future operations. No roadway widening or loss of existing on-street parking is proposed. (DEIR Fig. 8.1-5). Under Build without mitigation scenario, the intersection would operate at AM v/c 1.12, delay >100 seconds, LOS F, and PM peak hour v/c 1.38, delay >100 seconds and LOS F. Under Build with Mitigation, the intersection will operate at AM v/c 0.70, delay 26 seconds and LOS C; PM v/c 0.89, delay 41 seconds and LOS D. There are no additional feasible means to avoid or minimize the project's traffic impacts at this location that the Proponent could be required to implement.
- ◆ Randolph Street/Forest Street/Hollis Street: Recommended mitigation is a combination of traffic calming and possible signalization at Randolph/Forest. (FEIR Fig. 13.2-5). Under Build without mitigation scenario, the intersection would operate at AM delay 28 seconds, LOS D, and PM peak hour delay >100 seconds and LOS F. Under Build with Mitigation, the intersection will operate at AM v/c 0.39, delay 6 seconds and LOS A; PM v/c 0.51, delay 8 seconds and LOS A. There are no additional feasible means to avoid or minimize the project's traffic impacts at this location that the Proponent could be required to implement.
- ◆ Columbian Square (Pond Street/Pleasant Street/Union Street): Signalization and construction of turn lanes is proposed. (FEIR Fig. 31.2-1). Under Build without mitigation scenario, the intersection would operate at AM delay >100 seconds, LOS F, and PM peak hour delay >100 seconds and LOS F. Under Build with Mitigation, the intersection will operate at AM v/c 0.64, delay 12 seconds and LOS B; PM v/c 0.68, delay 12 seconds and LOS B. There are no additional feasible means to avoid or minimize the project's traffic impacts at this location that the Proponent could be required to implement.
- ◆ Columbian Street/Forest Street: Recommended mitigation is a combination of traffic calming and signalization at Columbian/Forest. (FEIR Fig. 31.2-7). Under Build without mitigation scenario, the intersection would operate at AM delay >100 seconds, LOS F, and PM peak hour delay >100 seconds and LOS F. Under Build with Mitigation, the intersection will operate at AM v/c 0.85, delay 18 seconds and LOS B; PM v/c 0.57, delay 9 seconds and LOS A. There are no additional feasible means to avoid or minimize the project's traffic impacts at this location that the Proponent could be required to implement.

Phase 2:

- ◆ Route 18 at Route 123: Recommended mitigation is to upgrade the existing signal equipment, upgrade the existing pavement markings, and implement signal timing and phasing modifications to optimize future operations. (DEIR Fig. 8.1-19). Under Build without mitigation scenario, the intersection would operate at AM v/c 1.01, delay 47 seconds, LOS D, and PM peak hour v/c 1.05, delay 71 seconds and LOS E. Under Build with Mitigation, the intersection will operate at AM v/c 0.79, delay 24 seconds and LOS C; PM v/c 0.87, delay 38 seconds and LOS D. This work will be constructed by MHD as part of the (separate) Route 18 Widening Project, but a portion is attributable to the impacts of the NAS Redevelopment Project. There are no additional feasible means to avoid or minimize the project's traffic impacts at this location that the Proponent could be required to implement.
- ◆ Weymouth Street/Sharp Street/Abington Street: Recommended mitigation is a combination of traffic calming and signalization and turning lanes. (FEIR Fig. 13.2-3). Under Build without mitigation scenario, the intersection would operate at AM delay >100 seconds, LOS F, and PM peak hour delay >100 seconds and LOS F. Under Build with Mitigation, the intersection will operate at AM v/c 0.62, delay 8 seconds and LOS A; PM v/c 0.64, delay >9 seconds and LOS A. There are no additional feasible means to avoid or minimize the project's traffic impacts at this location that the Proponent could be required to implement.

Phase 3:

- ◆ Columbian Street/Park Avenue West. Recommended mitigation is signalization. (FEIR Fig. 13.2-6). Under Build without mitigation scenario, the intersection would operate at AM delay >100 seconds, LOS F, and PM peak hour delay 79 seconds and LOS F. Under Build with Mitigation, the intersection will operate at AM v/c 0.69, delay 11 seconds and LOS B; PM v/c 0.54, delay 7 seconds and LOS A. There are no additional feasible means to avoid or minimize the project's traffic impacts at this location that the Proponent could be required to implement.

