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Section A

Introduction

Transportation Demand Management Definition
Transportation Demand Management (TDM) is a general term for various strategies that increase transportation system efficiency. TDM strategies are designed to better balance peoples’ need to travel a particular route at a particular time with the capacity of available facilities to efficiently handle this demand. The focus of TDM strategies is to provide people with enhanced travel choices – from choices in travel mode, to choices in travel route and trip departure-time – and to provide incentives and information for people to make informed travel choices.

TDM Plan Summary
The City of Rockville Traffic and Transportation Division identified the need for a TDM Plan to accomplish the following:

- Establish a long-term vision for TDM in the City of Rockville
- Increase coordination amongst members of Rockville City staff
- Focus limited financial resources to achieve a coordinated long-term TDM vision for Rockville

The plan recommendations, based on a moderate TDM program, are designed to maximize the efficiency of the existing programs and encourage new alternative mode users. In order to build a foundation for success, it is recommended that these five key activities be the first actions of the City of Rockville TDM Plan.

1. Implement first priority multimodal improvements
2. Establish Employer Trip Reduction Programs
3. Implement the Trip Reduction Tool
4. Formalize the Transportation Demand Management Fee
5. Adopt the revised Comprehensive Transportation Review Methodology

The TDM account should have enough funds to keep this plan sustainable for the next five years (FY 2012 to FY 2016).
Section B
Existing Conditions

The following is an overview of TDM programs currently offered by state, regional, county, and city TDM providers. These services represent the foundation of TDM programs on which the City of Rockville TDM program recommendations are built. Understanding current services allows this plan to focus attention on recommendations that enhance the TDM offerings to the residents and businesses of Rockville.

B1. Metropolitan Washington TDM Services
Commuter Connections was originally created in 1974 as the Commuter Club, providing one of the first computerized carpool matching systems in the nation. The Commuter Club network consisted of the Metropolitan Washington Council of Governments (COG), General Services Administration (GSA), and the Greater Washington Board of Trade. COG provided the direct ridematching services to the public. This service was and still is provided free to anyone who requests ridematching information. In the 1980’s, the local government agencies of City of Alexandria, Fairfax County, Montgomery County, Prince William County, and the Northern Virginia Transportation Commission joined the network. The Commuter Club network members used COG’s ridematching software and shared one regional database for ridematching. In the mid-1980’s the network changed its name to the RideFinders Network.

By 1994 the network had grown in membership to include all Washington D.C. area local governments, a few federal agencies, several Transportation Management Associations, and government agencies from the Baltimore area, southern Maryland, and northern Virginia.

In 1996 and 1997, the services provided by the RideFinders Network had grown beyond just carpool/vanpool matching to include transit route and schedule information, a regional Guaranteed Ride Home program, bicycle to work information, park-and-ride lot and HOV lane information, telecommute/telework program assistance, InfoExpress commuter information kiosks, commuter information services through our Internet site, and employer services. It was in 1996 that the network changed its name to Commuter Connections.

Funding for Commuter Connections is provided to the Metropolitan Washington Council of Governments by the U.S. Department of Transportation, District of Columbia Department of Transportation, Maryland Department of Transportation, and Virginia Department of Transportation. Many of the local Commuter Connections members receive grant funding directly from their respective state government.

B2. Montgomery County TDM Services
Fare Share - Fare Share is available to all businesses in Montgomery County that are not located in one of the County's four Transportation Management Districts (TMDs). Fare Share offers matched dollars - up to $30,000 each year for five years - to each contributing organization for employees' public transportation to and from the workplace. Transit options include: RideOn, Metrorail, Metrobus, MARC train and vanpool.
Transportation Resources and Places to See (TRIPS) – TRIPS are outlet stores offering commuter assistance, purchasing of transit fare media, or making connections to regional public transportation.

*High Occupancy Vehicle (HOV) lanes* - available to persons who rideshare on Interstate 270 in Montgomery County. Vehicles must have a minimum number of occupants to travel on these lanes during peak commuting hours.

*Montgomery County Park and Rides* - In addition to parking at all Metro Stations within or near the City of Rockville, there are additional park and ride lots available off of the following highway interchanges in Montgomery County:

**Park & Ride Locations**
- I-270 at MD 117, Gaithersburg, Exit 10, 260 spaces
- I-270 at MD 124, Gaithersburg, Exit 11, 511 spaces, J7 and J9 bus service
- MD 97 at MD 28, Norbeck, 248 spaces, RideOn Route 51, Y5, Y6

*Montgomery County Vanpool Providers* - Montgomery County Department of Transportation Commuter Services works in tandem with Commuter Connections to help commuters find riders with whom they can vanpool. In addition to many private individuals operating vanpools in Montgomery County and the Metropolitan Washington Region there are several third-party vanpool providers, which include:

- VPSI Commuter Vanpools
- ABS Vans-Metro
- Maryland RideShare Corporation
- EZ Vans, Inc.

*Montgomery County Transportation Management Districts (TMD)* - TMD staff works primarily with employers and employees within the TMD to promote adoption of commuter-benefit programs by employers and to inform employees about their commuting options. Transit subsidy programs such as Super Fare Share offer employers and employees discounted transit passes. TMDs also work to improve transit service in the area, to increase ridership, and to provide transit-friendly amenities. There are four TMDs in Montgomery County:

- Downtown Bethesda TMD - Bethesda Transportation Solutions (BTS) provides free services to employers, employees, residents and visitors in downtown Bethesda.
- North Bethesda TMD - The North Bethesda Transportation Center provides free services to employers, employees, residents and visitors in Grosvenor, White Flint, Twinbrook, Executive Boulevard, and Rock Spring Park.
- Silver Spring - Established in 1987, the Silver Spring TMD was created to facilitate transportation mobility in Downtown Silver Spring by providing a wide-range of transportation information and services to employers and commuters in the Silver Spring central business district. TMD traffic-reduction strategies include constrained parking,
expanded transit services, financial incentives, free fringe park ’n ride lots outside the central business district, and intersection improvements.

- Friendship Heights - The TMD staff works primarily with employers and employees within the TMD to promote the adoption of commuter benefits programs by employers and to inform employees about their commuting options.

**B3. State of Maryland TDM Services**

*Teleworking Partnership with Employers (TPE)* – The Maryland Department of Transportation’s TPE offers free professional telework consulting services to Maryland employers looking to start or expand the organization’s telework program.

*Maryland Commuter Choice Tax Credit* - With the Maryland Commuter Choice Tax Credit employers can receive a tax credit of 50 percent of the amount they spend on employee commuting benefits – up to a maximum of $50 per month for each participating employee.

**B4. City of Rockville TDM Services**

The City of Rockville currently collects a fee from developers to be used specifically for the City of Rockville TDM fund. As established in individual TDM agreements with developer applicants, the fee is $0.10 per square foot for commercial and retail developments and $60 per unit for residential development for a ten-year period.

In addition to TDM programs conducted by developers, such as the Twinbrook Trip Reduction Program in Appendix A, funds were used to conduct a pilot TDM program, conduct Bike To Work Day events, and to maintain 70 bus shelters throughout the City of Rockville. The City is now looking to strategically expand its use of TDM funds to implement additional TDM programs, thus the need for this five-year TDM Plan.

*Metrorail (Red Line)* – Operated by the Washington Metropolitan Area Transit Authority (WMATA), the Red Line has three stations that provide heavy rail access to and from the City of Rockville. Those stations are Twinbrook Station, Rockville Station, and Shady Grove Station.

*Metrobus* – Operated by WMATA, there are several Metrobus routes providing transit access to and from the City of Rockville, including the C, J, Q and T series bus routes.

*RideOn Bus* – RideOn is Montgomery County’s intra-county transit service. The RideOn bus system consists of 375 County owned and operated buses. The RideOn system is designed to complement the service provided by the other transit providers in the County. The system serves the City of Rockville with over 30 routes.

*MARC –* Operated by Maryland Transit Administration (MTA), the MARC Brunswick Line provides Regional Rail Service to and from the City of Rockville from points as far south as Union Station (Washington, DC) and as far north as Martinsburg Station (Martinsburg, WV).
C1. Assessment of Transportation in Rockville

A Strengths, Weakness, Opportunities, and Threats (SWOT) Analysis helps determine what locally implemented TDM strategies will have the most support in addressing Rockville specific needs. Given that the City’s current TDM program is in the formative stages, the SWOT Analysis focus shifted from TDM Program areas to the overall transportation system in Rockville. As described in Appendix B, a SWOT analysis was completed with each stakeholder group, which included the Traffic and Transportation Commission, the Traffic and Transportation Division, the Planning Division, the Public Information Office, and the Environmental Management Division. This is followed by a synthesis of all four SWOT exercises, with emphasis on those characteristics that were a focus in more than one stakeholder meeting.

**Strengths**

*Highly Recurring Themes*
- Metro stations
- Bike/Pedestrian connections

*Recurring Themes*
- Stable funding – incentives for changes
- RideOn Bus
- Employment base of large employers (more people work here than live here)
- Significant destination (shopping/retail)
- Current planning efforts on Rockville Pike

*Other Themes*
- MARC
- Adequate in-house resources to tackle issues
- Control of transit enhancements
- Easy parking
- Have strong brand in “Drive Less Rockville”
- Internal control of communications channels through City website, weekly e-newsletter, monthly TV station broadcast, monthly print newsletter (“Rockville Reports”) and public service announcements opportunities on bus shelters

**Weaknesses**

*Highly Recurring Themes*
- Lack of direct control over RideOn, Metro Rail and buses, as well as state and county owned roadways and traffic signals
- Poor current local street connectivity for pedestrians and bicyclists
Recurring Themes
Transit network is not strong for non-radial trips
Railroad tracks, 355 and 270 act as barriers to east/west crossings and there are few east/west crossings
Pass through traffic
Public transit’s stigma that it is less convenient compared to car
Low frequency RideOn bus transit service

Other Themes
Metro station above grade and parallel to busy roads
No current means to enforce developer implementation of TDM
No long term TDM Funding source beyond one time developer payments
Lack of education about how to use transit
Lack of education about walking opportunities to downtown
Poor promotion of TDM

Opportunities
Highly Recurring Themes
Rockville Pike Plan
Bus rapid transit, including Purple Line construction in 2012

Recurring Themes
Bike/pedestrian connections internal to City as well as linking with other Montgomery County jurisdictions
Gas Prices increasing

Other Themes
Bus depot needed before RideOn will increase bus service
Redevelopment yielding higher density, design, diversity
Rockville’s ability to affect county policy
Montgomery College as a connectivity source
Circulator shuttles
Complete Streets Policy
Pedestrian Policy
Parking pricing at city garages used as a funding source for TDM and to effect change
Speed camera revenue
Tie TDM goals to Rockville’s Climate Change Agreement
Positive public relations for show casing innovative approaches to TDM at the city level
State of Maryland’s “Smart, Green, and growing” initiative is supportive of TDM

Threats
Highly Recurring Themes
Worsening economy threatens funds for bus service and TDM programs from developers as well as County, State and Federal sources
Impact of through traffic on Rockville from I-270, Rockville Pike, ICC, and development west of Rockville
Other Themes
Transit doesn’t cover its own cost operationally
Employee apathy
Military Base Realignment and Closure (BRAC) impacts on travel
Crowded transit

C2. Using Trip Reduction To Evaluate Program Success
Following the SWOT analysis, the stakeholder group examined the TDM ordinances of cities with similar characteristics to Rockville, which are shown in Appendix C. The stakeholder group determined that trip reduction was the best evaluation tool for whether TDM goals are met. Similar to Rockville, cities that use vehicle trip reduction to measure TDM program success tend to have a distinct peak period during the day when traffic is noticeably worse.

