

## Street Design and Transportation

### Packet Synopsis

In a well thought out and well developed community land use plan, the **transportation** component is a crucial element. **Transportation** and other forms of communication – telephone, radio, the internet, for example – are the lifelines for the community’s intercourse with the rest of the world and generally essential for its survival. Minnesota is replete with ghost towns and hamlets that had high civic hopes that never materialized because the road went elsewhere. And the state is now replete, especially in the Twin City metro area, with examples of hamlets that have turned into growing communities because the roads did come.

But it can also be said that a community’s streets and squares and lanes and byways, be it a city, a township or a county, not only serve a transportation function but do define a community, both to the inhabitant and also to the visitor. The images conveyed by **street design**, good and bad, can and do impact the community. Good **street design** can convey definite social and economic benefits. Bad **street design** can do just the opposite. Furthermore, a well thought out and implemented **street design** program established by ordinance can control, mitigate and benefit the present dependence upon the auto and encourage other forms of transportation.

Marrying the goals of an efficient transportation system and good land use and community esthetics is a distinct challenge, but is one that is not impossible of achieving.

The contents of this packet have been selected because they not only illustrate some basic planning tools and techniques and approaches that others have used but also point out the positive values that good **transportation** and **street design** planning provide. They are as follows:

“Rethinking Residential Streets”, Molinaro, Joseph R., AICP, *Planning Commissioners Journal*, November/December 1991, Burlington, VT 055406 – makes several interesting points: 1. Adoption of inappropriate street design standards can violate the sense of a neighborhood. 2. Blanket standards (one size fits all) ignore differing neighborhood/community needs. 3. Street width is a most important design feature. 4. Requiring excessive right-of-way wastes land. It advocates that if the city, town or county has adopted street and highway design standards based only on traffic movement criteria, they should revisit them considering all of the elements that make a vibrant community function.

“Neighborhood Street Design Guidelines: An Oregon Guide for Reducing Street Widths”, Transportation Growth Management, Oregon Department of Transportation and the Department of Land Conservation and Development, Salem, OR – is a 30 page guide that not only explains the justifications for narrower streets as well as concerns to so doing but outlines a community-based program for adopting new standards plus a check list for evaluating streets and cross section examples of various street design concepts. This can be downloaded from the noted web site.

“Taming the Automobile”, *Planning Commissioners Journal*, November/December 1991, Burlington, VT 055406 – postulates three basic questions to ask when evaluating a street/road: 1. Is it functional 2. Is it safe? 3. Is it comfortable? It expresses to viewpoint that street design has paid too little attention to the pedestrian and that the conventional zoning approach of buffering land uses from each other – residential, commercial and work has led to our dependence on the automobile.

“Flexible Street Design Standards”, Department of Community Affairs, Atlanta, GA – is a brief paper that explains what flexible street design standards are, how to do them, and things to consider when developing them.

“Ten Ways to Win With Your State DOT”, Lockwood, Jan, *Knowledge Exchange/Planning Practice*, October 2001, American Planning Association, Chicago, IL – is included because the Minnesota Department of Transportation is always going to a significant player in local transportation planning. As such, the ten suggestions made are very good advice, especially the first. MNDOT has its mandated priorities, but it does have a regional organization that is willing to work with local communities.

“Main Street ... When a Highway Runs Through It”, Oliver, Gordon, 2002 *Outstanding Planning: A Tool*, American Planning Association, Chicago, IL - addresses a significant planning problem for many Minnesota communities. The state of Oregon has with local community input developed a comprehensive handbook that may have good ideas for your “main street”. The 103 pages can be downloaded from the given web address.

“The Battle Over Dead Ends”, Knack, Ruth, AICP, *Planning May 2002*, American Planning Association, Chicago, IL – cul-de-sacs and dead-ends became prominent community street design elements in the 1960s through the 1980s and even today. But are they good, efficient design elements? This brief article describes several approaches to addressing the issue of street connectivity”, which can be divisive.

“The Residential Street – Part I”, Dale, C. Gregory and Jennifer Sharn, *Planning Commissioners Journal*, Issue 20, Fall 1995, Burlington, VT 055406 – gives a brief history on the design evolution of the residential street and highlights the current principle issues regarding **street design**. It also contains a very good glossary of residential street terms.

“From Policy to Reality: Model Ordinances for Sustainable Development”, *Minnesota Environmental Quality Board*, Minnesota Planning, February 2000 – is a comprehensive collection of model ordinances for implementing a comprehensive land use plan whose goal is “sustainable community development”. Presented here is the model ordinance for Street Standards within a community’s street classification system. As with all model ordinances, it must be recognized “that one size does not fit all feet”, but this model does illustrate the essentials for a good **street design** ordinance.

“Planning Highways, Roads and Streets”, *County Development, Volume I*, National Association of County Engineers, Washington, D. C. is included because it illustrates the

wider dimensions of **transportation** and good **street design**. Both are interdependent, often cross jurisdictional and require careful and far sighted planning. This paper outlines the basic elements and steps for developing the transportation plan. It specifically notes that transportation planning must relate to present and planned land uses which in turn govern present and projected traffic and the origins and destinations of the traffic.

### **Interlibrary Loan Materials**

The following titles on **street design** and/or **transportation** can be borrowed via MnLINK. There is a rich literature on these subjects.