IV.2 Traffic Calming Measures

Traffic calming measures include constructing horizontal or vertical devices such as neighborhood traffic circles, center islands, chicanes (which are roadway narrowings or bump-outs forming S-shaped curves), chokers (narrowing the road), speed humps, speed tables, raised crosswalks, or raised intersections, the intent of which is to slow down vehicles and increase the travel time through these sensitive areas, thereby providing disincentive to use these roads as “short-cuts.”

The following several “corridors” in the area have been identified as potential locations for traffic calming measures:

- ◆ Thicket Street (Weymouth and Abington). This corridor provides a connection between Route 139 in Abington, and Pond Street/Route 18 in South Weymouth. Traffic calming measures will be implemented during Phase 1B of the Project.
- ◆ Forest Street (Weymouth). This street is part of a corridor that provides a connection between Route 18 in South Weymouth and Braintree. Traffic calming measures will be implemented during Phase 1B of the Project. Possible signalization of Randolph/Forest Street and Columbian Street/Forest Street will be considered.
- ◆ Abington Street/Pine Street/Oak Street/Ralph Talbot Street (Hingham and Weymouth). This corridor provides a travel route between the east end of the Base and Pleasant Street and the Weymouth neighborhoods north of Route 3, as well as a route to the Derby Street interchange with Route 3. Traffic calming measures will be implemented during Phase 2 of the Project.
- ◆ Gardiner Street (Hingham). This residential street is a current short-cut route between Route 53 and the Route 3 interchange at Hingham Street. Traffic calming measures will be implemented during Phase 3 of the Project.

Implementation of a successful traffic calming program on the Abington Street/Pine Street/Oak Street corridor and the Thicket Street corridor will require coordination with and the cooperation of town officials and residents of Weymouth, Hingham, and Abington. The Proponent has already initiated a dialogue with some of the towns, and coordinated effort and joint meetings, where appropriate, between the towns are suggested as the traffic calming studies move forward. The Proponent has also agreed to assist the neighboring communities in establishing a dialogue with MassHighway that would seek ways to streamline the current process used to modify traffic regulations on local roadways (e.g., traffic control signage, and truck restrictions).

V. Other Mitigation Measures

V.1 *Multi-Modal Center*

A new multi-modal transportation center will be constructed to help minimize the traffic demands generated by the Project. The proposed multi-modal access improvements will enhance the existing South Weymouth commuter rail station, provide new transit and non-auto access alternatives, and connect into the systems of pedestrian and bicycle paths linking to the nearby transit village and village center.

The proposed improvements will include the following components, adjacent to planned transit-oriented retail and residential development:

- ◆ Shuttle and regional bus service;
- ◆ “Kiss-and-ride” drop-off and pick-up access;
- ◆ Station waiting area;

- ◆ Lighting;
- ◆ Pedestrian amenities;
- ◆ Bicycle storage facilities; and
- ◆ Handicapped parking

The multi-modal transportation center will also accommodate curb stops for potential local and regional bus services. These accommodations provide the flexibility to expand transit service to areas not well served by commuter rail as demand arises. Potential opportunities include regional bus service to downtown Boston or other destinations by a private operator or local transit service between the site and other nearby destinations.

V.2 Public Transportation

To further promote use of public transportation, the Proponent LNR will do the following:

- ◆ Provide for an on-site transit shuttle bus system as warranted by resident/tenant demand that will provide regular service to homes, shops and offices within the development.
- ◆ Encourage employers and commercial tenants to promote MBTA usage through fare subsidies and payroll deduction programs and promote the TDM program through additional means.
- ◆ Require that employers post information regarding MBTA schedules, shuttle bus services, etc. This information should also be posted in all community/public facilities on the Base.
- ◆ Encourage employers to deliver the MBTA passes to the participant's payroll address as an added convenience.