C3. Peer Review of Trip Reduction Goals
With a peak period vehicle trip reduction goal in mind, UrbanTrans utilized summaries of current development conditions to establish a current development trip generation baseline. The peak period trip generation forecasting is based on the land use type and size of the development in conjunction with the rates and equations available from the Institute of Transportation Engineers’ (ITE) Trip Generation Manual, 7th Edition.

Because the national averages forecasted from ITE do not take into consideration Rockville’s local context, they were calibrated. UrbanTrans used a combination of best practices in mixed use transit oriented development as well as professional TDM experience and judgment to forecast the level of reduced trip generation that is feasible based on the location of the development in the city. The best practices research looked at over twenty-five (25) case studies of developments from around the country to assess:

- The level of land use mix
- The level of transit service available
- The type of land use
- The level of TDM program applied
- The level of measured trip reduction achieved

Table 1 summarizes the communities that were examined in best practices review. A more detailed description of the TDM programs implemented for each location, along with the corresponding measured vehicle trip reduction impact can be found in Appendix D.
<table>
<thead>
<tr>
<th>Transit</th>
<th>Land Use</th>
<th>Location</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low/No Transit Service</td>
<td>Office</td>
<td>Exurban</td>
<td>NISSAN in Gardena, CA</td>
</tr>
<tr>
<td></td>
<td>Office</td>
<td>Rural</td>
<td>Evergreen State College in Olympia, WA</td>
</tr>
<tr>
<td></td>
<td>Office</td>
<td>Suburban</td>
<td>MERCK Pharmaceutical in Rahway, NJ</td>
</tr>
<tr>
<td></td>
<td>Office</td>
<td>Suburban</td>
<td>Nike in Beaverton, OR</td>
</tr>
<tr>
<td></td>
<td>Office</td>
<td>Suburban</td>
<td>Alsco in Spokane, WA</td>
</tr>
<tr>
<td></td>
<td>Office</td>
<td>Suburban</td>
<td>Telecordia Technologies in Piscataway, NJ</td>
</tr>
<tr>
<td></td>
<td>Office</td>
<td>Suburban</td>
<td>3M Technologies in St. Paul, MN</td>
</tr>
<tr>
<td>Medium Transit Service</td>
<td>Office</td>
<td>Suburban</td>
<td>Santa Clara Transportation Authority in Santa Clara, CA</td>
</tr>
<tr>
<td></td>
<td>Residential</td>
<td>Urban</td>
<td>SmartTrips Summit University Program in St Paul, MN</td>
</tr>
<tr>
<td></td>
<td>Residential</td>
<td>Various</td>
<td>FTA Demonstration Program in Bellingham, WA; Sacramento, CA; Cleveland, OH; Durham, NC</td>
</tr>
<tr>
<td>High Transit Service</td>
<td>Mixed Use</td>
<td>Suburban</td>
<td>Ballston in Arlington, VA</td>
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<tr>
<td></td>
<td>Mixed Use</td>
<td>Urban</td>
<td>Lloyd District in Portland, OR</td>
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<tr>
<td></td>
<td>Mixed Use</td>
<td>Urban</td>
<td>Clayton Lane in Denver, CO</td>
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<tr>
<td></td>
<td>Mixed Use</td>
<td>Urban</td>
<td>Atlantic Station in Atlanta, GA</td>
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<td></td>
<td>Office</td>
<td>Suburban</td>
<td>Walnut Creek BART Station in Walnut Creek, CA</td>
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<tr>
<td></td>
<td>Office</td>
<td>Suburban</td>
<td>Mission Valley San Diego Trolley Station in Mission Valley, CA</td>
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<td></td>
<td>Office</td>
<td>Suburban</td>
<td>Anaheim Metrolink Station in Anaheim, CA</td>
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<tr>
<td></td>
<td>Office</td>
<td>Suburban</td>
<td>Various Denver Light Rail Stations in Denver, CO</td>
</tr>
<tr>
<td></td>
<td>Office</td>
<td>Urban</td>
<td>Berkeley BART Station in Berkeley, CA</td>
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<tr>
<td></td>
<td>Office</td>
<td>Urban</td>
<td>Hollywood Los Angeles Metro Station in Hollywood, CA</td>
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<td></td>
<td>Office</td>
<td>Various Locations</td>
<td>Sacramento Light Rail Transit Station at Various Stations</td>
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<tr>
<td></td>
<td>Residential</td>
<td>Suburban</td>
<td>BART (Pleasant Hill and Alameda County, CA)</td>
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<td></td>
<td>Residential</td>
<td>Suburban</td>
<td>Mission Valley San Diego Trolley Station in Mission Valley, CA</td>
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<td>Residential</td>
<td>Urban Sprawl</td>
<td>Long Beach Los Angeles Metro Station in Long Beach, CA</td>
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<td>Residential</td>
<td>Various</td>
<td>Various Metrorail Station Areas in Washington, DC</td>
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<td>Residential</td>
<td>Various</td>
<td>Various Portland TriMet Light Rail Stations in Portland, OR</td>
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<td></td>
<td>Residential</td>
<td>Various</td>
<td>Various BART Stations in San Francisco, CA</td>
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<td></td>
<td>Residential</td>
<td>Various</td>
<td>Various Stations for California Commuter Trains</td>
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<tr>
<td></td>
<td>Residential</td>
<td>Suburban</td>
<td>Orenco Station in Hillsdale, OR</td>
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</table>
C4. Method for Determining Rockville’s Trip Reduction Goals

The result of the best practices analysis was used to assign appropriate trip reduction percentages to several categories of land use in Rockville. Levels of transit service as well as other land use characteristics such as density, land use mix, and pedestrian accessibility differentiate these categories. The primary consideration for trip reduction is the availability of transit, and therefore Table 1 is first divided into three transit categories:

- **High Transit Service**: Development is located within a ½ mile of Metrorail and short bus headways.
- **Medium Transit Service**: Development is located with connectivity to Metrorail by short or moderate bus and shuttle headways. Headways should be no more than 15 minutes during the peak hour, and 30 minutes during the off-peak hour.
- **Low or No Transit Service**: Development is located in an area with transit service greater than 15 minute peak, 30 minute off-peak headways or there is no transit service available.

In addition to the transit service level, land use mix, density, and pedestrian accessibility are also taken into consideration in the trip reduction method. In order to qualify as a “high” in the Land Use Condition row of Table 1, the following criteria for the development and surrounding land use within a ¼ mile radius must be met:

**Land use mix:**
- Residential uses present and at least 100,000 square feet of office or commercial space
- At least eight neighborhood-scale retail uses or schools. Neighborhood scale retail uses include “Main Street” type uses, such as restaurants, cafes, clothing stores, post office, bank, dry cleaners, fast food, book stores, schools, etc. Large regional shopping centers with large parking lots fronting entrances not considered neighborhood scale.

**Density**: A development must satisfy one of these options:
- Greater than 15 housing units per acre, or
- Population density greater than 30 people/acre, or
- Employment population (workers) greater than 50 workers/acre

**Pedestrian Accessibility:**
- Paved sidewalks at least four feet wide on both sides of the street
- Lighting adequate to provide full visibility of sidewalk surface
- Terrain less than five degrees slope
- If the proposed development is along a roadway with more than 2 vehicle lanes in each direction and/or speed limits in excess of 30 miles per hour, are there planted median, hardscape medians, on-street parking, street furniture, or some other barrier between the vehicle travel lane and the pedestrian right of way?
- Average block length less than 600 feet
If the answers to both the land use mix and pedestrian accessibility questions above are “yes” and at least one of the density criteria are satisfied, the development area qualifies as a “high” area for Land Use Conditions. If the development does not pass these tests, then it is qualified as a “low” area and will receive a correspondingly lower trip reduction percentage. Table 2 shows the trip reduction percentages assigned based on the trip reduction method.

<table>
<thead>
<tr>
<th>Transit Service</th>
<th>High Transit Service</th>
<th>Medium Transit Service</th>
<th>Low/No Transit Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Use Condition</td>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Office Trip Reduction Range</td>
<td>35-40%</td>
<td>30-35%</td>
<td>15-20%</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>35-40%</td>
<td>25-30%</td>
<td>15-20%</td>
</tr>
</tbody>
</table>

Table 2: Rockville’s Forecasted Trip Reduction Ranges
Section D
Recommendations

D1. First Priority Action Steps

1. **Implement first priority multimodal improvements.** In addition to maintaining Rockville’s bus shelters, design and construct first priority projects from the Sidewalk Prioritization Policy, the Complete Streets Policy, and the Pedestrian Safety Intersection Inventory. Maps showing high priority projects from the Sidewalk Prioritization Policy and the Complete Streets policy are shown in Appendix E and F.

2. **Implement a Trip Reduction Tool.** The Trip Reduction Tool is a web-based application that takes applicants through a series of questions about the development site’s availability of transit, land use mix, density, and pedestrian accessibility to determine a trip reduction range and a list of trip reduction strategies. The trip reduction ranges to be used in the tool will be those listed in this plan, outlined in Section C. Based on the answers to the questions in the Trip Reduction Tool, point values can be assigned to a list of trip reduction strategies. A sample list of strategies, which may be adjusted based on the latest best practices and technologies, is in Appendix G. Applicants will select preferred strategies so that the total point value equals the established minimum number of points. Applicants developing in transit-oriented areas will automatically receive points toward their total score.