Improving Street Climate through Urban Design, Thurow, Charles, American Planning Association, Chicago, IL, 1983.

Carfree Cities, Crawford, J. H., International Books, Utrecht, 2000.

Effective Utilization of Street Width on Urban Arterials, Harwood, D. W., Transportation Research Board, National Research Council, Washington, D.C., 1990.

How to save your own street, Ramati, Raquel in collaboration with the Urban Design Group of the Department of City Planning, New York, Dolphin Books, Garden City, N.Y. 1981.

Accessible Rights-of-Way: Sidewalks, Street Crossings, Other Pedestrian Facilities: A Design Guide, U.S. Access Board and Federal Highway Administration Staff; U.S. Architectural and Transportation Barriers Compliance Board, Washington, DC, 1999.

Yard, Street, Park: The Design of Suburban Open Space, Girling, Cynthia L., J. Wiley, 1952, New York, c1994.

Pedestrian and Street Life Bibliography, Hill, David R., Leslie Ragan, Council of Planning Librarians, Chicago, IL, 1991.

Carscape: a parking handbook, Miller, Catherine G., Published for the Irwin-Sweeney-Miller Foundation by Washington Street Press, Columbus, IN, c1988.

The Sustainable Street: The Environmental, Human and Economic Aspects of Street Design and Management, edited by C. Jefferson, J. Rowe, C. Brebbia, WIT Press, Southampton, Boston, c2001.

### **LEGAL NOTES**

**Transportation plans** and **street design** ordinances can be adopted by counties, cities and townships under Minnesota Statutes which convey to them the power to plan and zone. These are:

**For Townships** - Minnesota Statutes § 366.10 through § 366.18 convey to townships the authority to enact zoning regulations, zoning districts and establish zoning commissions and prescribes the manner in which this is to be done. Minnesota Statutes § 394.33 also conveys to townships the authority to plan and zone with the stipulation that any official controls, after adoption, must not be inconsistent nor less restrictive than any adopted official controls of the county within which it belongs. Minnesota Statutes § 462.352 Definitions, subd. 2. Municipality defines "municipality" to mean any city, including a city operating under a home rule charter, and any town, thereby extending all of the authority granted to municipalities to plan per Minnesota Statutes Chapter 462 - Housing, Redevelopment, Planning, Zoning - to townships as well.

**For Counties** - Minnesota Statutes § 394.21 specifically grants to all counties, except those in the defined seven-county metropolitan Area, the authority to “carry on county planning and zoning.” Minnesota Statutes § 394.23 gives county boards the power and authority to prepare and adopt by ordinance, a comprehensive plan, “a comprehensive plan or plans when adopted by ordinance must be the basis for official controls adopted under the provisions of sections 394.21 to 394.37.”

**For Municipalities** - Minnesota Statutes § 462.353 grants municipalities their authority to plan. Subdivision 1. states, “A municipality may carry on comprehensive municipal planning activities for guiding the future development and improvement of the municipality and may prepare, adopt and amend a comprehensive municipal plan and implement such plan by ordinance and other official actions in accordance with the provisions of sections 462.351 to 462.364.”

The seven metro counties are governed by Minnesota Statutes Chapter 473, the Metropolitan Planning Act.

For cities in the seven-county metropolitan area, Minnesota Statutes § 473.858 - Comprehensive Plans – governs.

*However*, there are a number of specific Minnesota Statutes that convey and control local authority regarding roads and roadways. Attention should be directed to the specific Minnesota Statutes Chapter 160 - Roads, General Provisions, Chapter 161 - Trunk Highways, Chapter 162 - State-aid Road Systems, Chapter 163 - County Highways, Chapter 164 - Town Roads and Chapter 165 – Bridges.

Minnesota Statutes § 160.01 - Scope of chapters 160 to 165 reads as follows:

Subdivision 1. **Designation.** For the purposes of chapters 160 to 165 the roads of this state shall be designated and referred to as trunk highways, county state-aid highways, municipal state-aid streets, county highways, and town roads. They shall be established, located, constructed, reconstructed, improved, and maintained as provided in chapters 160 to 165 and acts amendatory thereto.

Subd. 2. **Certain streets excluded.** The provisions of chapters 160 to 165 do not relate to highways or streets established by, or under the complete jurisdiction of cities except when the provisions refer specifically to such highways or streets.

Also Minnesota Rules, specifically Chapter 8820 - Local state-aid route standards, financing, and specifically its § 8820.2500 establishes the minimum state standards for geometric design standards, roadways, specifications, right-of-ways, and parking. For rural undivided highways, urban roads, designated forest roads and bicycle paths, this section contains specific references to applicable standards specified in other sections of Chapter 8820.

In summary, for your **transportation** and **street design** planning, these Minnesota Statutes and Rules must be considered.

The **Local Planning Assistance Center at the Department of Administration** helps local governments with planning efforts, including comprehensive planning, zoning, hazard mitigation planning, GIS applications and development issues.

Upon request, this document will be made available in an alternate format, such as Braille, large print or audiotape. For TTY, contact Minnesota Relay Service at 800-627-3529 and ask for the Department of Administration.

**Local Planning Assistance Center**

658 Cedar St., Room 300  
St. Paul, MN 55155  
651-296-6550

[local.planning@state.mn.us](mailto:local.planning@state.mn.us)

[www.lpa.state.mn.us](http://www.lpa.state.mn.us)

