

Chapter 4: Transportation and Land Use



Transportation and land use together make possible the wide range of destination opportunities in the region. Transportation provides the connections, and, in turn, land use imposes demands on the transportation system, underscoring the need to plan both in close coordination as the region grows.

This region has experienced both benefits and challenges of growth, and will continue to do so into the future. As the region grows, so too does the demand for transportation capacity.

Mechanisms for Coordination

The coordination of planning for regional growth and planning for the region's transportation systems is accomplished through the Council's *Regional Development Framework* and this *Transportation Policy Plan*. The forecasts developed by the Council as part of the *Development Framework* provide the basis for forecasting regional infrastructure needs for roads and highways, transit service, wastewater infrastructure, and parks. The forecasts and *Development Framework* policies also serve as the springboard for planning by each community for its roads, wastewater and parks. The local comprehensive plans must coordinate among key elements: forecast growth, planned land use, residential and employment densities and infrastructure plans.

Decisions about how communities grow and the facilities to support them affect one another. Regional transportation and sewer investments help shape growth patterns. The types and locations of housing influence mobility options and travel patterns. Transportation investments, particularly transit, need to be integrated with land use and development patterns so the region's residents and businesses have a high level of accessibility.

Because it is not possible to build enough new highway capacity to eliminate congestion or to completely meet future mobility needs of the region, an integrated, multimodal transportation system is necessary to support balanced job and household growth. By the same token, increasing job concentrations and increasing integrated, mixed-use developments in the region can help maximize the effectiveness of the transportation network and transportation investments in highways, transit and other modes.



Figure 4-1: Land use and transportation decisions impact each other

Downtown Minneapolis - looking north from E 15th St. at the Grant St. / 11th St. exit



Land Use Approaches Supportive of Transportation Network

The *Framework* emphasizes the need for intensified development in centers with access to transportation corridors and in rural centers that want to grow and that lie along major highways. Regional investments can create a transportation system that includes transit solutions that support attractive, walkable neighborhoods with homes, green space, public places and other amenities.

Over the longer term, the region can improve accessibility by encouraging development and reinvestment in centers that combine transit, housing, offices, retail, services, open space and connected streets that support walking and bicycle use. Such development enables those who wish to reduce their automobile use to meet their daily needs and makes it possible for those who are unable to drive to live more independently.

Transportation Policies and Strategies Related to Land Use

Policy 4: Coordination of Transportation Investments and Land Use

Regional transportation investments will be coordinated with land use objectives to help implement the *Regional Development Framework's* growth strategy and support the region's economic vitality and quality of life.

Strategy 4a. Accessibility: The Council will promote land use planning and development practices that maximize accessibility to jobs, housing and services.

Strategy 4b. Alternative Modes: Transportation investments and land development will be coordinated to create an environment supportive of travel by modes other than the automobile including travel by transit, walking and bicycling.

Strategy 4c. Increased Jobs and Housing Concentrations: Transportation investments and land development along major transportation corridors will be coordinated to intensify job centers, increase transportation links between job centers and medium-to-high density residential developments and improve the jobs/housing connections.

Strategy 4d. Transit as Catalyst for Development: Transitways and the arterial bus system should be



Figure 4-2: Development density impacts the types of efficient transit service available to communities

Condo development along Lake Street in Minneapolis





Figure 4-3: Local improvements can enhance the regional transportation system

Martin Olav Sabo Bridge over Hiawatha Avenue

catalysts for the development and growth of major employment centers and residential nodes to form an interconnected network of higher density nodes along transit corridors. Local units of government are encouraged to develop and implement local comprehensive plans, zoning and community development strategies that ensure more intensified development along transitways and arterial bus routes.

Strategy 4e. Local Comprehensive Plans: Local comprehensive plans must conform to the *Transportation Policy Plan* and should recognize the special transportation opportunities and problems that various *Development Framework* planning areas present with regard to transportation and land uses.

Strategy 4f. Local Transportation Planning: Local governments should plan for and implement a system of interconnected arterial and local streets, pathways and bikeways to meet local travel needs without using the regional highway system. These interconnections will reduce congestion, provide access to jobs, services and retail, and support transit.