3. **Establish employer trip reduction programs.** New office use developments generating more than 125 trips should be required to prepare a trip reduction plan consistent with a Trip Reduction Tool. Over a ten-year period after the site is fully occupied, the applicant shall perform annual traffic counts until the site meets its trip reduction range for three consecutive years. The applicant’s trip reduction plan shall include the following elements:

   - Description of trip reduction strategies to be implemented
   - Trip reduction goal
   - Applicant commitment to perform annual traffic counts until trip reduction goal is met for three consecutive years
   - Applicant commitment to provide annual reports to the Traffic and Transportation Division summarizing how the applicant is implemented the strategies for ten years
   - Budgetary minimum requirements for the strategies proportional to development’s impact, if required
   - Penalties associated with not reaching trip reduction goals
   - “Summary of Results” page from trip reduction tool

4. **Formalize the Transportation Demand Management Fee.** New developments generating 30 or more trips should be required to pay a transportation demand management fee. Comparable to regional rates, such as those of Montgomery County,
MD, and Howard County, MD, the fee is $0.10 per square foot for commercial and retail developments and $60 per unit for residential development for a ten-year period. As an option for the developer, instead of annual payments, the fee can be collected in a one-time lump-sum amount when the first occupancy permit is issued. The fee should be used to implement multimodal improvements, to provide transportation information and services to employers and commuters in Rockville, and to monitor employer Trip Reduction Plans to ensure compliance with trip reduction goals. The fee will not be used to increase automobile capacity.

5. **Evaluate participation in a region-wide bicycle-sharing program.** Work with Washington Metropolitan Council of Governments to assess program needs and program success. Use results of assessment to evaluate whether to expand the bike-sharing program to Rockville.

6. **Adopt the revised Comprehensive Transportation Review Methodology** to be consistent with the TDM Plan.

**D2. Second Priority Action Steps**

1. **Implement second priority multimodal improvements.** In addition to maintaining Rockville’s bus shelters, design and construct second priority projects from the Sidewalk Prioritization Policy, the Complete Streets Policy, and the Pedestrian Safety Intersection Inventory.

2. **Evaluate impact of TDM on parking reduction.** For all new developments, evaluate the results of parking reductions. Consider incentives for higher reductions for developments at TOD locations and integrate incentives into the planning process for new developments.

3. **Enhance Drive Less Rockville website.** Utilize market research garnered through customer satisfaction surveys and focus group tasks to develop a plan to expand the function of the DriveLessRockville.com website from a challenge campaign site to a full blown TDM site for the City. As part of implementing the expansion plan, the site will include efforts to provide real-time traveler information from throughout the region.

4. **Implement TDM Programs for City of Rockville Employees.** Build on existing TDM programs conducted at the city, such as telework, flextime, preferred carpool spaces, and transit incentives, so that the city is a model for the region.

5. **Improve pedestrian and bicycle wayfinding.** To promote accessibility and educate pedestrians and bicyclists about connectivity to destinations in the city, wayfinding in the form of signs and maps should be enhanced. This should include wayfinding to Rockville’s MetroRail stations, transit-oriented developments, and regional trail systems, such as the Rock Creek Trail and the Bethesda Trolley Trail.
6. **Serve on technical advisory committees for major transportation projects.** TDM should be integrated into all aspects of major transportation projects, from planning and construction mitigation to marketing the new transportation service.

7. **Fulfill the transportation policy objectives articulated in the Rockville Comprehensive Master Plan.** The Citywide Master Plan of 2000 identifies several objectives that support TDM strategies: reducing travel times through use of real-time information supplied by Intelligent Transportation Systems; maximizing use of TDM incentives; mitigating trip production impacts of new development; improving pedestrian and bike connections between residential areas and activity centers; increasing transit use; increasing carpool and vanpool use; and providing multi-modal access to new activity centers.

8. **Expand Montgomery County’s Fare Share Program.** Determine areas for improvement in the City of Rockville and provide assistance to the Fare Share Program.

9. **Enhance Drive Less Rockville as a Citywide Brand for TDM.** Solicit the involvement of the TDM community in enhancing the Drive Less Rockville as a citywide brand for TDM services.

10. **Provide local special events assistance.** Work with local event venues and organizers to identify means to communicate with patrons about travels alternatives when attending events. This includes special events organized by the City such as Hometown Holidays.

11. **Expand car-sharing programs.** Work with carsharing services to identify demand for services and ways the City can assist in accommodating the demand.

12. **Create an Employer Contact Management System.** Work with Montgomery County to gain access to the employer contact management software used by the COG or explore alternatives.

13. **Evaluate shuttle routes for expansion and/or conglomeration.** Work with employers to assess ridership, routing, and headways for privately run shuttles in Rockville to determine feasibility and efficiencies gained from combining and/or expanding shuttle services.

**D3. Third Priority Action Steps**

1. **Implement third priority multimodal improvements.** In addition to maintaining Rockville’s bus shelters, design and construct third priority projects from the Sidewalk Prioritization Policy, the Complete Streets Policy, and the Pedestrian Safety Intersection Inventory.

2. **Launch a citywide “Try It” marketing campaign.** “Try It” campaigns are designed to encourage individuals to try a new commute mode in the hopes that once they do, they will like it, and continue using it after the campaign. Phase I focused on piloting the
campaign at a single employer to gauge the level of effort required to implement the campaign at a single worksite. Phase II should expand the pilot to include 5 sites and test how the campaign will run at multiple sites simultaneously.

3. **Conduct brand awareness campaigns.** Develop citywide marketing campaigns that focus on delivering a unified message and a single reference point for more commuters to find detailed information on the Drive Less Rockville website. Develop a marketing plan that identifies the messages, a single contact point for more information on commuting, and media outlets to use. Campaigns may include but are not limited to Citywide Bike to Work Day, Walk to Lunch Day, Try Transit Day, Earth Day, Tax Day, More Parks Less Parking, Car Free Day, etc. The intent of these campaigns is to associate them with Drive Less Rockville and reinforce that the brand is about providing alternatives to driving in Rockville.

4. **Seek media placements for current events stories.** Current events stories report on a timely event or development affecting commuters, such as a planned special event, a new construction mitigation measure, or announcement of a new commuter benefit (e.g., passage of tax incentive legislation).

5. **Seek media placements for feature stories.** Feature stories pertain to interesting but not time-sensitive stories about commuting life in Rockville, such as a “day in the life” story.

6. **Identify newsworthy TDM successes throughout the city and develop these successes into news releases or story pitches.** Resulting news coverage will complement marketing activities in raising the profile and level of awareness of Drive Less Rockville and the importance of TDM in addressing the city’s overall mobility needs. Effectiveness measures include target market response and awareness of TDM among opinion leaders. This may also include regional and national awards submissions.

7. **Develop an Employer Transportation Coordinator Network.** Create an online and in-person forum for Employer Transportation Coordinators to share ideas on how to implement TDM programs at their sites. Foster dialogue and engagement amongst employers participating in TDM programs in Rockville.

8. **Develop monthly e-news briefs.** Case briefs are an effective tool for outreach and education. The City will leverage staff resources directed towards evaluation and tracking of employer outreach activities to develop brief employer case studies of Rockville employers with links to the Drive Less Rockville website where information about resources to implement that program can be located. They can be distributed as part of e-news brief story cycle throughout the year and tracked to gauge recipient level of interest in different topics.

9. **Promote regional, state and federal TDM programs.** Staff will be accountable for maintaining regular contact and communication with targeted employers to promote
utilization of regional TDM programs like COG’s Guaranteed Ride Home (GRH) and rideshare matching system as well as Montgomery County’s FareShare Transit Subsidy program. Additional promotion of state programs like Maryland’s Commuter Choice Tax Credit and federal programs like tax credits through Transportation Fringe Benefits will also be important programs to promote to employers within the City of Rockville.

10. **Deliver ongoing Drive Less Rockville telework consulting services** through delivery of technical assistance upon request.

11. **Conduct telework training workshops.** These workshops, identifying lessons learned and relating operational guidelines, will provide information on overcoming management resistance, how to write a management proposal, how to develop telework programs for non-profit and public sector employers, technology considerations of telework, and cost / benefit analyses of telework.

12. **Publish telework e-news stories.** The e-newsletter will provide specific tips and stories for those who telework. This activity will require interaction with Public Information Office staff.

13. **Create Neighborhood Specific Access Maps.** Create maps with transit, bicycle, and parking and other transportation information specifically tailored to that area.

**D4. Budget**

The action items described above will provide the essential elements of a citywide TDM program. As reflected in the plan’s recommendations, successful TDM programs include both physical improvements, such as the construction of sidewalks, bicycle lanes, or bus shelters, and programmatic initiatives, such as the development of a telework program or paid parking programs. As a result, it is recommended that Rockville allocate the majority of the TDM budget, which is from Transportation Improvement fees collected from new development applications, to multimodal physical improvements. These improvements would not include any projects that increase automobile capacity. The remaining portion of the TDM budget should be allocated to programmatic functions listed in the plan, such as providing transportation information and services to employers and commuters in Rockville, and monitoring employer Trip Reduction Plans to ensure compliance with trip reduction goals.

In FY 2011, the City has approximately $1.8 million in TDM funds with an average of $204,000 per year of additional revenue from approved developments over the next five years. To implement the plan, it is anticipated that expenditures will include $100,000 per year to maintain bus shelters (unless a bus-shelter advertising program is implemented to fund this activity), $100,000 per year to provide transportation information and services to employers and commuters in Rockville, and to monitor employer Trip Reduction Plans to ensure compliance with trip reduction goals, and approximately $300,000 per year to install physical multimodal improvements. The $300,000 could be applied to unfunded capital improvement projects related to non-auto transportation modes.
Appendix A: Sample Trip Reduction Program: Twinbrook Commons

TRIP REDUCTION AGREEMENT

THIS TRIP REDUCTION AGREEMENT ("Agreement") for the Twinbrook Commons development by and among TWINBROOK COMMONS, L.L.C. ("TBC") a Delaware limited liability company, and the MAYOR AND COUNCIL OF ROCKVILLE, a municipal corporation of the State of Maryland ("City") is effective this 30th day of March, 2007.

RECOLTALS

A. TBC is the long-term ground lessee of a certain 26.26 acres of land that comprise the Twinbrook Metro Station located in Rockville, Maryland ("Twinbrook Commons" or the "Property").

B. The Property is bounded by the north by Ardennes Avenue, on the east by Chapman Avenue, on the south by Parklawn Drive and Thompson Avenue, and on the east by Wicomico Avenue and Twinbrook Parkway.

C. The eastern portion of the Property consisting of 16.18 acres is subject to an Annexation Agreement dated 3/30/2007 by and among, TBC and the City, which provides that TBC and the City shall enter into a Trip Reduction Agreement setting forth traffic mitigation goals and implementation measures.

