

Effective Transportation Demand Management (TDM) in Congested Corridors

US 422 TDM Best Practices Policy Brief
and Recommendations

Pennsylvania
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Presentation Outline

- Transportation Demand Management
- The US 422 Corridor in SE Pennsylvania
- Why TDM for US 422?
- Recommendations
- Discussion



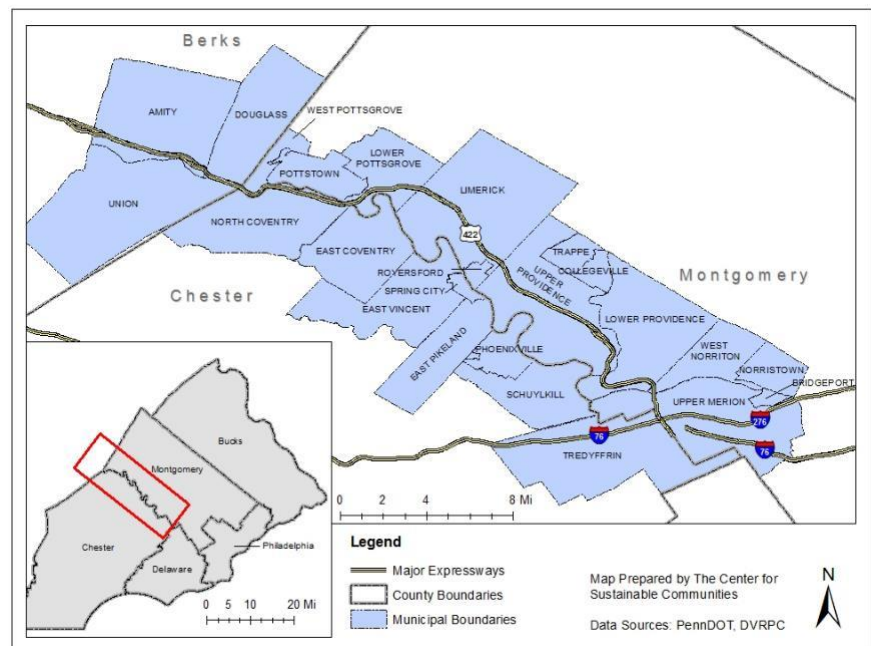
What is TDM?

- A comprehensive approach to addressing traffic congestion
- Many policies and programs are TDM, depending upon the context
- We use the definition provided by The Center for Urban Transportation Research (CUTR):

TDM "focuses on helping people change their travel behavior to meet their travel needs by

- using different modes,
- traveling at different times,
- making fewer trips or shorter trips,
- or taking different routes."

Communities of the US 422 Corridor



Rising Demand

Regularly congested in peak hours, AADT ~70,000, increasing traffic as pop'n / empl have grown.

Table 3.1-1: Existing Demand (2010) vs. Year 2035 No-Build

Location/Limits	Lanes	Daily Capacity	Year 2010		Year 2035	
			Volume	Capacity Used	Volume	Capacity Used
Between Grosstown Road and PA 100	4	88,280	54,960	62%	65,440	74%
Between Sanatoga (Evergreen Road) and Limerick / Linfield (Lewis Road)	4	85,800	53,090	62%	84,110	98%
Between PA 29 (Phoenixville / Collegeville) and Oaks (Egypt Road)	4	85,800	66,410	77%	93,470	109%
Schuylkill River Bridge	5	113,110	99,095	88%	118,660	105%

Source: *Tolling US 422: Traffic and Revenue Forecasts, Appendix A*, Michael Baker Jr., Inc., September 2011

Conventional Approaches

- **Increase Supply** with Capacity Additions
- **Manage Supply and Demand** with Transportation System Management Tools
- **Reduce Demand** with Transportation Demand Management Tools

TDM Supportive Policy Environment

- Regional TDM policies
- Many and good travel mode choices
- Timely and accurate travel information
- Incentives and disincentives
- Coordinated multi-modal transportation and land use planning policies



Policy Environment in the US 422 Corridor

- Regional TDM policies
- Many and good travel mode choices
- Timely and accurate travel information
- Incentives and disincentives
- Coordinated multi-modal transportation and land use planning policies
- Some, voluntary
- Transit / bike / ped inconvenient
- Provided, but could be strengthened
- Guidance provided, not widely adopted
- Supportive LU patterns in some boroughs; overall, travel convenient only by car

Key Decisions to Discuss and Make



- What performance measures and TDM goals?
- Favor shared and non-motorized transportation?
- Require land use and transportation coordination?
- Make single occupant vehicle travel more costly?
- Promote private shared modes of transportation?

