



## TOWN OF ARLINGTON

MASSACHUSETTS 02476

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### DEPARTMENT OF PLANNING and COMMUNITY DEVELOPMENT

January 10, 2008

Barbara Lucas, Chair  
Suburban Mobility and TDM Subcommittee  
Boston Region MPO Transportation Planning and Programming Committee  
Attn: TDM Program  
c/o CTPS  
10 Park Plaza, Suite 2150  
Boston, MA 02116

Dear Ms. Lucas and Suburban Mobility and TDM Subcommittee:

We are pleased to submit this application for funding under the Transportation Demand Management Program, to develop a Work-site Based Strategy for the Parmenter School site, 25 Irving Street in Arlington. Following you will find information about our proposal.

#### **Application for Boston Region MPO 2007/2008 TDM Funding Program**

Work Site Based Strategy  
Parmenter School, 25 Irving Street, Arlington, MA 02476  
Contact: Laura Wiener, Senior Planner

#### **PROGRAM MISSION**

1. What is the purpose of the new or expanded project or program?

Describe the market that it will serve and why this service is necessary.

The Town of Arlington is currently engaged in an effort to reduce traffic and emissions by encouraging people to use their vehicles less. One part of that effort is encouraging the use of Transportation Demand Management. The Town is considering a zoning bylaw amendment to allow a reduction in the parking requirement where TDM is used, and where public transportation is available. Though Arlington does not have a subway stop, it has 5 bus routes connecting to the Red Line and 2 bus routes connecting to the Green Line. If funded, this project will be the first time that TDM is used in Arlington. We will use the materials and ideas generated to help developers of other sites in Arlington to develop TDM plans. We would also be happy to share our results and materials with other municipalities.

Though Arlington is largely residential, there are a number of small employers in Town. The Parmenter School houses a day care and after school program (Arlington

Children's Center, aka ACC) and a private school (International School of Boston, aka ISB). The total number of employees at this site is about 100. This is typical of the type of employment in Town, which tends to be small and decentralized. Because the school is in the middle of a residential neighborhood, and has no off street parking, employee vehicles create a problem.

a. Identify your target customers and include any relevant demographic data (age, income levels, etc.), results from origin/destination studies, travel survey data, etc. that would support the need for this new project or program.

We anticipate the market for this program to be the younger employees who may be less car dependent. Approximately 30 of the 100 employees are under the age of 30. We surmise that this is the population that may be more open to alternative transportation modes. The first part of this project will be an origin and destination study based on a travel survey for each employee, to determine whether good alternatives are available for each individual. The Travel Survey will be reused at other sites in Arlington where TDM is encouraged.

b. Provide a description of the activity hubs (businesses, schools, etc.) and residential developments that would benefit from your project or program.

The Parmenter School project will primarily benefit those employees and the residential neighbors. However, if significant reductions in auto use are attained, this could reduce traffic on Mass. Ave. and Pleasant Street as well. In immediate proximity of the Parmenter School are 3 other employment sites that could be incorporated into this program in the future. The Central School, located on Academy Street between the Parmenter School and Mass. Ave., houses a number of small employers, with approximately 100 employees. Town Hall, also on Academy Street has 50 employees, and the Town Library, in the same region, has 35 employees. Given the short turnaround time for this grant, we were not able to discuss this with all of the employers at these locations, but will incorporate them over time in a second phase, using the materials and knowledge gained from this grant. The total number of employees in the area is 285.

c. What is the mission statement for this new service?

To reduce traffic and congestion by reducing the number of single occupancy vehicle trips to this site, and to other sites in Arlington, by increasing use of public transit, bicycles, and walking. In addition, we intend this to be a pilot program that will be reused in other parts of Town, and could be used by other communities.

## **ALTERNATIVE MODE CHARACTERISTICS**

2. Describe the existing HOV and transit services available. Are there transit routes serving the area? Are there vanpools or shuttles in the area? Are these programs competitive with SOV travel?

Arlington is well served by MBTA buses. Within 3/10 of a mile of the site, there are 3 bus lines connecting to the Red Line. Within 3/4 of a mile, additional buses connecting to Lechmere and the Green Line are available. There are no HOV lanes or vanpools. A vanpool or shuttle is a possible option for TDM

implementation, if it is determined that a sufficient number of people would make it worthwhile.

3. For any alternative modes present in the area, describe the level of utilization. Is there latent demand or a lack of interest?