D. TBC filed a Preliminary Development Plan for Twinbrook Commons on October 11, 2004 to accommodate a mixed use development on the Property. The traffic study that was filled with the Preliminary Development Plan indicated that trip generation rates for the project could be reduced to 35 percent in the AM and 24 percent in the PM (the "Trip Reduction Goals") with the implementation of certain mitigation measures given the Property's proximity to the metro station and the mix of proposed uses.

E. The approved Preliminary Development Plan, approved by Resolution No. 9-2004, requires for the development of 1,595 residential units, 325,000 square feet of office space and 95,000 square feet of retail space.

F. The approved Preliminary Development Plan is subject to certain conditions, including Condition No. VIII C2, requiring the City and TBC to enter into the Trip Reduction Agreement required by the Annexation Agreement, for the intended purpose of satisfying the Trip Reduction Goals.

G. Pursuant to a Declaration of Covenants, Conditions and Easements (the "Declaration") to be recorded by TBC against the Property, TBC shall establish the Twinbrook Commons Management Group (the "Manager") which shall, among other things, assume TBC's obligations under this Agreement and implement and fund the "Trip Reduction Program" as set forth on Exhibit "A" attached hereto.
NOW, THEREFORE, in consideration of the Recitals stated above, each of which is made a part of this Agreement, and for other good and valuable consideration, the receipt and sufficiency of which each of the parties to this Agreement acknowledges the parties agree to the following in compliance with the above requirements:

1. Definitions

   a. Full Buildout – the issuance of the shell occupancy permit (or an occupancy permit in the case of a residential building) for the final building within the Twinbrook Commons development

   b. One-third Buildout – Issuance of either one-third of the residential occupancy permits, one-third of the non-residential shell occupancy permits or a combination of residential and non-residential shell occupancy permits that equal one-third of the development.

   c. One-Half Buildout – Issuance of either one-half of the residential occupancy permits, one-half of the non-residential shell occupancy permits or a combination of residential occupancy permits and non-residential shell occupancy permits that equal one-half of the development.

   d. Traffic and Transportation Division – the Traffic and Transportation Division of the City of Rockville’s Department of Public Works, or its successor.

   e. Trip Generation Rates – the number of vehicular trips assigned to a specific land use (retail, office, residential) by the Maryland-National Capital Park and Planning Commission, Montgomery County Department of Park and Planning Local Area Transportation Review Guidelines (“LATR”) and/or the Institute of Transportation Engineers (“ITE”) standards

   f. Trip Reduction Goals – the percentage reduction in trip generation rates for each category of land use at various stages of development.

   g. Ultimate Development – the development of 1,595 residential units; 325,000 square feet of office development and 220,000 square feet of retail development.

2. Commencement Date

   The obligations and requirements set forth in this Agreement, except as provided otherwise, shall commence upon the issuance of the first occupancy permit for the first building (excluding parking garages) to be constructed on the Property (the “Commencement Date”).

3. Trip Reduction Goal

   a. TBC will be responsible for meeting the Final and Interim Trip Reduction Goals as further specified in sections e and d of this paragraph 3 by reducing trips from either the Property itself or from other properties within the Twinbrook Metro Station Policy Area.
b. As it pertains to both the Final and Interim Trip Reduction Goals, the trip reduction calculation shall be based on the aggregate average trip reduction goal of all uses. This shall be approved by the Traffic and Transportation Division.

c. For purposes of a baseline, the following trips, not taking into account any trip reduction, are anticipated at Ultimate Development: 1448 AM trips and 2066 PM trips.

d. Final Trip Reduction Goals to be met beginning at Full Buildout or ten (10) years after the Commencement Date, whichever first occurs, are 35 percent in the AM and 24 percent in the PM. It is anticipated but not required that the reductions will occur as follows:

<table>
<thead>
<tr>
<th>Use</th>
<th>Percentage Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM</td>
<td>PM</td>
</tr>
<tr>
<td>Retail</td>
<td>15%</td>
</tr>
<tr>
<td>Office</td>
<td>50%</td>
</tr>
<tr>
<td>Residential</td>
<td>25%</td>
</tr>
</tbody>
</table>

e. TBC shall employ its best efforts to meet the following Interim Trip Reduction Goals of 8.75 percent in the AM and 6.25 percent in the PM beginning at one-half buildout or five (5) years after the Commencement Date. It is anticipated, but not required that the reductions will occur as follows:

<table>
<thead>
<tr>
<th>Use</th>
<th>Percentage Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM</td>
<td>PM</td>
</tr>
<tr>
<td>Retail</td>
<td>3.75%</td>
</tr>
<tr>
<td>Office</td>
<td>12.5%</td>
</tr>
<tr>
<td>Residential</td>
<td>6.25%</td>
</tr>
</tbody>
</table>

For purposes of meeting the Interim Trip Reduction Goals, the specific number of trips to be removed from the road system to satisfy the applicable trip reduction goals at any given time will depend on the mix of uses at said time.

4. Monitoring of Trip Reduction Program

a. At one-third buildout TBC will commence semi-annual traffic-monitoring. Such semi-annual monitoring shall continue throughout the duration of this Agreement, subject to the provisions for increased monitoring in paragraph 5 below.

b. Traffic monitoring shall consist of traffic counts to be conducted at all garage access points on the Property and commuter surveys throughout the Twinbrook Metro Station Policy Area where components of the Trip Reduction Plan have been employed. Location of counts and surveys shall be coordinated with and approved by the Traffic and Transportation Division.

c. All traffic-monitoring shall be performed by an independent third-party traffic consultant and shall be fully funded by TBC.
d. Traffic-monitoring results shall be submitted to the Traffic and Transportation Division every January 1 and July 1.

5. Trip Reduction Measures

a. To achieve the Interim and Final Trip Reduction Goals, TBC will implement and fund whatever components of the Trip Reduction Program, attached hereto as Exhibit "A" deemed necessary.

b. If Interim Trip Reduction Goals are not met between One-Half and Full Buildout, TBC shall, with the approval of the Traffic and Transportation Division, identify and implement additional feasible trip reduction measures to achieve Interim Trip Reduction Goals. Such measures shall recognize that the Twinbrook Commons Property has not yet obtained full buildout and the projected modal splits resulting from the full complement of uses has not yet had an opportunity to be achieved. Accordingly, such measures may be employed temporarily and in a limited scope or manner.

c. If at Full Buildout or any time thereafter, TBC fails to meet the Final Trip Reduction Goals, TBC must:

1) Adopt a revised, more comprehensive and aggressive Trip Reduction Program in coordination with the Traffic and Transportation Division, and

2) Increase monitoring to quarterly monitoring until Trip Reduction Goals have been met for three (3) consecutive quarters, at which time semi-annual monitoring will resume

d. It is the intent of the parties that for the life of this Agreement it is TBC's obligation to identify and implement (with City approval) additional mitigation efforts whenever TBC fails to meet the Trip Reduction Goals, to include both the Interim and Final Trip Reduction Goals. The parties may modify the Trip Reduction Program and/or this Agreement at any time as may be necessary to achieve the Trip Reduction Goals.

6. Participation in City of Rockville Transportation Management District

TBC will participate in, and take actions specified by, programs operated by any existing and/or future City of Rockville Transportation Management District ("TMD") and/or any applicable Montgomery County Transportation Management District.

7. Fees

TBC will pay an annual fee of $1.10 per square foot for non-residential development and $60 per dwelling unit for residential development for a period of twelve (12) years, said contribution to be known as a Transportation Demand Management (TDM) fee.
The first payment of the TDM fee attributable to each rental multi-family and nonresidential building shall be made prior to the issuance of the occupancy permit for said building. If the first TDM payment for a building is made before March 1 of any given year, the second payment for said building shall be made on or before July 1 of that same year. If the first TDM payment for a given building is made on or after March 1 of any given year, the second payment for said building shall be made on or before July 1 of the following year. Each subsequent annual TDM payment shall be made on or before July 1. TDM payments shall be made to the “Mayor and Council of Rockville” c/o the City of Rockville Department of Public Works. Each payment shall indicate that it is being made for the Twinbrook Commons development pursuant to the applicable use permit number. Should one or more of the residential units be converted from apartment units for rent to condominium units or otherwise sold as individual residential units, the entire unpaid balance of the $720 TDM fee attributable to each unit sold shall become due and owing to the City. Owner agrees to pay to the City said unpaid balance due for each residential unit prior to the transfer of ownership in said unit. At any time the Owner may make a lump sum payment of the remaining TDM fees owed under this agreement.

8. Reporting

In addition to the traffic monitoring results required to be submitted to the Traffic and Transportation Division every January 1 and July 1, pursuant to paragraph 4d herein, TBC shall also submit a report to the Traffic and Transportation Division every January 1 and July 1 in a form acceptable to the City which documents and describes the traffic mitigation programs that TBC is employing (the "Traffic Mitigation Report"). At the request of the Traffic and Transportation, TBC agrees to provide up to two additional Traffic Mitigation Reports per year.

9. Enforcement

In the event the City determines that TBC or the Manager, as the case may be, has failed to implement the Trip Reduction Program (the "Trip Reduction Program") or has ceased to implement the Trip Reduction Program for a period of more than 60 days, the City shall first issue written notice to TBC or the Manager, as the case may be, informing TBC or the Manager, as the case may be, that it has 30 days within which to implement the Program or TBC shall be found to be in default of this Agreement. Failure of TBC or the Manager, as the case may be, to implement the Trip Reduction Program within the 30 day notice period shall constitute a violation of the Zoning and Planning provisions of the Rockville City Code for which a citation may be issued and a fine imposed in an amount consistent with the provisions of the Rockville City Code. In addition to the enforcement mechanisms set forth herein, the City shall have the authority to withhold further Twinbrook Commons development approvals, including permits, if TBC fails to implement the mitigation measures in good faith.

The remedies set forth in this paragraph are in addition to other remedies contained in this Agreement or otherwise available to the City under the laws of Maryland or the Rockville City Code or Charter, including, but not limited to, instituting legal proceedings to enforce the provisions of this Agreement. This Agreement shall be construed in accordance with
the law of the State of Maryland, and all suits or actions brought thereunder shall be brought in
an applicable court in Montgomery County, Maryland.

Notwithstanding anything in this Agreement to the contrary, so long as TBC or the
Manager, as the case may be, is implementing the Trip Reduction Program in compliance with
this Agreement, the failure by TBC or the Manager to meet the Final and/or Interim Trip
Reduction Goals shall not constitute a default under this Agreement and neither TBC or the
Manager shall have any liability under this Agreement as a result of any such failure.

