What is Transportation Demand Management?

- Low-cost approach to relieving congestion and/or constrained parking
- Promotes more efficient use of the transportation system & delays widening streets by:
  - Encouraging carpooling/carsharing
  - Enhancing alternate modes
  - Mixing land uses for shorter trips
  - Managing the parking system
  - Encouraging off-peak travel
- **TDM should address all trip types with:**
  - Infrastructure & services
  - Programs & promotions
- Over time, TDM results in people changing travel behaviors
  - Portland, OR
  - Arlington, VA
  - Boulder, CO offer relevant examples of success
Common TDM Infrastructure & Programs

- **Infrastructure**
  - HOV lanes
  - Transit (Metrorail, Metrobus, DASH)
  - Pedestrian facilities
  - Bicycle facilities
  - Shower, locker, storage facilities
  - Vans
  - “Flex Cars”

- **Programs**
  - Carpool / Vanpool matching
  - Transit incentives
  - Guaranteed ride home for non-auto commuters
  - Parking Management (shared, unbundled, limited access)
  - “Flex Car” access

- Initially focused on employee commutes, must be expanded
Alexandria’s Current TDM Toolbox of Programs

- **Transportation Management Plans (TMP)**
  - required for large-scale projects (commercial and residential)

- **Program Assistance**
  - “Carshare Alexandria!” (subsidy to residents and businesses)
    - 39% reduction in car ownership by program participants
  - Public Transportation Subsidy Program (federally based)
  - Commuter Connections (ridematching & Guaranteed Ride Home)
  - Old Town Transit Shop
  - Telework Assistance
  - Bicycle Commuter Assistance & Bike Parking Improvements
  - Trip Planning Services
  - Local Motion web page & Transportation Alternatives eNewsletter

- **Results**
  - 58% of Alexandria residents drive alone to work, 80% is national average.
  - Increasing walking & bicycling to Metrorail stations
  - Driving and parking or dropped rates declined since 2002
Braddock Road Transportation Challenges

- Congestion on commuter routes
- Neighborhood livability/vitality impacts from congestion & cut-through traffic
- Mixed pattern of one-way / two-way streets
- Bottlenecks and constraint points for access
- Neighborhood parking constraints
- Barriers to pedestrian mobility & transit access
- Basic retail needs not met within the area
- Local and regional growth may add to impacts
Addressing the Challenges

- **Lloyd District in Portland, Oregon**
- **Constraints:**
  - Limited points of access
  - Commuters using key corridors
  - Inability to widen roads
  - Mix of one-way / two-way streets
  - Limited transit
  - Limited parking
  - Anticipated local and regional growth
- **Conditions:**
  - Transit commute mode split @ 10%
  - Accessory parking provided at 3.5 stalls/1,000 SF
  - No bike lanes or end-of-trip facilities
  - Only transit investments anticipated
- **Expected Growth in District:**
  - Near doubling of employment
  - 200% increase in residential
Lloyd District TDM Successes

- Resident/Employee commute modes since 1997:
Lloyd District TDM Successes

- Vehicles removed during commuter peak hour

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The Organizational Structure

- Established a Transportation Management Association (TMA)
  - All stakeholders included
  - Initially staffed and subsidized by City
  - Vision, Goals, & Leadership provided by District representatives

- Partnership Goals for Transportation Providers:
  - Expand District access through transit
  - Provide aggressive TDM to make transit work
  - Invest in ped/bike improvements to complement transit access
The Major TDM Tools Used

- **Transit Investments & Incentives**
  - Lightrail, stations, bus circulators
  - Extension of “Fareless Square” from Downtown to Lloyd District
  - Resident/Employee geo-coding for targeted bus routing
  - Guaranteed ride home
  - Volume discounts for monthly/annual transit passes

- **Pedestrian/Bicycle Improvements**
  - Bike lanes/boulevards, bike parking, shower/locker facilities, transit bike racks
  - Streetscaping, illumination, crosswalk improvements, traffic calming

- **Parking**
  - Metered on-street system for better management
  - Promoted shared-parking agreements among existing uses
  - Converted to parking maximums from parking minimums
  - Flexible standards to accommodate unique conditions
Using a TMA to Strengthen TDM in Braddock

- Puts local residents and businesses in the lead
- Emphasizes the importance of partnerships
  - Public-Private
  - Resident-Business
  - Developer-Tenant
- Provides strength in numbers
- Produces tailored programs & services
- More responsive to changing needs
Suggested Additions to Existing TDM Programs

- **Expand Federal Public Transportation Subsidy (PTS) program to private sector**
  - Offers $105/month in commute benefits

- **Revise Alexandria Transportation Management Plan (TMP)**
  - Manage funds and programs through city-wide TMA
  - Enhance residential participation
  - Finance strategies to achieve Association goals:
    - Discounted transit fare programs
    - Targeted shuttle bus service
    - Car sharing programs
    - Pedestrian facility improvements
    - Bicycle lockers and parking facilities
    - Administrative costs
Right-Sizing Parking

- On-street Spaces for residents & retail customers when needed
- Avoid over-supply
- Tailor supply to existing conditions
  - Potomac Yards
  - Braddock Condos
  - Arlington

Results of Parking Studies
- Parker Gray Neighborhood with supply problems at some times of day - 85% full
- Oversupply in on-site accessory parking
- On-street restrictions are oriented to Metro riders and vary widely from street to street
Easy, Efficient, Reliable Transit

- Metrorail ridership up in Alexandria 11.74% since 2002, 2nd highest (behind DC at 17.14%) for all Metro Washington
- Improve efficiency and frequency of connections to rail system and area destinations
Variety of Transit Options

- Transit ridership is steadily increasing
  - Metrobus up 30%
  - Dash reached 3,743,499 in FY2007
- Frequent and convenient “loop” service for neighborhood trips
- Predictable and fast for longer trips
- Good information and time/cost competitive with the auto
Rosslyn-Ballston Corridor, Arlington, VA Pedestrian Route Plan

WALKArlington Proposed Pedestrian Routes

The WALKArlington report identifies several different kinds of pedestrian routes in order to respond to the diverse development conditions in the Rosslyn-Ballston Corridor and "to the many reasons people walk there."

- Major Walkways
- Special Pedestrian Walkways
- Lateral Walkways
- Neighborhood Walkways

Kittelson & Associates, Inc.
Transportation Engineering/Planning

TDM-15
Rosslyn-Ballston Corridor, Arlington, VA Results

- TDM Policy implemented in 1990
  - Requires developers to implement and fund TDM
- Non-auto mode share 50% higher in areas near Metro-rail (60% vs. 40%)
- Flat daily traffic growth on major streets

Expanding Braddock’s Walkable Street Network
Enhancing street safety and “walkability”
Boulder, CO TDM Tools & Results

- City-wide program began 1989
  - Welcoming public realm
  - Ubiquitous bike accommodation
  - Frequent, comfortable transit service
  - Branded & marketed bus routes
  - Student Transit Pass

- 32% of all trips are non-motorized
- 60% of residents own bus passes
- SOV trips down 17%
Bicycle Routing and Network Building

Provide a low-traffic alternative for cyclists.
Expanding Bicycling Accommodation in Braddock
Transportation Improvement Opportunities
Transportation Improvement Options

Transportation Improvement Priorities

Braddock Metro Neighborhood Plan
City of Alexandria, Department of Planning & Zoning
www.alexandriava.gov/planningandzoning  703.838.4566