Arlington is served by 10 MBTA bus lines that connect it to the Red Line at Alewife or Harvard Square, and the Green Line at Lechmere. The most heavily used bus line is the #77, from Arlington Heights to Harvard Station, with 3,320 weekday boardings in Arlington. The #79, connecting Arlington Heights to Alewife Station, has 1,149 weekday boardings. The #80 and #87, which connect Arlington Center to Lechmere, together have 612 weekday boardings. Other lines are also well utilized, though the #77 is by far the best utilized. Since the largest share of ridership is going into Cambridge, it is unlikely that overcrowding is deterring people from using this bus to get to Arlington.

4. Are there existing facilities in the area that support alternative modes (e.g. park & ride lots, HOV lanes, bicycle facilities)?

The site is located a half mile from the Minuteman Bikeway. We believe that 2 current employees use their bikes to get to work. However there are no facilities for bicycle parking or showering at the site. This could be a potential implementation strategy that would help increase the number of bicycle users.

## **ROADWAY CHARACTERISTICS**

5. Describe the level of roadway congestion in the area, using measures such as level of service (LOS), vehicle miles traveled (VMT), average vehicle occupancy (AVO), mode splits, and hours of delay. How is this expected to change in the future?

The level of service at Massachusetts Avenue and Pleasant Street ranges from D to F. Pleasant Street is a two lane road that connects Route 2 to Mass. Ave, and points beyond. It is used heavily by commuters to get to Route 2 from Winchester and Medford as well as Arlington residents. During rush hour it is very congested. It is our hope that through TDM we can reduce traffic on Pleasant Street, however slightly.

6. If the existing roadway facilities are congested, are there alternative routes available?

There are only 3 roads connecting Mass. Ave. to Route 2 in all of Arlington. All 3 get very congested during rush hour. There is no alternate route that would impact this site.

7. How long is peak period, and is there available capacity during off-peak hours?

There is some available capacity during off-peak hours.

8. Describe the major trip generators within the area. Is most of the traffic passing through, or is most of it due to sites within the area?

During rush hour, commuter traffic is largely leaving Arlington, since Arlington is primarily residential. The exception to this is that Arlington has ten or more day care centers, which generate a fair amount of traffic at rush hour.

## OPERATING ENVIRONMENT

9. Describe the policy environment in the area for alternative modes. Are there policies, programs, ordinances, etc., in place to support alternative modes? These may include policies for planning, land use, growth management, or environmental protection in addition to transportation.

Arlington is in the early stages of implementing support for alternative modes of transportation. The Town is considering a zoning amendment that would allow reduced parking with a TDM plan, in proximity to public transit. We expect this to be used by both residential and commercial projects. In 2007, Arlington Town Meeting adopted a Sustainability Action Plan that included the following recommendation:

“Arlington should improve the desirability of non-auto transportation alternatives, through such means as improving safety for pedestrians and bicyclists, giving incentives for using public transit, and facilitating ride-sharing”.

10. Describe the state of technology in the area, including electronic infrastructure for data collection or distribution, telephone, cable, and computer network technologies. Is the area covered by a “Traffic Management Center”?

NA

11. Describe the degree of public-private cooperation in the area. To what degree is there trust and collaboration between private employers and developers and government agencies and transit providers? Are there Transportation Management Associations in the area?

This is a unique opportunity because it is a publicly owned building, with private non-profit tenants. The Town has an unusual amount of leverage with the tenants. This is true not only for the Parmenter School, but for the second phase properties, Central School, Town Hall and Library. There are no TMA's in Arlington.

12. Describe the attitudes of the public and elected leaders in the area towards TDM and alternative modes. How has the public responded to recent transportation projects? Have any recent attitudinal surveys been done?

Understanding and enthusiasm for TDM is in an early stage. The concept is just being introduced. The Transportation Advisory Committee is very interested in the concept, and has already promoted the introduction of Zipcar in Arlington, and is in strong support of this grant proposal. The Board of Selectmen is very concerned about traffic and parking issues in Town, and would like to see a reduction in car dependence. For the first time this year, the Town is funding snow removal on the Minuteman Bikepath to encourage year round use. In 2007, Arlington Town Meeting adopted a Sustainability Action Plan that included the following recommendation:

“Arlington should improve the desirability of non-auto transportation alternatives, through such means as improving safety for pedestrians and bicyclists, giving incentives for using public transit, and facilitating ride-sharing”.