10. Duration

The provisions of this Agreement shall continue in force for thirty (30) years from
the Commencement Date.

All of the provisions of this Agreement including the benefits and burdens shall
be binding upon and inure to the successors and assigns of TBC.

11. TBC's Obligations

The obligations of TBC under this Agreement shall commence on the
Commencement Date and shall terminate upon the first to occur of: (i) the date that Twinbrook
Commons, L.L.C. ceases to own fee simple interest in the Property or any part thereof or ceases
to be a ground lessor to all or any part of the Property or (ii) the date on which the Manager shall
be formed under the Declaration. On the date that TBC's obligations under this Agreement shall
terminate, the obligations and liabilities thereafter accruing under this Agreement (but not as to
any accrued or unperformed obligations and liabilities on the date said obligations are assumed
by said successors and/or assigns) shall be the obligations of either (i) TBC's successors and/or
assigns, to the extent permitted by law, or (ii) the Manager, as the case may be. TBC shall
provide notice to the City of TBC's successors and/or assigns or establishment of the Manager.

Notwithstanding anything set forth in this Agreement to the contrary, at such time
as the Manager shall be formed under the Declaration, all of TBC's obligations under this
Agreement (including without limitation the obligations to implement the Trip Reduction
Program) shall automatically become the sole responsibility of the Manager and TBC shall
thereupon be released from its obligations and liabilities under this Agreement (but not as to any
accrued or unperformed obligations and liabilities on the date said obligations are assumed
by the Manager).

12. Notices

All Notices and other communications required to be given by any party under
this Agreement shall be in writing and shall be deemed duly given by Certified Mail, Returned
Receipt Requested, Postage Prepaid, as follows:
(a) If to Twinbrook Commons, L.L.C.
    to:    Mr. Rod Lawrence
           The JBG Companies
           4445 Willard Avenue
           Chevy Chase, MD 20815

    with copy to:    Patricia Harris, Esq.
                      Holland & Knight LLP
                      3 Bethesda Metro Center
                      Suite 800
                      Bethesda, MD 20814

(b) If to the City,
    to:    City of Rockville
           City Manager
           111 Maryland Avenue
           Rockville, MD 20850

           and

           City of Rockville
           Director of Public Works
           111 Maryland Avenue
           Rockville, MD 20850

    with copy to:    City of Rockville
                      City Attorney's Office
                      111 Maryland Avenue
                      Rockville, MD 20850

13. Entire Agreement

   This Agreement constitutes the entire agreement between the parties and no party
   is liable to the other or bound in any manner by express or implied warranties, guarantees,
   promises, statements or representations pertaining to the subject matter hereof unless such
   warranties, guarantees, promises, statements or representations are expressly and specifically set
   forth in this Agreement.

14. Counterparts

   This Agreement may be executed simultaneously in any number of counterparts,
   each of which shall be deemed an original but all of which shall constitute one and the same
   Agreement.
15. Amendments/Modifications

This Agreement can be modified only in writing signed by all the parties hereto, their heirs, successors, assigns or their designees hereunder. Amendments which are deemed by any party to materially alter the Agreement and which are inconsistent with the requirements of the PDP Approval, Exhibit "B", must be approved by the Mayor and Council.

16. Governing Law

This Agreement shall be governed and construed in accordance with the laws of the City of Rockville and State of Maryland.

17. Severability

If any term or provision of this Agreement or its applications to any person or circumstance shall, to any extent, be invalid or unenforceable, the remaining terms and provisions of this Agreement, or the application of such term or provision to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected, and each term and provision of this Agreement shall be valid and enforced to the fullest extent permitted by law.

IN WITNESS WHEREOF, TBC and the Mayor and Council of Rockville have entered into this Agreement on the day and year first written above.

[SIGNATURE PAGES FOLLOW]
MAYOR AND COUNCIL
OF ROCKVILLE

By:  (SEAL)

Scott Ullery
City Manager

COUNTY OF:

STATE OF:

I HEREBY CERTIFY that on this 30th day of March, 2007, before me, the undersigned, a Notary Public in the jurisdiction aforesaid, personally appeared Scott Ullery, who acknowledged himself to be the City Manager of the Mayor and Council of Rockville, a municipal corporation, and that he, as City Manager being authorized so to do, executed the foregoing instrument on behalf of the corporation for the purposes therein contained, by signing the name of the Mayor and Council of Rockville by himself as City Manager.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Notary Public

My Commission Expires: 10-01-10

[NOTARIAL SEAL]
ATTORNEY'S CERTIFICATE

I HEREBY CERTIFY that this Agreement was prepared under my supervision, and that I am an attorney duly admitted to practice before the Court of Appeals of Maryland.

[Signature]

Patricia A. Harris
EXHIBIT "A"

Twinbrook Commons Trip Reduction Program
TWINBROOK COMMONS
TRIP REDUCTION PROGRAM

Overview

The Twinbrook Commons development project encompasses the 26-acre east and west sides of the Twinbrook Metro Station. The proposed development of the entire project will include, when completed, 1,595 multi-family residential units, a maximum of 225,000 square feet of office space, and 220,000 square feet of retail space. Twinbrook Commons will be developed by Twinbrook Commons, LLC (an affiliate of JBG Associates, LLC (“TBC”) in conjunction with WMATA pursuant to the WMATA Joint Development Agreement.

In accordance with the City of Rockville Preliminary Development Plan approval, the Twinbrook Commons project is subject to the goal of significantly reducing the total peak hour trip generation of the development.

The potential for vehicle trip reductions are significant due to: (1) the proximity of the Twinbrook Metro Station, which provides alternate modes of travel; (2) the synergy of uses planned on the site and in the immediate vicinity including, office, residential, and retail that will internalize site trips and promote a “live where you work” dynamic; and (3) trip reduction measures provided by the project. In order to achieve and maintain a goal of 35 percent AM peak period and 24 percent PM peak period reduction in vehicle trips to and from the property, defined as the Trip Reduction Goals and as stated in the Trip Reduction Agreement, a comprehensive Trip Reduction Program is recommended. This Trip Reduction Program is the establishment of measures to influence travel behavior by mode, frequency, time, route, and/or trip length in order to achieve a maximally efficient use of transportation facilities. In an effort to achieve the Trip Reduction Goals, TBC may implement certain mitigation programs within other properties which are under common control with TBC.

The following presents the Trip Reduction Program for the Twinbrook Commons project. It includes descriptions for each of the elements that comprise the Trip Reduction Program. As the project is developed and occupied, modifications and additions to this Trip Reduction Program may be considered and approved by the Traffic and Transportation Division. The Trip Reduction Program sets forth a variety of potential measures to be implemented by Twinbrook Commons in order to meet the Trip Reduction Goals. Depending on the effectiveness of certain measures or a combination thereof, the implementation of all measures may not be necessary.
Trip Reduction Program

The Trip Reduction Program includes, but is not limited to, the following elements:

I. Education and Information
II. Parking Management
III. On-Site Construction
IV. Commuter Assistance Programs

I. Education and Information

A. Transportation Coordinator. Twinbrook Commons LLC will engage a transportation coordinator at its own cost above the TDM fees paid to the City. The Transportation Coordinator will be the primary point of contact and will be responsible for coordinating, monitoring and completing trip reduction obligations on behalf of the Applicant. The transportation Coordinator’s duties will include, but not be limited to the following:

1. Administer TBC’s participation in any existing or future City of Rockville Transportation Management District (TMD) and/or any applicable Montgomery County Transportation Management District.

2. Maintain displays of printed rideshare marketing materials or an electronic display with direct links to the City, County and WMATA web pages in each office building and in the residential buildings, and/or in the transit resource center.

3. Distribute to new tenants and residents materials that include site-specific transit-related information to include transit schedules, stop locations, and fares, and will promote the Twinbrook Metro Station in all promotional materials and advertisements for the property.

4. Implement a transit-advertising program that will be distributed four times per year to all existing and new Twinbrook Commons commercial tenants. This will provide information about transit/ridesharing opportunities so that new employees will be informed of the transit options available on site.

5. Coordinate participation in Ozone Action Days and other regionally sponsored clean air programs.

6. Develop and maintain a “transformation information” section within the Twinbrook Commons website. The website will include a transportation section that provides details of the current Twinbrook Trip Reduction programs with links to; www.WMATA.com; www.nblt.org; www.maryland.com; www.nblt.org; www.commuterconnections.com and other commuter assistance websites.
7. Perform and assist with the performance monitoring data collection, including annual surveys of riders on mode choice, origin and destination, and approximate frequency of ridership on different modes.

8. Insure that all office tenants within other projects controlled by affiliates of TBC are provided information and special pre-leasing opportunities regarding the housing and retail shopping opportunities at Twinbrook Commons.

II. Parking Management

A parking management plan will be prepared by the Transportation Coordinator and submitted to the City for review and approval. The plan will include a description of the visitor, employee, and retail parking management strategies. These strategies will include, but will not be limited to, the following:

A. Reserved carpool spaces. The owner/parking operator will reserve parking spaces in each parking garage associated with the office and retail space for registered carpools (2 or more occupants per vehicle). These spaces will be conveniently located with respect to the elevators and garage entrances. It is the intent of TBC that as many carpool spaces as are needed will be provided in each garage.

B. Market rate SOV parking. Monthly parking rates for single occupant vehicles (SOV) will be consistent with office buildings located in comparable markets.

C. Reserved free vanpool parking. Registered vanpool parking spaces will be reserved in each parking garage associated with the office buildings. These spaces will be conveniently located with respect to elevators.

D. Provide reserved spaces in each parking garage including residential garages for a car-sharing program. This program offers to transit and rideshare users and residents an "on demand" car rental, providing access to a vehicle on short notice, (i.e. for the unexpected meeting out of the office, or for the family that chooses to own one or no vehicle).

E. Reduced rate parking for residents (reduction for one space per family) employed within Twinbrook Commons or Fishers Place.

III. On-site construction

To encourage alternate modes of transportation and internal site trips Twinbrook Commons will provide the following:

A. A Transit Resource Center, to include real-time information kiosk(s), bus schedules and route maps, Metro maps, shower facilities for bicycle commuters. The Center
will be no more than 2000 square feet, with at least eight seats to accommodate riders waiting for transit. The Center will be located within 150 feet of the metro station entrance on the east side of Twinbrook Commons.

B. Class I bicycle storage facilities on-site for the office and residential tenants and will provide Class II bike racks for retail customers. Class I bicycle parking is generally for long-term parking, requires a high degree of security and weather protection, and generally consists of lockers or storage rooms, or fenced areas with restricted access. Class II bicycle parking refers to short-term parking, requires a high degree of convenience (i.e., close to activity centers), and generally consists of bike racks.