Strategy 4g. Metropolitan Urban Service Area (MUSA): Local governments within the MUSA should plan for a prospective 20 years and stage their transportation infrastructure to meet the needs of forecast growth. Outside the Metropolitan Urban Service Area transportation plans and facilities and land use patterns must be compatible with the region's need for future sewered development and protection of agriculture.

Associated Transportation Policies and Strategies

Policy 2: Prioritizing for Regional Transportation Investments

Strategy 2d. Bicycle and Pedestrian Investments

Strategy 2e. Multimodal Investments

Policy 3: Investments in Regional Mobility

Strategy 3d. Travel Demand Management Initiatives

Strategy 3e. Parking Pricing and Availability

Policy 6: Public Participation in Transportation Planning and Investment Decisions

Strategy 6b. Interjurisdictional Coordination and Participation

Strategy 6e. Transit Customer Involvement

Policy 7: Investments in Preserving of Right-of-Way

Strategy 7a. Preservation of Railroad Rights-of-Way

Strategy 7b. Right-of-Way Acquisition Loan Fund (RALF)

Strategy 7c. Identification of Right-of-Way in Local Plans





Policy 8: Energy and Environmental Considerations in Transportation Investments

- Strategy 8c. Preservation of Cultural and Natural Resources
- Strategy 8d. Protection of Surface Water

Policy 9: Highway Planning

- Strategy 9a. Planning in the Context of Congestion
- Strategy 9b. Multimodal System
- Strategy 9f. Interconnected Roadway Network
- Strategy 9g. Roadway Jurisdiction
- Strategy 9h. Corridor Studies
- Strategy 9i. Context Sensitive Design

Policy 11: Highway System Management and Improvements

- Strategy 11e. Access Management

Policy 12: Transit System Planning

- Strategy 12b. Transit Service Options
- Strategy 12c. Transit Centers and Stations
- Strategy 12d. Park-and-Rides

Policy 13: A Cost-Effective and Attractive Regional Transit Network

- Strategy 13e. Transit Safety and Security

Policy 15: Transitway Development and Implementation

- Strategy 15c. Process for Transitway Selection
- Strategy 15d. Transitway Coordination
- Strategy 15f. Transitway Coordination with Other Units of Government
- Strategy 15g. Transitways and Development

Policy 16: Transit for People with Disabilities

- Strategy 16c. Access to Transit Stops and Stations

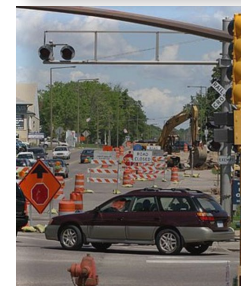
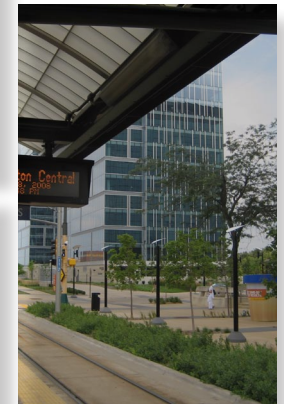
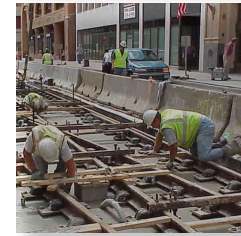


Figure 4-4: Transportation investments and planning decisions are integrated



Policy 17: Providing for Regional Freight Transportation

Strategy 17a. Freight Terminal Access

Policy 18: Providing Pedestrian and Bicycle Travel Systems

Strategy 18b. Connectivity to Transit

Strategy 18c. Local Planning for Bicycling and Walking

Strategy 18d. Interjurisdictional Coordination

Strategy 18e. Multimodal Roadway Design

Policy 24: Protecting Airspace and Operational Safety

Strategy 24a. Notification to FAA

Strategy 24b. Locating Tall Structures

Strategy 24c. Airport/Community Zoning

Policy 25: Airports and Land Use Compatibility

Strategy 25c. Providing Sanitary Sewer

Strategy 25e. Aircraft Noise Abatement and Mitigation

Coordination of Local Comprehensive Plans

Under the Metropolitan Land Planning Act (MLPA), local communities are required to adopt comprehensive plans that are consistent with the Council's *Development Framework* and its four metropolitan system plans – for transportation, aviation, wastewater treatment and regional parks (Minn. Stat. 473.858-.859; 473.864).