V.3 Transportation Demand Management

The fundamental characteristics of transit-oriented, Smart Growth development, which were the guiding principles when the proposed Village Center Plan was formulated, by their very nature manage travel demands. By locating near existing mass transit facilities, proposing a wide mix of land uses, integrating pedestrian and bicycle facilities into the development plan, clustering the development into high density neighborhoods, and restricting the number of parking spaces available on-site through zoning regulations, the critical mass needed to reduce vehicle trips to and from the Base has been established.

However, to effect additional vehicle trip reduction, a comprehensive Transportation Demand Management program was developed, which takes advantage of the unique location and the Plan elements themselves. The elements of the TDM program, as well as trip reduction goals and the means to measure the effectiveness of the TDM program, are described below.

V.3.1 On-Site Shuttle Bus Service

- ◆ Provide for an on-site transit shuttle bus system as warranted by resident/tenant demand that will provide regular service to homes, shops and offices within the development.
- ◆ The on-site shuttle service will connect to the new South Weymouth Multi-Modal Center/South Weymouth commuter rail station.
- ◆ Frequent shuttle bus service will be coordinated with the commuter rail schedule to provide minimal wait and transfer times for commuters.
- ◆ Shuttle Bus Service will be initiated in Phase 1 of the Project, and expanded to provide the service necessary as the subsequent phases come on line.

V.3.2 High Occupancy Vehicles

To promote the use of high occupancy vehicles as a transportation alternative for residents and employees at the Base, the Proponent will:

- ◆ Promote High Occupancy Vehicle Use (e.g., dedicated parking, vanpool, guaranteed ride home programs).
- ◆ Promote ride matching services to facilitate residents and employees in finding fellow residents and workers who live and work in the same communities and are willing to share a ride to work.
- ◆ Establish web pages (see discussion under TMA below) where Base residents and workers can enter basic data to facilitate ride matching. The data would include information such as:
 - Zip Code
 - Gender preference (if specified)
 - Smoking preference (if specified)
 - Driving preference
 - Work schedule (work days, departure times, return times)

V.3.3 Bicycle and Pedestrian Modes

The following measures will encourage bicycle and pedestrian use:

- ◆ The Village Center Plan includes the construction of a network of bicycle and pedestrian trails throughout the Base that will provide connections between the villages, to the Multi-Modal Center, and off-Base to Weymouth Street on the east side Route 18 to the west. The bicycle and pedestrian system was illustrated on the Base Amenity Plan (Figure 8.12-1 in the DEIR).

- ◆ This path network will include a multi-use path built along the East-West Parkway (in addition to sidewalks) that will veer away from the Parkway on the west side and connect to Route 18 in the vicinity of Calnan Road/Shea Memorial Drive.
- ◆ The Project will also integrate sidewalks and bike paths (bike lanes) into roadway designs to provide safe and efficient access for non-motorized transportation.
- ◆ Buildings with office uses will provide bicycle racks, and multi-family residential buildings will provide covered bicycle storage facilities.

V.3.4 Additional TDM Measures and Project Amenities

- ◆ Accommodations for shared cars, such as Zipcars, will be promoted on the Base. These providers offer short-term use of private vehicles for members who reserve vehicle use in advance. Typically, the vehicles are parked in designated spots in off-street lots which must be accessible 24-hours a day. Zipcar spots could be sited at the Multi-Modal Center and in the vicinity of the Village Center.
- ◆ Employers will be encouraged to provide alternative work schedules for employees to reduce the number of peak hour trips, including flexible work hours, compressed work weeks, and telecommuting.

V.3.5 Transportation Management Association

- ◆ A Base-wide Transportation Management Association comprising the Corporation, Base employers, building owners, and other interested local businesses and institutions will be formed to oversee the implementation of a Traffic Demand Management Plan.
- ◆ The TMA will designate a TDM coordinator to oversee implementation and maintenance of the TDM program. The coordinator will also work with other businesses and TMAs in the region to identify opportunities to expand the proposed TDM program or coordinate TDM efforts on a regional basis. As an example, the shuttle bus service could be expanded to provide a shuttle route with a connection to the Red Line in Braintree. The buses could pick up residents on the Base and bring back workers destined for the Base, or for South Shore Hospital or the businesses along the Hingham Street corridor. This potential service would require coordination between the Base TDM coordinator and its counterparts at the Hospital or an employer such as Blue Cross/Blue Shield.
- ◆ The TMA will establish a web site to provide information for Base residents and workers regarding the various transportation option that will be available to them, such as:
 - Shuttle bus service (routes, schedules, etc.);
 - Car/van pool programs and ride matching services;
 - Links to the MBTA and MassRIDES web sites; and