C. Two on-site taxi loading/waiting zones.

D. Accessible pickup/drop-off/waiting areas for para-transit vehicles with accessible pathway, sufficient space to load and unload wheelchairs from vans, and appropriate signage.

E. On-site business center(s) to serve all the residents. The center(s) will be maintained by the respective building management and will include, at a minimum, copiers, fax machines, and computers with internet access. The center will be available for any residents of Twinbrook Commons who choose to work from home.

F. A property concierge service available through the property management office or Transit Resource Center to provide a taxi hotline or phone available to call cabs, site-specific transit schedules and information, and the sale of transit passes to residents, employees, and visitors. This may also include an internal concierge service to provide residents and tenants alike, pick-up and delivery of goods and services offered within the complex (i.e. dry cleaning, printing, groceries, etc).

G. Real Time transit signs installed in two bus shelters within the Twinbrook policy area.

IV. Commuter Assistance Program

A. Tenant lease agreements will include a provision authorizing TBC to require that non-residential tenants undertake traffic mitigation strategies which may include, but are not limited to the following, in the event that monitoring of the site traffic indicates that the site trips do not meet the Trip Reduction Goals:

1. Monthly subsidies to employees and residents (Super fare share and/or MetroCheck).

2. Transit passes/tokens offered at work site (at full or reduced price).

3. Pretax payroll deduction for transit costs for employees.

4. Carpool matching for employees.
INFORMATION FOR RECORDING

Type of Instrument: Trip Reduction Agreement

Parcel ID Nos.: 52-2106737
               20-3251508
               20-3251473
               20-2404951

After Recording, Return to: Patricia Harris, Esq.
                           Holland & Knight LLP
                           3 Bethesda Metro Center
                           Suite 800
                           Bethesda, MD 20814
Appendix B: TDM Plan Outreach

The City of Rockville includes a tremendous number and diversity of stakeholders involved with or influencing TDM programs. For this long-range planning process to truly work, all stakeholders that will eventually play a role in funding or implementing TDM efforts must buy into both the process and the outcomes of this project. Because of the importance of building stakeholder ownership in a project of this nature, the stakeholder involvement process should be both open and structured. UrbanTrans executed and managed the Rockville TDM Long Range Plan development constantly seeking input from a TDM Advisory Committee comprised of city staff and key stakeholders, as well as the Traffic and Transportation Commission.

Stakeholder Meeting #1: July 28, 2009
UrbanTrans worked closely with the Traffic and Transportation Commission through two key meetings. The first occurred on July 28, 2009 at the commission’s monthly meeting where time was spent to identifying City of Rockville transportation system strengths, weaknesses, opportunities and threats (SWOT). Additional discussion surrounded how the Commission would define and quantify success for the TDM Program in addressing the City’s transportation system needs. It was determined that additional information from other peer cities was needed to feel comfortable making a decision on a measurable goal for Rockville’s TDM Program.

Stakeholder Meeting #2: August 4, 2009
UrbanTrans worked closely with several Traffic and Transportation Division as well as Planning Division staff. Three main accomplishments of this meeting were completing a Rockville Transportation System SWOT analysis, determining that trip reduction as a measure of success, and identifying areas within the City where current or future levels of traffic congestion are forecasted to be most challenging (hot spots).

Stakeholder Meeting #3: August 4, 2009
UrbanTrans met with staff from the Public information Office. The two main accomplishments of this meeting were completing a Rockville Transportation System SWOT analysis and identifying communications channels through which future TDM program information can be disseminated.

Stakeholder Meeting #4: August 4, 2009
UrbanTrans met with Environmental Management Division Chief and other staff who have experience with TDM. The two main accomplishments of this meeting were completing a Rockville Transportation System SWOT analysis and identifying opportunities to ensure that the TDM plan is in sync with the City’s Comprehensive Sustainability Strategy as well as its US Conference of Mayors Climate Change Agreement.

Stakeholder Meeting #5: August 25, 2009
At the subsequent Traffic and Transportation Commission meeting on August 25, 2009, UrbanTrans presented the requested Peer Comparison and demonstrated how trip reduction percentages gathered from those communities could be applied to hot spots in the City of Rockville. The Traffic and Transportation Commission agreed with this approach.
Appendix C: TDM Ordinance Summaries

<table>
<thead>
<tr>
<th>Location</th>
<th>San Mateo, CA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>90,954</td>
</tr>
<tr>
<td>Employment</td>
<td>50,002</td>
</tr>
<tr>
<td>Household Income</td>
<td>$79,548</td>
</tr>
<tr>
<td>Per capita income</td>
<td>$42,481</td>
</tr>
</tbody>
</table>

**Program Specifics**
This TDM ordinance is associated with the Transit Oriented Development (TOD) district along the San Mateo Rail Corridor. San Mateo developed a TOD district along this Caltrans rail corridor to encourage more intensive development within walking distance of the rail stations.

**Trigger**
TDM plans are triggered if there is increase of 100 or more PM peak hour trips, before implementing TDM measures. Trips are calculated using the rates and equations contained in the latest edition of the Trip Generation Handbook published by the Institute of Transportation Engineers.

**TDM Requirements**
Once a TDM plan is triggered, the TDM requirements include participation in the local Transportation Management Association, recommended trip reduction and parking reduction measures, and TDM strategy implementation at employer sites. Residential TDM is a secondary option.

**TDM Goals**
The goal is to achieve an overall reduction in new vehicle trips of at least 25 percent corridor-wide. This goal is recognized as a long-term goal. Individual developments may not achieve their full trip reduction potential until the TOD is fully built-out.

**Evaluation**
Trip reduction is measured against available trip generation data for “traditional” projects that do not benefit from TOD (a typical baseline is using ITE rates and equations). Monitoring procedures include annual surveys, driveway counts, cordon counts, or monitoring key intersection volumes. The appropriate method is selected on a case-by-case basis. Projects that exceed their trip generation threshold are required to modify their TDM plan and incorporate more measures. Projects may be required to implement market-rate parking permit systems if other trip reduction strategies prove ineffective. The TMA is responsible for submitting an annual report to San Mateo City Council outlining the compliance of occupied developments and any program changes. Some areas are not expected to generate significant trip reductions, particularly regional retail uses.

**Keyword Comparables to Rockville**
TOD; smart growth; reductions for retail; mandatory program
<table>
<thead>
<tr>
<th>Location</th>
<th>Boca Raton, FL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>82,124</td>
</tr>
<tr>
<td>Employment</td>
<td>40,974</td>
</tr>
<tr>
<td>Household Income</td>
<td>$67,531</td>
</tr>
<tr>
<td>Per capita income</td>
<td>$50,423</td>
</tr>
</tbody>
</table>

**Program Specifics**

The City of Boca Raton, FL has several TDM requirements for new and existing developments in their downtown area. Reduction goals are determined by city staff and a TDM plan is required in addition to an extensive application from the property owner/employer.

**Trigger**

Downtown developments with 50 or more employees and/or 30 or more residential units.

**TDM Requirements**

- Requirements for developments existing before October 22, 2002:
  - Facilities to post TDM program information (e.g., kiosks)
  - Unsubsidized transit tickets/passes onsite
  - Provision of meaningful incentives
  - TDM plan and implementation of the TDM strategies proposed
  - TDM Program Coordinator

- Requirements for developments built after October 22, 2002:
  - Elements described for existing development
  - Driveways and parking areas to accommodate use of vans and shuttle buses
  - Bus shelter if property has frontage on any transit route or shelter within 600 ft
  - Secure bicycle parking

  **By October 2007 or within 5 years of Certificate of Occupancy, whichever is later:**
  - Commuter vanpool service to all employees in the development

**TDM Goals**

The goals for the program are determined by city staff.

**Evaluation**

An annual evaluation report template is provided by the city. This form asks the responsible party if the TDM program was implemented to the parameters described in their TDM plan and initial application materials. Peak period vehicle trip reduction, vehicle to employee ratio, and driveway vehicle count measures are determined using the traffic count data and employee surveys by Boca Raton city staff.

**Keyword Comparables to Rockville**

Requirements for new and existing properties; TDM programs in retail areas; mandatory program without penalties; sophisticated role for city staff to evaluate and monitor.
<table>
<thead>
<tr>
<th>Location</th>
<th>Bellevue, WA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>117,521</td>
</tr>
<tr>
<td>Employment</td>
<td>64,073</td>
</tr>
<tr>
<td>Household Income</td>
<td>$76,641</td>
</tr>
<tr>
<td>Per capita income:</td>
<td>$44,011</td>
</tr>
<tr>
<td>Program Specifics</td>
<td>The Transportation Department within the City of Bellevue administers a Transportation Management Program. The purpose of the program is to mitigate the transportation impacts of new development.</td>
</tr>
<tr>
<td>Trigger</td>
<td>The program only applies to new development or a development undergoing a substantial remodel. Different requirements apply based on the development's size and type of use.</td>
</tr>
<tr>
<td>TDM Requirements</td>
<td>Programs are assigned to specific land uses in the ordinance through a point system. Applicants have flexibility in applying different strategies as long as they select enough strategies to meet or exceed their point targets. Strategies include: &lt;br&gt;- Distribute information annually: 4 pts &lt;br&gt;- Provide a Transportation Coordinator: 9 pts &lt;br&gt;- Line item parking costs in lease agreements: 7 pts &lt;br&gt;- Promote the regional ridematching service: 6 pts &lt;br&gt;- Provide one carshare and designated parking: 7 pts &lt;br&gt;- Provide shuttle service to transit center or park-n-ride: 12 pts &lt;br&gt;- Minimum financial incentive of 20% of market-rate parking cost/month: 12 pts &lt;br&gt;- Lease agreements that do not subsidize parking: 9 pts &lt;br&gt;- Variable priced parking (occasional parking program): 7 pts &lt;br&gt;- Develop parking supply that does not exceed minimum required by city code: 6 pts &lt;br&gt;- Guaranteed Ride Home program: 6 pts &lt;br&gt;- Provide showers, lockers: 17 pts &lt;br&gt;- Local bikeshare program or bike maintenance program: 8 pts &lt;br&gt;- Support of local Transportation Management Association: 18 pts &lt;br&gt;- Submit biennial report: 2 pts &lt;br&gt;- Monitor progress towards performance goal: 9 pts</td>
</tr>
<tr>
<td>TDM Goals</td>
<td>Bellevue's Commute Downtown plan set a goal of 5,000 reduced trips by 2011. The specific performance goal for each use subject to this program is staggered over the long term.</td>
</tr>
<tr>
<td>Evaluation</td>
<td>Property owners are required to submit a biennial report to the city for the life of the building. The report format is flexible, but it must document compliance with each of the required transportation programs, typically through employee surveys. If performance targets are not attained as documented in the biennial report, an additional 5 points are required to be implemented from the TDM strategy list.</td>
</tr>
<tr>
<td>Keyword Comparables to Rockville</td>
<td>Mandatory programs; programs required for new development only; flexible point system to assign TDM strategies; significant staff administration</td>
</tr>
<tr>
<td>Location</td>
<td>Cambridge, MA</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Population</td>
<td>91,867</td>
</tr>
<tr>
<td>Employment</td>
<td>54,595</td>
</tr>
<tr>
<td>Household Income</td>
<td>$58,457</td>
</tr>
<tr>
<td>Per capita income</td>
<td>$40,086</td>
</tr>
</tbody>
</table>

**Program Specifics**

Cambridge has developed a Parking and Transportation Demand Management (PTDM) ordinance. The ordinance is in the Cambridge Municipal Code Chapter 10.18: Parking and Transportation Demand Management, Parking Space Registration.