Local communities are the key partner for the Council in implementing its plans and policies. The local comprehensive plan is not only a tool used by communities to guide their development; it is used by the region as a key element in local and regional local partnership to accommodate growth across the seven-county region. Local plans ensure that adequate regional systems are planned and developed to serve growth in an efficient and cost-effective manner.

Local comprehensive plans are reviewed by the Council for conformance with metropolitan system plans, consistency with Council policies and compatibility with adjacent and affected governmental units (see statutory provisions below). Forecasts play an important role in the regional/local partnership to accommodate growth and to see that adequate infrastructure is planned and provided.



Comprehensive Plan Review

Minn. Stat. sections 473.851 to 473.871

Conformance: A local comprehensive plan will conform with the metropolitan system plans if the local plan does not have a substantial impact on or contain a substantial departure from a system plan:

1. Accurately incorporates and integrates the components of the metropolitan system plans as required by Minn. Stat. sections 473.851 to 473.871:
 - Transportation components for a multimodal system including accurate road functional classification, transitways and transit facilities and corridors, park-and-ride facilities, traffic forecasts, right-of-way preservation for future roads, transitways and bike/pedestrian facilities.
 - Identification of traffic volumes (current Average Daily Traffic), number of lanes on roadways (principal and minor arterials), allocation of 2030 forecasts to Traffic Assignment Zones (TAZs) and 2030 traffic forecasts for principal and minor arterials.
 - Airports, aviation facilities, noise and safety zones and appropriate land uses surrounding these features.
2. Integrates public facilities plan components described in Minn. Stat. sec. 473.859, subd 3.

Integrates development policies, compatible land uses, forecasted growth allocated to TAZs at appropriate densities specified in 2030 *Regional Development Framework* Allocation of 2030 forecasts to TAZs for transit system development and operation and to maximize the efficiency and effectiveness of the regional system.

Consistency: A local comprehensive plan will be consistent with Council policies and statutory requirements if the local plan:

1. Addresses community role strategies for Geographic Planning Areas contained in the *Framework* including the planning and development of an interconnected local transportation system that is integrated with the regional system.
2. Addresses the linkage of local land uses to local and regional transportation systems including increasing housing and employment numbers and densities in centers along transitways and the arterial bus network.
3. Incorporates Council approved highway or transitway corridor plans for transportation facilities and land use patterns.



4. Includes an implementation plan that describes public programs, fiscal devices and other specific actions for sequencing and staging to implement the comprehensive plan and ensure conformance with regional system plans, described in Minn. Stat. sec. 473.859, subd. 4).
5. Addresses official controls: Includes a Capital Improvement Program (sewers, parks, transportation, water supply and open space) that accommodates planned growth and development.

Compatibility: A local comprehensive plan is compatible with adjacent and affected governmental units including appropriate interconnection of the county and local transportation network, based on comments or concerns, or lack thereof, from these entities. A community should adequately document that it has acknowledged the concern(s) of all adjacent and affected governmental units.



Figure 4-5: Employment density is one of the seven indicators which strongly impact the effectiveness of transitways

Riverfront development in downtown Minneapolis

Planning and Implementation to Enhance Transitway Corridor Potential

Local Land use and Related Factors

Transit, particularly transitways, can improve regional mobility. The benefits that transit offers can be enhanced if land use patterns and development decisions support transit investment. Local communities play several important roles. First, through their comprehensive planning they set groundwork for a transit-supportive land use pattern, including large, walkable concentrations of employment. Second, they approve and permit the projects that implement that pattern. Third, they can work with adjoining communities to coordinate the development of interconnected activity nodes along corridors that can be served by and become destinations for transit service. The following factors strongly influence how successful and effective transitway investments can be. They are an interrelated and interdependent.

Population numbers. High levels of transit ridership depend on a large number of people living within a corridor. Without a critical number of people, ridership will not be high enough to justify rail and bus transitway investments.

Population density. Population density is also related to transit success. If population is scattered, it's not possible to generate enough potential transit customers justify intensive investments.