Recommendations for the US 422 Corridor

Bike and Pedestrian Infrastructure

Short Term (0 to 2.5 Years)	Medium Term (2.5 to 5 years)	Long Term (5+ years)
Support regional efforts for infrastructure improvements	Commitment to "complete streets guidelines"	Land Use planning
Secure funding to expand current network	Comprehensive approach to bicycling planning	Encouragement of TOD and Smart Growth Development
Improve current infrastructure	Construction of facilities and infrastructure	Trip Reduction Ordinance
Identify ped / bike transportation connections	Enforcement of policies and regulations	Regional and State planning for trail connections
Outreach and education		

Bike & Pedestrian Infrastructure



Employer Incentives

Short Term (0 to 2.5 Years)	Medium Term (2.5 to 5 years)	Long Term (5+ years)
Detailed info to employers and employees	Development of internal TDM program	Commitment to a Sustainability Plan
Private Public Partnerships	Commuter amenities and infrastructure	Proximity to trails and public transportation
Incorporation of existing Commuter Programs	Shuttle/ Bussing service	Parking Policies
Incentives to use modes other than SOV		
Flexible Work Schedules		

Employer Incentives Examples

The screenshot shows the WalkPittsburgh.org website. At the top, there's a navigation bar with links: HOME, WALK, SAFETY, PARTNERS, NEWS, EVENTS, ABOUT US, and WELLNESS. Below the navigation bar, there's a banner with the text "WalkPittsburgh.org provides resources and support to" and "Encourage walking as a viable commuting option". Below the banner, there are four statistics: # of Walkers (858), Total Steps (44,414,536), Distance Walked (mi) (21,976), and CO2 Saved (kg) (7,221.31). To the right of the statistics, there's a photo of a white van with "ride act" branding. Below the statistics, there's a photo of a meeting room with people sitting around a table. At the bottom, there's a screenshot of a 511 website showing a map of the Pittsburgh area with various travel conditions and alerts.

Public Transportation

Short Term (0 to 2.5 Years)	Medium Term (2.5 to 5 years)	Long Term (5+ years)
Disseminate information	Analysis of multi-modal facilities	Statewide transportation planning policies
Development Task Force or Coalition	Implement new technologies	Long term funding mechanisms
Evaluation and Prioritization of current and future services	BRT, bus service expansion	TOD and Smart Growth Development
Advocacy for funding	Consideration of private provision of shared modes	Trip Reduction Ordinances
Incorporation into long-term plans	Upgrade facilities	

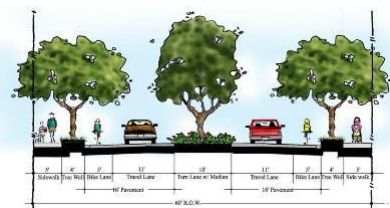
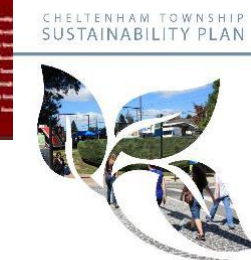
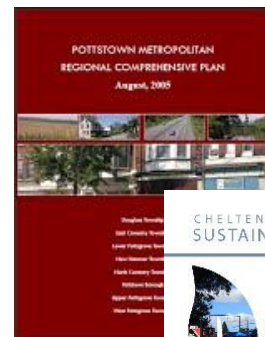
Public Transportation Examples