**Trigger**

A TDM plan is triggered when a developer of a non-residential project proposes to add parking.

**TDM Requirements**

The following strategies are recommended by Cambridge for PTDM plans. The developer and/or property owner have flexibility in choosing their programs, but the final plan is subject to city review to decide if enough strategies have been applied. Strategies include:

- MBTA transit pass subsidies
- Market-rate parking fees
- Shuttle buses
- Bicycle parking
- Showers/lockers
- Guaranteed Ride Home
- Carpool/vanpool matching
- Bus shelters
- Transit information
- Hiring of On-site TDM coordinator

**TDM Goals**

A reduction goal is assigned to large project PTDM plans only. This goal is a single occupant vehicle (SOV) mode-share commitment of 10% below the 1990 Census Journey to Work data for the tract representing the project location.

**Evaluation**

Annual monitoring and reporting is required of all PTDM properties. Monitoring includes employee and/or patron mode split surveys or SOV rate, biennial counts of parking occupancy and driveway in/out, and status of the TDM measures. If the city has reason to believe that the ordinance is being violated, the first step is to order the property owner to cease the violation within 30 days.

**Keyword Comparables to Rockville**

TDM plan triggered through parking requirements; flexible strategy selection; TDM plan part of development review process; strong enforcement policies.
<table>
<thead>
<tr>
<th>Location</th>
<th>Pasadena, CA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>136,294</td>
</tr>
<tr>
<td>Employment</td>
<td>70,676</td>
</tr>
<tr>
<td>Household Income</td>
<td>$61,269</td>
</tr>
<tr>
<td>Per capita income</td>
<td>$36,415</td>
</tr>
<tr>
<td>Program Specifics</td>
<td>The City of Pasadena requires TDM plans for new development to be submitted prior to the issuance of a building permit. The city has a formal Trip Reduction Ordinance contained within the City of Pasadena Municipal Code, Chapters 10.64.005, 10.64.010, and 10.64.020.</td>
</tr>
<tr>
<td>Trigger</td>
<td>Generally, commercial and non-residential mixed-use projects are subject to trip reduction measures based on their square footage. The larger the project, the more trip reduction measures apply. There are triggers for low, moderate, and high trip reduction programs.</td>
</tr>
<tr>
<td>TDM Requirements</td>
<td>For non-residential stand-alone and non-residential portions of mixed-use projects exceeding 25,000 sq ft gross floor area, carpool and vanpool parking must be a minimum of 10% of all parking, there must be bicycle parking, and a transportation plan is required. For non-residential portions of mixed-use projects exceeding 50,000 sq ft gross floor area, in addition to the parking requirements above, a Transportation Demand Management Program Plan must be approved. For non-residential stand-alone and non-residential portions of mixed-use projects exceeding 75,000 sq ft gross floor area, in addition to the elements described above for 25,000 and 50,000 sq ft developments, carpool and vanpool loading areas, connecting sidewalks, and bus stop improvements are required. For residential projects with 100 or more units and mixed-use projects with 50 or more residential units, a Transportation Demand Management Program Plan must be approved with residential programs outlined.</td>
</tr>
<tr>
<td>TDM Goals</td>
<td>Projects with over 50,000 sq ft of non-residential development or at least 50 residential units have a goal of 1.5 average vehicle ridership (AVR) between 6:00 AM and 9:00 AM, Monday through Friday.</td>
</tr>
<tr>
<td>Evaluation</td>
<td>Property owners must submit an annual TDM Status Report to the city. The city reserves the right to assign the first annual reporting date. In this report, the AVR must be calculated, results of vehicle traffic counts summarized, and the employee mode split must be provided. Failure to submit a TDM plan, implement is components, submit annual Status Reports, or achieve the AVR target can result in enforcement actions. Enforcement actions include requiring more elements to a TDM program and revoking approval of the TDM Plan.</td>
</tr>
<tr>
<td>Keyword Comparables to Rockville</td>
<td>TDM plans for mixed use areas; goals based on average vehicle ridership (AVR); strict reporting procedures and enforcement policies</td>
</tr>
</tbody>
</table>
Appendix D: Peer Review of Trip Reduction Impacts

**High Transit Service**

<table>
<thead>
<tr>
<th>TOD Best Practice Example</th>
<th>Land Use</th>
<th>TDM Program</th>
<th>Vehicle Trip Reduction Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orenco Station in Hillsdale, OR</td>
<td>Suburban residential neighborhood</td>
<td>Transit passes given to all new residents for one year</td>
<td>2 percent decrease in drive-alone trips in station area</td>
</tr>
<tr>
<td>Lloyd District in Portland, OR</td>
<td>Urban mixed use</td>
<td>Establishment of metered on-street parking; introduction of a subsidized transit passes for all district employees; multimodal facility improvements; promotional efforts</td>
<td>7 percent decrease in district attributable to TDM</td>
</tr>
<tr>
<td>Clayton Lane in Denver, CO</td>
<td>Urban mixed use - retail, hotel, office and residential</td>
<td>1 million square foot development with indoor bike parking, discounted transit passes to employees, guaranteed ride home, shared parking and a 21 percent decrease in required parking spaces</td>
<td>Estimated that TDM program reduces vehicles miles traveled by over 1 million per year</td>
</tr>
<tr>
<td>Atlantic Station in Atlanta, GA</td>
<td>Mixed use - office, retail, residential, hotel</td>
<td>6 million square feet of office, 10,000 residences, 1.5 million square feet of retail, 1,000 hotel rooms with a commuter store, bike parking, bike share program, transit service, and shuttle</td>
<td>59 percent of employees using alternate modes of transportation</td>
</tr>
<tr>
<td>Ballston in Arlington, VA</td>
<td>Mixed use - office, retail, residential</td>
<td>5.3 million square feet of office, 900,000 square feet of retail, and 6,000 residential units served by TDM program including a commuter store, car share parking, and structured car stall parking</td>
<td>16.5 percent access the transit station by car and 47 percent residents use transit to access jobs</td>
</tr>
<tr>
<td>Pleasant Hill Bay Area Rapid Transit (BART) Station in Pleasant Hill, CA</td>
<td>Residential - urban</td>
<td>Various TDM programs as part of a statewide study testing travel behavior in TOD's</td>
<td>53 percent of commute trips made by residents in the TOD were by single occupancy vehicle, 45 percent were by transit</td>
</tr>
<tr>
<td>Alameda BART Station in Alameda County, CA</td>
<td>Residential - suburban</td>
<td>Various TDM programs as part of a statewide study testing travel behavior in TOD's</td>
<td>62 percent of commute trips made by residents in the TOD were by single occupancy vehicle, 38 percent were by transit</td>
</tr>
</tbody>
</table>
### High Transit Service

<table>
<thead>
<tr>
<th>TOD Best Practice Example</th>
<th>Land Use</th>
<th>TDM Program</th>
<th>Vehicle Trip Reduction Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long Beach Los Angeles Metro Station in Long Beach, CA</td>
<td>Residential - urban sprawl</td>
<td>Various TDM programs as part of a statewide study testing travel behavior in TOD's</td>
<td>93 percent of commute trips made by residents in the TOD were by single occupancy vehicle, 3 percent were by transit</td>
</tr>
<tr>
<td>Mission Valley San Diego Trolley Station in Mission Valley, CA</td>
<td>Residential - suburban</td>
<td>Various TDM programs as part of a statewide study testing travel behavior in TOD's</td>
<td>85 percent of commute trips made by residents in the TOD were by single occupancy vehicle, 13 percent were by transit</td>
</tr>
<tr>
<td>Various Stations for California Commuter Trains</td>
<td>Residential - various locations</td>
<td>Various TDM programs as part of a statewide study testing travel behavior in TOD's</td>
<td>82 percent of commute trips made by residents in the TOD were by single occupancy vehicle, 17 percent were by transit</td>
</tr>
<tr>
<td>Berkeley BART Station in Berkely, CA</td>
<td>Office - urban</td>
<td>Various TDM programs as part of a statewide study testing travel behavior in TOD's</td>
<td>50 percent of commute trips made by office workers in the TOD were by single occupancy vehicle, 38 percent were by transit</td>
</tr>
<tr>
<td>Walnut Creek BART Station in Walnut Creek, CA</td>
<td>Office - suburban</td>
<td>Various TDM programs as part of a statewide study testing travel behavior in TOD's</td>
<td>82 percent of commute trips made by office workers in the TOD were by single occupancy vehicle, 17 percent were by transit</td>
</tr>
<tr>
<td>Hollywood Los Angeles Metro Station in Hollywood, CA</td>
<td>Office - urban</td>
<td>Various TDM programs as part of a statewide study testing travel behavior in TOD's</td>
<td>88 percent of commute trips made by office workers in the TOD were by single occupancy vehicle, 8 percent were by transit</td>
</tr>
<tr>
<td>Mission Valley San Diego Trolley Station in Mission Valley, CA</td>
<td>Office - suburban</td>
<td>Various TDM programs as part of a statewide study testing travel behavior in TOD's</td>
<td>96 percent of commute trips made by office workers in the TOD were by single occupancy vehicle, 3 percent were by transit</td>
</tr>
<tr>
<td>Sacramento Light Rail Transit Station at Various Stations</td>
<td>Office - various locations</td>
<td>Various TDM programs as part of a statewide study testing travel behavior in TOD's</td>
<td>66 percent of commute trips made by residents in the TOD were by single occupancy vehicle, 29 percent were by transit</td>
</tr>
</tbody>
</table>
**High Transit Service**