- Link to the SmarTraveler web site, where residents and employees will be able to get current traffic updates
- ◆ The TMA will host Transportation Awareness events on the Base that should be held during National Transportation Week (<http://www.ntweek.org/>). The events will be organized by the TDM coordinator and will bring transportation organizations such as the MBTA, MassRIDES and local bus companies onto the Base to provide information on commuting and travel options.

V.4 TDM Trip Reduction Goals and Monitoring

V.4.1 TDM Trip Reduction Goals

To ensure that the TDM program described is effective in reducing automobile use, and to ensure that the off-site transportation mitigation measures will be adequate, a series of TDM goals have been set and means developed to measure the TDM effectiveness. The goals are as follows:

- ◆ Phase 1: 15 percent reduction in vehicle trip generation compared to ITE trip generation rates for the uses on the Base;
- ◆ Phase 2: 25 percent reduction in vehicle trip generation compared to ITE trip generation rates for the uses on the Base; and
- ◆ Phase 3: 30 percent reduction in vehicle trip generation compared to ITE trip generation rates for the uses on the Base.

Actual trip generation rates for vehicles can be determined through the counts obtained for the traffic monitoring program (see Section V.4.2, below). One component of that program specifies that the number of trips entering and exiting the Base be measured as the development phases are being constructed. The actual number of vehicles could be compared to the number projected through ITE methodologies to understand the level of trip reduction being realized. As part of this effort, shuttle bus ridership counts and Base-related boardings at the South Weymouth commuter rail station will also be measured to gain a complete picture of the transportation system.

If the trip reduction goals are not being met, additional TDM measures must be taken by the TMA and additional off-site transportation mitigation measures may be required.

V.4.2 Traffic Monitoring

The intent of the traffic monitoring program is to confirm the forecast increases with actual data. Pre-opening traffic counts will be performed on roadways in sensitive residential areas to determine a baseline condition. Post-opening traffic counts will be performed at the same locations after occupancy of each phase of the redevelopment is completed. From a comparison of these counts, the impacts of the Project can be determined and the locations where traffic

calming should be employed can be identified. The Proponent will continue to coordinate with the neighboring communities to identify candidate locations and preferred traffic calming measures in the permitting process. The need and schedule for the implementation of the measures will depend on the results of the traffic monitoring program.

The monitoring program will be developed and implemented by professional traffic engineers in accordance with industry standards. **The monitoring program will include the following elements:**

- ◆ Monitoring will be conducted after completion of each development phase (1a, 1b, 2 and 3).
- ◆ Key roadway links and intersections will be monitored. Initially, these will be the fourteen intersections proposed for mitigation as well as the ten roadway links monitored as part of the baseline traffic count.
- ◆ The counts conducted at the intersection locations will be peak hour turning movement counts, and the counts conducted on the roadway links will be performed using Automatic Traffic Recorder machines.
- ◆ If the monitoring program determines that there are significant differences in the trip generation or distribution characteristics of the Base traffic compared to the CTPS forecasts (see below for definitions of significant), then the locations of the intersection roadway link counts may be modified for subsequent monitoring counts. The revised monitoring locations will be determined through discussions between the Proponent and the local communities.
- ◆ Transit ridership from the Base will also be monitored.
- ◆ Daily and peak hour counts at active vehicular access points to the Base will be monitored.
- ◆ The monitoring program may include “license plate surveys” or similar methods to differentiate trips from the Base from those from the surrounding region (non-Base traffic) at particular intersections or roadways of special concern. The need for and scope of these surveys will be determined through discussions between the Proponent and the local communities.
- ◆ Monitoring results will be compared to modeled traffic volume and intersection Level of Service projections. If monitoring results indicate that sustained Base-related traffic volumes are significantly higher (more than ten percent more than projected) or the distribution of trips to and from the Base is significantly different from the distribution that CTPS has forecast (a more than ten percent difference in a direction), the Proponent will initiate an evaluation of mitigation effectiveness with officials from the affected towns. The Proponent will work with these officials to design and implement reasonable supplemental mitigation measures sufficient to address Base-related traffic impacts beyond those identified in the FEIR.