Land Use

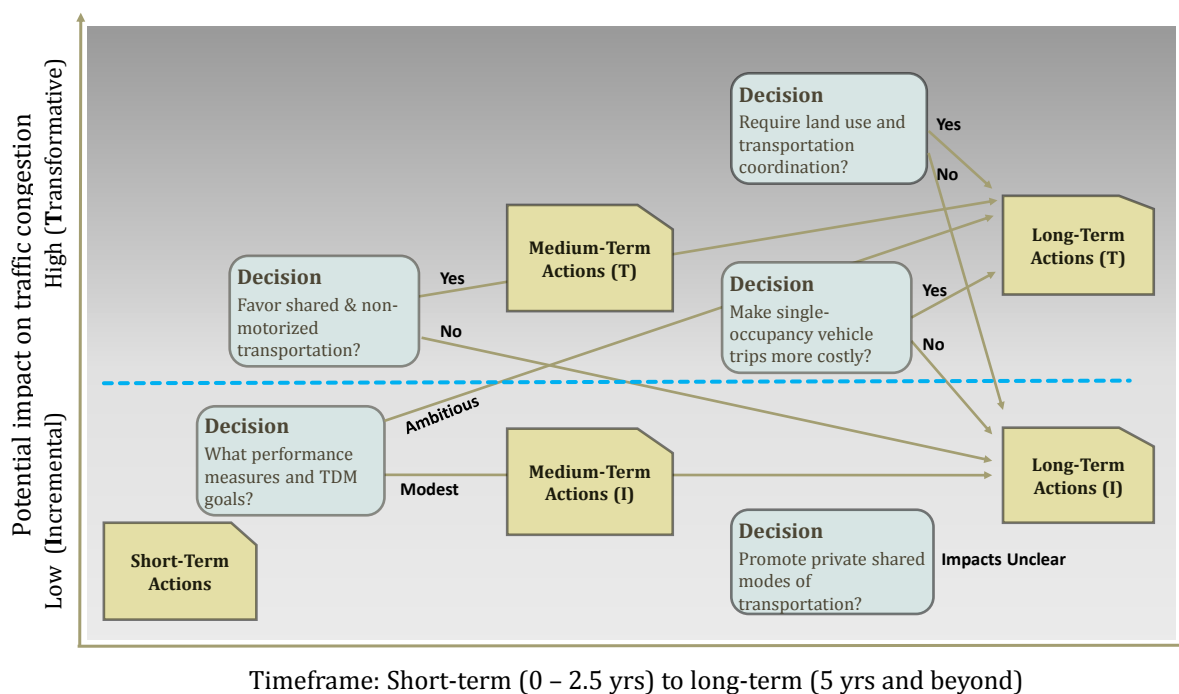
Short Term (0 to 2.5 Years)	Medium Term (2.5 to 5 years)	Long Term (5+ years)
Advocacy and engagement	Study transit / land use coordination opportunities	Parking pricing policies
Build on sub-regional planning initiatives	Incorporate TDM measures into plans	Trip reduction ordinances
Development of stakeholder coalitions	Regional land use planning efforts	TOD and Smart Growth policies
Develop clear, measurable TDM goals		Multi-use high density development zoning

Land Use Examples



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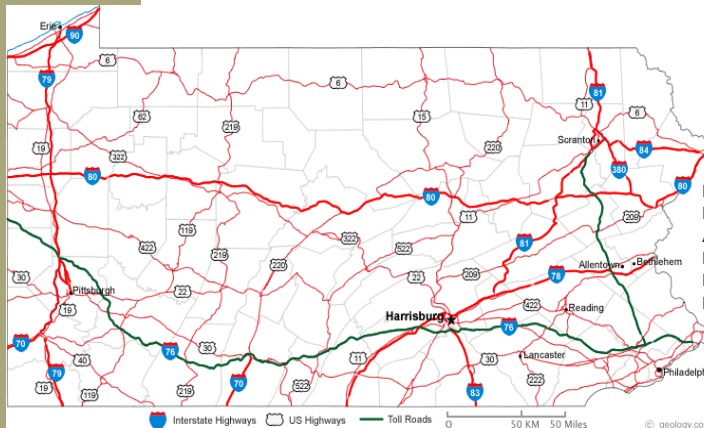


GVF Follow-Up

- Dissemination of Policy Brief
- 422 Corridor Coalition
- Establishment of Goals
- Employer Engagement
- Recognition



Similar Corridors



Pittsburgh: 447,000+ hrs, \$1,130,000,000
Philadelphia: 157,000+ hrs, \$3,600,000,000+
Allentown: 17,000 hrs, \$393,000,000
Erie: 3,445 hrs, \$87,000,000
Harrisburg: 10,342,000 hrs, \$254,000,000
Lancaster: 7,800,000+ hrs, \$187,000,000

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