Integrating Travel Demand Management into the Long-Range Planning Process

2017 AMPO

October 19, 2017
Chattanooga 2045 RTP

- Chattanooga 2045 RTP addresses both transportation supply and demand
- Continued focus on sustainable investment strategies for the region
- Priority is maximizing use of existing transportation system
Travel Demand Management (TDM)
Travel Demand Management (TDM)

A collection of strategies designed to reduce automobile trips and associated roadway congestion and parking demand by redistributing travel to alternative modes, times and routes.
TDM Is a “Win-Win” for Public and Private Sectors

Benefits to Communities

Benefits to Developers
TDM Stakeholders

• Targeted developers and local government to better understand knowledge of TDM and capacity for implementing TDM strategies

• Feedback
  • Developers are already doing some TDM, they just don’t call it that
  • Developers and local governments requested a TDM toolkit that accounts for land-use context
TDM Toolkit

• Resource for local government and development community
  • Educate on the benefits of TDM
  • Build local capacity for implementation

• Contents
  • Manual with TDM 101
  • TDM calculator
  • Funding options

How does it work?

1. Answer questions about the development and its context
2. Receive custom TDM recommendations based responses
3. Leverage toolkit for further assistance on TDM strategies and implementation
This tool provides the user a set of targeted Travel Demand Management (TDM) strategies based on the transportation and land use context of the development/analysis area. Strategies are tailored to residents and/or employees of the area being analyzed. Please refer to the corresponding TDM Toolkit for more information:

- **Bicycle Network**: A map of high density locations of low stress bicycle facilities.
- **Bicycle Facilities**: A map of existing bicycle facilities.
- **Pedestrian Network**: A map of pedestrian propensity given intersection density.

**Recommendations Output**

- A tailored set of TDM strategy recommendations.

**Density Map**

- Population/employment density in people per acre.

For more information, please refer to the TDM Web Materials.
## TDM Calculator

<table>
<thead>
<tr>
<th>Infrastructure</th>
<th>Recommended Strategies</th>
<th>Applicability</th>
<th>Implementation Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Residents</td>
<td>Employees</td>
<td>Development size (S/M/L)</td>
</tr>
<tr>
<td>Bike parking</td>
<td>E</td>
<td>E</td>
<td>All</td>
</tr>
<tr>
<td>Charging rooms</td>
<td>---</td>
<td>---</td>
<td>M/L</td>
</tr>
<tr>
<td>Showers</td>
<td>---</td>
<td>---</td>
<td>M/L</td>
</tr>
<tr>
<td>Bike repair stations</td>
<td>---</td>
<td>---</td>
<td>M/L</td>
</tr>
<tr>
<td>Transit stop improvements</td>
<td>E</td>
<td>E</td>
<td>M/L</td>
</tr>
<tr>
<td>Walk/bike paths</td>
<td>E</td>
<td>E</td>
<td>M/L</td>
</tr>
<tr>
<td>Wayfinding</td>
<td>S</td>
<td>E</td>
<td>L</td>
</tr>
<tr>
<td>Minimize curb cuts</td>
<td>---</td>
<td>---</td>
<td>M/L</td>
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</table>

<table>
<thead>
<tr>
<th>Parking Management</th>
<th>Recommended Strategies</th>
<th>Applicability</th>
<th>Implementation Responsibility</th>
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</tr>
<tr>
<td>Parking cash out</td>
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<td>E</td>
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</tr>
<tr>
<td>Shared parking</td>
<td>---</td>
<td>E</td>
<td>All</td>
</tr>
<tr>
<td>Carpool parking</td>
<td>---</td>
<td>S*</td>
<td>M/L</td>
</tr>
<tr>
<td>Carshare parking</td>
<td>E</td>
<td>E</td>
<td>M/L</td>
</tr>
<tr>
<td>EV charging</td>
<td>O</td>
<td>O</td>
<td>M/L</td>
</tr>
<tr>
<td>TNC loading zone</td>
<td>---</td>
<td>O</td>
<td>M/L</td>
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</table>

<table>
<thead>
<tr>
<th>Subsidies</th>
<th>Recommended Strategies</th>
<th>Applicability</th>
<th>Implementation Responsibility</th>
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</thead>
<tbody>
<tr>
<td>Bikeshare memberships/bike library</td>
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<td>---</td>
<td>All</td>
</tr>
<tr>
<td>Carshare memberships</td>
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<td>E</td>
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</tr>
<tr>
<td>Carpool incentives</td>
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<tr>
<td>Vanpool discounts</td>
<td>---</td>
<td>S*</td>
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<tr>
<td>Free/discounted transit</td>
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<td>All</td>
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<tr>
<td>Guaranteed ride home</td>
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<td>All</td>
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<tr>
<td>Discounted bicycle purchases</td>
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</tr>
<tr>
<td>TNC discounts</td>
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<td>All</td>
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</table>
Bringing it Together:
Long-Range Planning
ENTERPRISE SOUTH SUB AREA STUDY
Recommended Investment Scenario
ENTERPRISE SOUTH SUB AREA STUDY
I-75 and Bonny Oaks Drive

Bringing it Together Within Long-Range Planning
Bringing it Together Within Long-Range Planning

TRANSPORTATION INVESTMENTS

- Corridor Widening
- Multi-Use Trail
- New Road
- New Transit Service
- Sidewalk

TRANSPORTATION IMPROVEMENTS
Bringing it Together Within Long-Range Planning

Transportation Improvements
- Corridor Widening
- Multi-Use Trail
- New Road
- New Transit Service
- Sidewalk

Land Use Recommendations
- Civic / Institutional
- Mixed-Use Residential (Medium Density)
- Mixed-Use Transit Corridor
- Traditional Neighborhood
- Parcels
TRAVEL DEMAND MANAGEMENT INITIATIVES

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BRINGING IT TOGETHER WITHIN LONG-RANGE PLANNING
Informing the 2045 RTP

• Proposed land use intensification areas and regional planning districts were screened with TDM calculator

• Supported identification of applicable TDM strategies to enhance transportation recommendations in key areas
### Example: East Main Street Intensity Area

<table>
<thead>
<tr>
<th>Existing Conditions</th>
<th>2045 Status Quo</th>
<th>2045 Intensification</th>
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</thead>
<tbody>
<tr>
<td><strong>Land Use</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Housing Units</strong></td>
<td>120</td>
<td>120</td>
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<tr>
<td><strong>Employment</strong></td>
<td>850</td>
<td>870</td>
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</table>
Next Steps

• Finalizing 2045 RTP project evaluation
  • Project in keeping with recommended areas of land development/intensification as one key evaluation metric
  • For this criteria, all projects were evaluated against transit and multimodal potential based on the land use context; complementary TDM investments were identified if appropriate

• Draft 2045 RTP by end of year

• Refinements to toolkits and calculator and then rollout
Questions?