<table>
<thead>
<tr>
<th>TOD Best Practice Example</th>
<th>Land Use</th>
<th>TDM Program</th>
<th>Vehicle Trip Reduction Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anaheim Metrolink Station in Anaheim, CA</td>
<td>Office - suburban</td>
<td>Various TDM programs as part of a statewide study testing travel behavior in TOD's</td>
<td>92 percent of commute trips made by office workers in the TOD were by single occupancy vehicle, 6 percent were by transit</td>
</tr>
<tr>
<td>Various Denver Light Rail Stations in Denver, CO</td>
<td>Office - suburban</td>
<td>Various TDM programs</td>
<td>48 percent of 840 employee responses report that they use transit to get to work more than three times per week</td>
</tr>
<tr>
<td>Various MetroRail Station Areas in Washington, DC</td>
<td>Urban</td>
<td>Various TDM programs</td>
<td>Amid mid-to-high rise apartments surrounding Metro stations, vehicle trip production rates were 60 percent lower than ITE predicted rates</td>
</tr>
<tr>
<td>Various Portland TriMet Light Rail Stations in Portland, OR</td>
<td>Urban</td>
<td>Various TDM programs</td>
<td>Amid apartments surrounding transit stations, vehicle trip production rates were 40 percent lower than ITE predicted rates</td>
</tr>
<tr>
<td>Various BART Stations in San Francisco, CA</td>
<td>Urban</td>
<td>Various TDM programs</td>
<td>Amid apartments surrounding transit stations, vehicle trip production rates were 44 percent lower than ITE predicted rates</td>
</tr>
</tbody>
</table>
## Medium Transit Service

<table>
<thead>
<tr>
<th>TOD Best Practice Example</th>
<th>Land Use</th>
<th>TDM Program</th>
<th>Vehicle Trip Reduction Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Transit Administration Demonstration Program in Bellingham, WA; Sacramento, CA; Cleveland, OH; and Durham, NC</td>
<td>Various metropolitan areas with diversity in character and density</td>
<td>4 cities asked to try transit through an IM program</td>
<td>4 percent decrease in drive-alone trips and 25 percent increase in public transit use</td>
</tr>
<tr>
<td>SmartTrips Summit University Program in St Paul, MN</td>
<td>Urban neighborhood</td>
<td>Various TDM programs</td>
<td>4 percent decrease in vehicle trips in neighborhood and 33 percent increase in walking and biking trips among 612 households</td>
</tr>
<tr>
<td>Santa Clara Transportation Authority in Santa Clara, CA</td>
<td>Suburban mixed use</td>
<td>Transit pass subsidies to employees in Mountain View, CA and Palo Alto, CA</td>
<td>16 percent decrease in vehicle trips at the employment sites</td>
</tr>
<tr>
<td>Designed to Ride Campaign in Denver, CO</td>
<td>Urban neighborhood</td>
<td>Use of signage, real-time vehicle information, and route information</td>
<td>Transit ridership increased by 7 percent</td>
</tr>
<tr>
<td>In Motion: Columbia City Program in Seattle, WA</td>
<td>Urban neighborhood</td>
<td>Three neighborhoods asked to try alternate modes</td>
<td>Reduced 2,564 single occupancy vehicle trips</td>
</tr>
</tbody>
</table>
### Low or No Transit Service

<table>
<thead>
<tr>
<th>TOD Best Practice Example</th>
<th>Land Use</th>
<th>TDM Program</th>
<th>Vehicle Trip Reduction Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alsco Linen Company in Spokane, WA</td>
<td>Suburban</td>
<td>Rideshare matching, guaranteed ride home, transit subsidies, bike parking, and four promotions of program per year</td>
<td>Decreased single occupancy vehicle ridership by from 76 percent to 29 percent</td>
</tr>
<tr>
<td>Evergreen State College in Olympia, WA</td>
<td>Rural</td>
<td>Free transit passes, rideshare matching, special promotions, and guaranteed ride home</td>
<td>Decreased single occupancy vehicle ridership from 80 percent to 72 percent</td>
</tr>
<tr>
<td>MERCK Pharmaceutical in Rahway, NJ</td>
<td>Suburban office campus</td>
<td>Vanpool subsidy, transit subsidies, reserved rideshare parking, and reward program</td>
<td>5 percent transit, 6 percent rideshare</td>
</tr>
<tr>
<td>Nike in Beaverton, OR</td>
<td>Suburban office campus</td>
<td>Reward program, transit subsidy, and vanpool subsidy</td>
<td>Of 4,000 employees, 45 percent carpool, and 20 percent transit</td>
</tr>
<tr>
<td>NISSAN in Gardena, CA</td>
<td>Ex-urban</td>
<td>Reward program, carpool program, vanpool program, vanpool subsidy, and reserved rideshare parking</td>
<td>Of 2200 employees, 25 percent take alternative modes</td>
</tr>
<tr>
<td>Telecordia Technologies in Piscataway, NJ</td>
<td>Suburban</td>
<td>Telecommuting, flex hours, carpool and vanpool programs</td>
<td>Of 7,000 employees, 40 percent of workforce involved in trip reduction, of which 20 percent telework</td>
</tr>
<tr>
<td>3M Technologies in St. Paul, MN</td>
<td>Suburban office campus</td>
<td>Subscription bus program, vanpool program, and telecommuting</td>
<td>Of 12,000 employees, 10 percent carpool, 7 percent vanpool</td>
</tr>
<tr>
<td>Smart Commute Challenge in Raleigh-Durham, NC</td>
<td>Downtown urban</td>
<td>Pledge to try any alternative to driving at least once in 6 weeks</td>
<td>19 percent increase in transit use</td>
</tr>
</tbody>
</table>
Appendix E: Missing Sidewalk Prioritization
Appendix F: Complete Streets Prioritization
Appendix G: Trip Reduction Program Strategies

1. **Commute Rewards Program** - Program where commuters are given cash rewards or prizes for commuting via a transportation alternative. Prizes can be awarded monthly based on a random drawing of individuals that reported using transportation alternatives during the month. Cash rewards could be accrued on an ongoing basis based on the amount that an individual uses transportation alternatives.

2. **Employer Training** - Trainings led by the city, transit partners, and local transportation groups to educate employers and their employees on how to use transportation alternatives and the TDM strategies available to them at their location. Training subjects could include how to effectively distribute marketing materials and communicate the program, how to help employees and others with trip planning, and how to implement marketing campaigns and programs.

3. **Information Kiosks** - Provide information on bus routes and schedules. Kiosks are generally placed at bus stops and provide riders with information on all routes serving the stop. Kiosks should provide fare information, basic details on how to use transit, and a phone number for additional information. Kiosks can range from simple posters to touch-screen computer displays.

4. **Vanpool, Bicycle, and Transit Subsidies** - Provide an individual with a minimum payment per month to pay for vanpool, bicycle, and transit commuting. If applicable, this subsidy should be integrated with pre-tax benefit programs that are available for employees using alternative modes of transportation.

5. **Charge for Parking** - Requires drivers to pay for parking. Effective programs require people to pay for parking on a regular basis. Programs should not allow people to pay for parking in blocks of more than three months at a time.

6. **Compressed Work Weeks** - Allow employees to work 40 hours in 4 days or 80 hours in 9 days. These programs allow employees to avoid work commutes once a week or once every two weeks.

7. **Flextime** - Allow employees to "flex" their shift start and end times. The amount of time by which employees may adjust their shift start and end times generally varies from 15 minutes to 2 hours. Flexible work schedules allow employees to adjust their work schedules to better match transit schedules and the schedules of other alternative transportation modes.

8. **Guaranteed Ride Home** - Provides commuters who use alternative transportation modes to get to work with a taxi or rental car ride home in the case of an emergency, illness, or need to work late. The number of rides available to an individual commuter may be limited to a certain number per calendar year. The Metropolitan Council of
Governments’ Commuter Connections program offers a Guaranteed Ride Home program.

9. **Live Near Your Work Marketing** - Applicable at residential locations that are within walking distance of major employment sites, this marketing encourages nearby employees to purchase or lease housing that is close to their work places.

10. **Minimum Financial Incentive 20% of Parking Rate** - Setting a financial incentive to use a transportation alternative such as transit or ridesharing at a dollar equivalent to 20% of the normal parking rate. This is a commitment to continuously spend a minimum level of parking revenue on incentives to use transportation alternatives such as a transit pass or a ridesharing gas card.

11. **Occasional Parking Permit Program** - Enable travelers to park on a pay as you go basis instead of paying lump sum payments for parking, like monthly parking passes. This facilitates a financial incentive to use a transportation alternative on a day when the parking cost has not been paid in advance. In addition, occasional parking also provides a way for individuals who normally use a transportation alternative daily a way to pay for the occasional day when they must drive. Variable pricing could be compounded with an occasional parking program. Variable pricing helps manage demand for parking spaces by charging more during peak periods and less during off-peak periods to spread demand.

12. **Parking Not Exceeding Minimum Required by Land Use Code** – Reducing parking at a development so that it does not exceed the minimum requirements listed in the Zoning Ordinance for the applicable land use.

13. **Shop Near Your Work Marketing** - Utilizes marketing, coupons, and other special offers to encourage employees to shop at, eat at, and visit businesses that are within walking distance of their place of employment.

14. **On-site Transportation Fairs** - Conducted by program managers and other TDM representatives, transportation fairs are held in central locations and provide residents and workers with information about their transportation options. Information is provided via marketing materials, direct conversations, and other media. In many situations representatives from transportation providers throughout the region will attend the fairs.

15. **Real-time Transit Displays** - Provides Metrorail and other transit arrival information real-time through closed circuit TV or other methods for bus routes and trains at bus stops and rail stations.

16. **Ridematching** - Utilizes database programs to automatically match participants with carpool and vanpool partners based on their commute start and end locations and work hours. The Washington Metropolitan Council of Governments currently maintains a ridematching tool that can be used by commuters throughout the region and at no cost.
17. **Telework** - Allow employees to work from home. Successful programs assist workplaces with the design of telework programs, answering management’s question regarding liability, rules of participation, and technology issues.

18. **Unbundled Parking** - Separates lease and purchase costs from parking costs. Individuals and companies are allowed to lease or purchase office space and residential units without also leasing or purchasing parking spaces. This allows individuals and companies to purchase only the parking spaces they need and want. Drivers can then be charged for parking on a daily or monthly basis.

19. **Websites Providing Transportation Information** - Provides online transportation information tailored to residents and workers. Should serve as a portal to regional transportation providers and have a look and feel that is specific to area being served. Websites can be integrated with any online commuter stores and provide information on transportation programs and incentives such as pay-for-performance programs, guaranteed ride home programs, real-time transit status, and ridematching services.