Figure 4-6: A job cluster like downtown Minneapolis is one way to improve transitway effectiveness

IDS Center - downtown
Minneapolis

Number of jobs. Most transit trips take people to or from work. If there are not enough jobs along a corridor, transit ridership will not support transitway investment.

Clustering of jobs. In addition to enough jobs, employment must be clustered so it is possible to walk to a large number of jobs at each node along a transitway.

Employment center commuter sheds. Some corridors serve a single transit market, such as downtown Minneapolis or downtown St. Paul. But some corridors split their market share between two or more destinations. Despite the total number of potential transit users, the split market cannot be served as effectively by a single transit investment.

Economic incentives to use transit. Downtown Minneapolis, the University of Minnesota and downtown St. Paul are robust transit markets in part because people have to pay for parking in addition to the cost of operating their automobile. This provides an increased economic incentive to use transit. However, this incentive does not exist throughout the rest of the region.

Fine-grain land use patterns. In a downtown, large office towers are clustered within a small number of blocks. Walking between buildings and to transit is easy. Jobs locations are also convenient and walkable from housing, retail, personal services, and cultural and entertainment venues. In suburban locations, there are large office towers but they are often surrounded by large surface parking lots, low-density retail, landscaping and large open spaces. The result is that the buildings with high concentrations of employment are located long distances from one another, from bus stops and from potential transit stations. This makes serving suburban job concentrations with transit more of a challenge.

Strategies for Strengthening Transitway Corridor Potential

Considering the factors that influence the success of transit, communities can employ a variety of strategies to help strengthen the potential of transportation corridors for major transit investments. A few key strategies are summarized below. For a detailed discussion, refer to the Council's *Guide to Transit Oriented Development*, found on the Council's website www.metrocouncil.org.

Intensify population density where it makes sense. Communities have different opportunities, needs and aspirations. Population intensification makes sense in nodes along transportation corridors, especially along existing and potential transit corridors. Proven approaches in the Twin Cities include:

- Promote housing choices with a range of prices. Cities can choose to promote and plan for land uses and building types with a variety of housing and transportation choices.
- Adopt land development policies that encourage more density. These can include density bonuses, lot-size reductions, setback reductions and allowing accessory units.



- Allow for structured and underground parking, which supports higher-density housing development.
- However, a critical mass of potential transit users is needed to support transit service investment.

Intensify employment clusters with transit and pedestrian infrastructure. The success of transit, over the long term, depends on increasing the job intensity (numbers and concentration) in job centers throughout the region, and designing pedestrian-oriented transit connections. This region has eight major job centers but few have integrated, walkable environments clustered around transit. The following recommendations can shape infill and redevelopment to improve transit feasibility, and are generally most appropriate for local units of government. To improve transit corridor potential, cities may adopt land use policies that:

- Encourage clustering of large employment centers into nodal concentrations, rather than dispersing them several blocks apart.
- Create connected streets, sidewalks and bicycle paths both within employment nodes and from employment nodes to surrounding residential areas.
- Encourage structured parking to reduce distances between buildings. This structured parking needs to enhance rather than distract from the pedestrian experience.
- Vertical or horizontal mixes of uses in the same development can support transit use by clustering trips to be within convenient walking distance for pedestrians.

Cities can promote this kind of development through transit overlay zones, density bonuses, and policies and actions to design streets that are safe, accessible and convenient for all users. Cities can support transitway station area development with financial tools such as tax increment financing.

Study land use now to realize transit-supportive development through 2030. Historically, it takes at least seven to 10 years to plan and implement a major transit investment. During these intervening years, cities can implement land use policies to encourage development that supports future transit investments.

Land use corridor studies can inform land use policy actions. These studies should be corridor-wide and can include factors described above. As communities plan for these investments, community planning and involvement is critical. Mixed-use and redevelopment projects take time and are facilitated by partnerships and a shared vision. Public participation efforts can include a corridor-wide visioning effort, design charrettes, task forces, and neighborhood and individual meetings. The aim is to develop goals, objectives and a vision for the area, which guide corridor development and its evolution.



Figure 4-7: Walkable environments, such as this one in St. Paul, make transit a more desirable and effective alternative