V.5 *Construction Period*

As was noted in the DEIR, construction traffic impacts are not expected to be significant. However, to ensure that the construction worker and truck trip estimates are valid, a traffic monitoring program specific to construction trips will also be instituted for the Project. The monitoring program will include traffic counts to determine the number and times of construction worker arrivals and departures. The monitoring will be extended beyond the traditional count periods to capture the peak construction commuting hours. Morning counts will be performed between 6:00 a.m. and 9:00 a.m., and afternoon trips measured from 3:00 p.m. to 6:00 p.m. The monitoring program will also include attempts to identify where the truck trips are coming from and going to and reporting to the Proponent or the towns if drivers for certain contractors are not traveling along the authorized truck routes.

VI. Reasonably Foreseeable Climate Change Impacts

In August, 2008 the General Court enacted the Global Warming Solutions Act, Chapter 268, Acts of 2008. Section 7 thereof amended Section 61 of MEPA, by inserting the following paragraph:

“In considering and issuing permits, licenses and other administrative approvals and decisions, the respective agency, department, board, commission or authority shall also consider reasonably foreseeable climate change impacts, including additional greenhouse gas emissions, and effects, such as predicted sea level rise.”

Section 7 took effect in November, 2008, 90 days after passage.

The Proponents' EIR analysis preceded the MEPA Greenhouse Gas Policy, and MHD has no record on which to base overall projections of climate change impacts, additional greenhouse gas emissions, and predicted sea level rise. MHD has however scrutinized the MEPA and NEPA filings for the Project, and has determined that the extensive TDM measures committed to by the Proponents will reduce motor vehicle fuel use on the East-West Parkway by 2,762 gallons per day¹. That represents a reduction, over the Build without Mitigation scenario, of 27.45 tons per day of carbon dioxide (CO₂).² The analysis did not reflect offsets for off-Base trip reduction, and hence is considered conservative. Actual reductions in CO₂ may be greater.

The Executive Office of Energy and Environmental Affairs (EEA) and MassDEP will be generating analysis, as required by various provisions of Chapter 268, Acts of 2008, on which

¹ Source: Draft Environmental Assessment, Parkway and Multimodal Center at the Former South Weymouth Naval Air Station, Federal Transit Administration, August 8, 2008, page 5-37.

² From the GHG Protocol Initiative, guidance for "CO₂ emissions from transport or mobile sources 1.3 (Jan 2005)" an emission factor of 69.25 kilograms of CO₂ per gigajoule of gasoline heat input and a derived lower heating value of 0.1302 GJ/USgal were used. Thus, 69.25 kg/GJ x 0.1302 GJ/gal x 2762 gal/day = 24903 kg CO₂/day = 27.45 tons CO₂/day.

MassHighway may be able to determine the climate change impacts, and effects such as sea level rise, both of the increases in CO2 attributed to the change in vehicle miles traveled associated with the Project, and of the benefits of the Proponents' extensive TDM program. MassHighway will await further guidance on this from EEA. For purposes of this Section 61 Finding, MassHighway has considered the increases in greenhouse gas emissions associated with project-related traffic, and stipulates that the mitigation measures proposed by the Proponent shall be considered a condition of this Section 61 Finding.

FINDINGS

Pursuant to M.G.L. Ch 30, Sec. 61, for the reasons stated above, MassHighway hereby finds that, with implementation of the mitigation measures described above, all practicable means and measures will be taken to avoid or minimize adverse traffic and related impacts to the environment resulting from the Naval Air Station Redevelopment Project. Appropriate conditions consistent with this Section 61 Finding will be included in the access and traffic signal permits to be issued by MassHighway to ensure implementation of these measures.

DATE

Luisa Paiewonsky
Commissioner

Comments on these Draft Section 61 Findings should be sent within 21 days (by DATE) to:

Diane Madden
Project Manager – Environmental
Massachusetts Highway Department
10 Park Plaza
Boston, MA 02116

Jan 14, 2009