

GreenStep Cities Best Practice # 14 **- final draft for comment through May 2010 -**

❖ **Demand-Side Travel Planning:** Use travel demand management and transit-oriented design.

Optional for all cities

Category: Transportation

Summary

Rather than respond to increasing population and economic activity by only building more road and parking infrastructure, cities and developers can invest in infrastructure changes shaped by transit-oriented design (TOD), and can shift car-oriented incentives and infrastructure through travel demand management (TDM). Both result in more cost-effective use of transportation infrastructure and change the overall transportation mode mix from single occupancy vehicle use to other modes – such as walking and transit - that deliver multiple public and private benefits.

TOD shapes moderate to higher-density development located within easy walking distance of a major transit stop, generally with a mix of residential, employment and shopping opportunities oriented toward pedestrians without excluding the auto. TDM strategies change the demand for travel so that roads and other public transportation infrastructure can accommodate more people, rather than simply more vehicles.

Best Practice Actions

- Category A cities must complete at least one Action if they choose to implement this best practice.
 - Category B and C cities must complete at least two Actions if they choose to implement this best practice.
- (1) In development standards, right-size parking minimum standards and add parking maximums in pedestrian-friendly or transit-served areas.
 - (2) For cities with regular transit service, require or provide incentives for the siting of retail services at transit/density nodes.
 - (3) For cities with regular transit service, require or provide incentives for the siting of higher density housing at transit/density nodes.
 - (4) Incorporate demand-side transportation strategies into development regulations, adopting, with modifications as necessary, at least one of the following from Minnesota's 2009 *Updated Model Ordinances for Sustainable Development*:
 - a. Travel Demand Management Performance Standard
 - b. Transit-oriented Development Ordinance
 - (5) Document that a development project certifies under the LEED for Neighborhood Development program and is awarded at least one of the following credits:
 - a. Transportation Demand Management.
 - b. Housing and Jobs Proximity.

See the related best practices *Mobility Options*, *Higher Density* and *Efficient and Healthy Development Patterns*.

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Implementation Resources

(tied to the relevant Action by number)

- (1) See “Fix Parking Requirements” in *Essential Smart Growth Fixes For Urban And Suburban Zoning Codes* (U.S. EPA: 2009): http://www.epa.gov/smartgrowth/pdf/2009_essential_fixes.pdf
- (1) *The Myth of Free Parking* (St. Paul-based Transit for Livable Communities: 2003): http://www.tlcminnesota.org/pdf/mythoffreeparking_PUBLIC.pdf
- (1) Consider a maximum allowed retail/shopping center parking ratio of 4.1 parking spaces per 1000 sq. ft. of gross floor area, and a maximum allowed office building parking ratio of 3.1 parking spaces per 1000 sq. ft. of

gross floor area. Parking stall dimensions should be in the range of 8' x 18' with 20' maximum aisle and driveway widths.

- (2) and (3) Transit-Oriented Development Guidebook (Metropolitan Council): http://www.nextstep.state.mn.us/res_detail.cfm?id=260
- (2) and (3) Mixed Income Transit-Oriented Development Action Guide (Center for Transit Oriented Development, FTA, HUD: 2010): <http://www.mitod.org>
- (4) Minnesota's 2009 *Updated Model Ordinances for Sustainable Development*: <http://www.crplanning.com/susdo.htm>
- (4) *Expanding Commuter Options in the Twin Cities* (David Van Hattum: 2004): http://www.nextstep.state.mn.us/res_detail.cfm?id=1395
- (5) Leadership in Energy and Environmental Design (LEED) for Neighborhood Development certification program: <http://www.usgbc.org/LEED/ND>

Benefits

- TDM plans in the Minneapolis-St. Paul area were found to reduce traffic generation rates by 27% to 37% and parking generation by 11% to 21%. These reductions can be the difference between needing to install a traffic signal or not, typically a \$200,000 expenditure. And in Minnesota, a surface parking stall costs between \$3,000 and \$4,000 to build while a stall in a parking ramp costs between \$15,000 and \$20,000. From *An Analysis of the Effectiveness of TDM Plans in Reducing Traffic and Parking in the Minneapolis-St. Paul Metropolitan Area* (Spack Consulting: 2009): <http://mikeontraffic.typepad.com/files/travel-demand-management-effectiveness-report.pdf>
- *Transportation Cost and Benefit Analysis: Techniques, Estimates and Implications* (Victoria Transportation Institute: 2009): http://www.nextstep.state.mn.us/res_detail.cfm?id=1009
- Detailed vehicle miles traveled savings, and fuel and emissions savings, in *Transportation Emissions Guidebook, Part One: Land Use, Transit, Travel Demand Management* (Center for Clean Air Policy): <http://www.ccap.org/safe/guidebook.php>
- Vehicle traffic from cars and trucks is a major source of greenhouse gas emissions in cities, accounting for between 20 and 50 percent of the total, depending upon the urban area.
- Providing city residents with regular access to fresh fruits and vegetables (stores with an NAICS code of 445110 or 455230) within a mile of their home, or within a half-mile of a transit line, has documented health benefits: <http://www.designforhealth.net/resources/foodissue.html>
- The benefits of TOD include:
 - Enhanced transit ridership.
 - Reduced reliance on cars and reduced need to travel beyond walking distances.
 - Decreased congestion, energy use, greenhouse gas emissions, and improved air quality.
 - Preserved public infrastructure and historic assets.
 - Public infrastructure cost savings: efficient and diverse land use.
 - Open space preservation.
 - Greater choice of living arrangements and community lifestyles.
 - Inherent safety due to increased eyes on the street.
 - Market advantages and cost savings for residential development and commercial development.

Connection to State Policy

- The MN Dept. of Employment and Economic Development (DEED) is identifying transit improvement areas across the state, with the goal of steering funds toward these areas.