## LAND USE

13. What is the current housing density in the area? How is it expected to change?  
Residential density in Arlington is 8,183 people per square mile. Arlington is the densest Town in the Commonwealth. Density in this neighborhood is close to the Town's average. Because of Arlington's overall density and lack of undeveloped land, the housing density in the area is not expected to change significantly in the future.
14. What is the current employment density in the area? How is it expected to change?  
Arlington is primarily a residential community. However, in this immediate area there are a number of employment centers, most of which are government related. The total number of employees in the 4 buildings mentioned previously is 285.
15. To what extent are distinct land uses segregated or integrated in the area?  
Arlington is primarily residential, with commercial uses concentrated along Massachusetts Avenue and Broadway, and a couple of industrial pockets located along the Mill Brook. The Bikepath, having once been a railroad track, runs through some of the Town's industrial parcels. The subject site is entirely residential.
16. To what degree is the area pedestrian or transit oriented? Are there activity centers within the area that are more or less pedestrian or transit friendly than the rest of the area? Are there safe, pleasant walkways? Are there transit shelters?  
As stated earlier, there are 3 bus lines in very close proximity, and 7 more bus lines within a half mile of the site. The Minuteman Bikeway also runs about a half mile from the site. However, most people continue to use their cars to get to work, drop off their children at school, and do their errands. We believe this is the result of a mindset as much as it is convenience. This grant represents an attempt to change that mindset.
17. What are the future plans for the area? Is it planned to remain essentially as it is now, or is it planned for development/re-development as a future employment, residential, or activity center?  
No significant changes are anticipated in this neighborhood.

## MARKETING PLAN

18. Describe how public education, awareness, and marketing fit into your plan. If public education and promotion are not a substantial portion of your program, how will you alert the public to it? Describe any marketing pieces that may be mailed, E-mailed, posted, advertised, etc.  
Initially, marketing will be done only to the employees at the two businesses within the Parmenter School. Promotional flyers will be developed and distributed, as will as a survey. There will be a number of group and individual meetings, some with groups and some individual. Once the Parmenter School TDM has been launched, we will spread publicity to the other 3 sites and repeat

the process. All marketing materials will be reused, and can be reused by other communities.

## **FINANCIAL PLAN**

19. Describe your long-term financial plan. Provide a detailed budget for your proposal, including all expected costs and revenue sources. Provide background information on how costs and revenues were determined.

Financial Spreadsheet is attached. This shows three years of costs. Some of the first year costs will not be repeated in years 2 and 3, but some costs, such as MBTA pass subsidies, and costs of meeting with individuals to look at options will need to be repeated. After that, employers will be required to pick up the cost of transit passes and Guaranteed Ride Home. Estimates were generated by discussion with 3 consultants and providers of TDM services.

- a. Estimate the gross operating cost per day.
- b. Estimate your annual maintenance costs, if applicable.
- c. Estimate all other costs, including marketing, administration, and performance data collection.
- d. Describe what entities you have either partnered with or will seek partnership with as a revenue source (in-kind contributors should be listed and their services should be described.)
- e. Describe your plans for sustainability after the three-year limit for subsidies under this funding program has been reached.

A spreadsheet has been provided to assist in assembling a budget for the proposed program.

## **MONITORING/REPORTING PLAN**

20. Describe how you plan to collect and maintain data on the activities and effectiveness of the program. How will you collect comprehensive usage data for a new service (if applicable)? How will you determine the impact/success of marketing efforts in terms of increasing awareness of the program?

Staff will work closely with the consultant to develop a schedule and monitor progress. Consultant will report progress to Town on a quarterly basis.

## **IMPACT ON AIR QUALITY**

21. Please provide the following inputs, where applicable, which can be used by Boston Region MPO staff to estimate the air quality benefits of your proposal:

Changes in speed, volumes NA

Reduction of vehicle trips.

We hope to reduce vehicle trips by 12 at the Parmenter School, and in phase 2, by another 30-35 at the Central School, Town Hall and Library.

Reduction of vehicle miles of travel.

Phase one should reduce vehicle miles by 180. Phase 2 should reduce vehicle trips by an additional 500.

Reduction of emissions from heavy duty vehicles. NA

Days of operation per year for the project.

Roughly 235 days per year.