

EXECUTIVE SUMMARY

INTRODUCTION

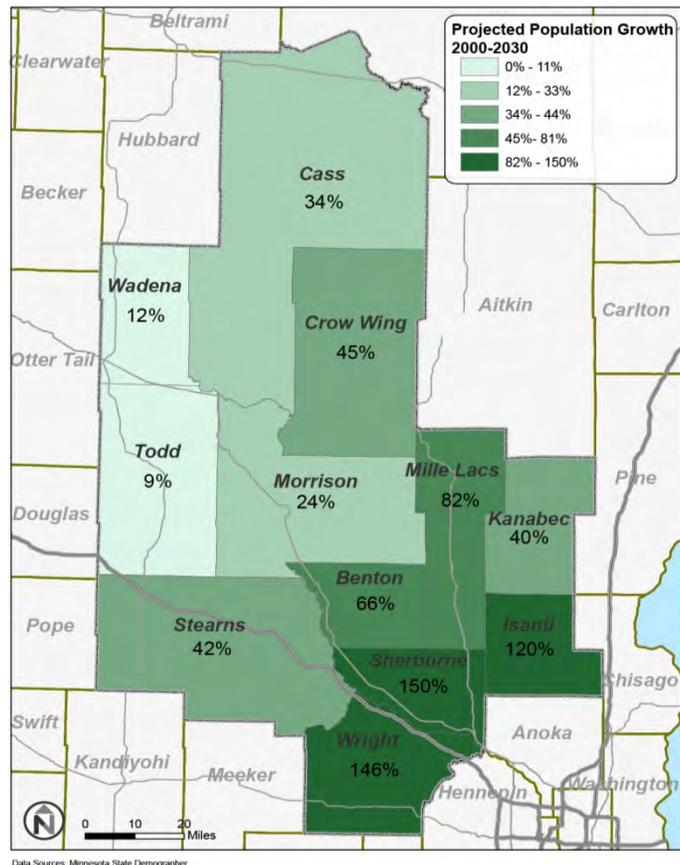
This study features an analysis of the existing services and facilities in 12 Central Minnesota counties, with an evaluation of the potential for new commuter transportation services. The study area, Minnesota Department of Transportation (MnDOT) District 3, is comprised of the following counties and portions of designated state regions:

- Region 5 counties: Cass, Crow Wing, Todd, Wadena, and Morrison
- Region 7E counties in District 3: Mille Lacs, Kanabec, and Isanti
- Region 7W counties: Benton, Sherburne, Stearns, and Wright

The study was completed in three phases, which included (1) an assessment of regional mobility needs, (2) an evaluation of the feasibility of new regional transit services, facilities, and programs, and (3) a financial strategy, along with implementation guidance to carry forward the elements of the study.

POPULATION DENSITY AND GROWTH

As the Twin Cities region has grown in the last two decades, growth from the metropolitan region has spread outward into District 3. The highest population densities in the region are in downtown St. Cloud, with other pockets of density in the Brainerd-Baxter area and Cambridge, as well as many of the outer ring suburbs of Minneapolis – Big Lake, Albertville, and Buffalo. Since 2000, the population in District 3 has grown considerably faster than the rest of the state and nation. Sherburne County grew very fast, with a nearly 58% increase in population in the last ten years. Wright County's population grew by more than 50%, and Isanti County



A significant increase in population is projected for Central Minnesota.
Source: Nelson\Nygaard Associates

by 44%. With the exception of Todd and Wadena, all other counties in the district have seen rapid population expansion, with growth rates well above the state average. Looking ahead to 2030, Sherburne, Wright, and Isanti Counties are expected to continue to be the fastest growing counties in District 3.

Median incomes are highest in Wright, Sherburne, and Stearns Counties, closer to the Twin Cities, although central and southwestern St. Cloud have lower incomes. High incomes are also found north of Brainerd along the Cass and Crow Wing border, and to a lesser degree in Benton and Isanti Counties. Of particular note are the high percentages of adults age 65 and over in Cass, Crow Wing, Kanabec, Mille Lacs, Morrison, Todd, and Wadena Counties. Wright and Sherburne Counties generally have a younger population. Benton and Isanti Counties have the highest percentage of workers in the labor force compared to the overall county population.

Labor force numbers across the country peaked in 2007, and the MnDOT Region 7W counties experienced the fastest growth up to 2007 and the sharpest decline in employment from the recession.¹ This region is expected to show the strongest job growth in the state in the coming decade (projections show a 12.9% increase in job growth in these counties). Region 7E, which includes Isanti, Kanabec, and Mille Lacs Counties, is also predicted to see a 12.9% increase in employment. This growth strongly outpaces the state's overall projected increase of 8.7%.



Metro Bus in St. Cloud is the largest bus operator in District 3.
Source: NelsonNygaard Associates

EXISTING TRANSIT SERVICES

A number of very good transportation resources exist today within District 3. For example, Northstar rail is an effective operation providing commuter services from District 3 into Minneapolis and allowing commuters to travel to other destinations within the Minneapolis-St. Paul area. First-year ridership was below estimates, but 2011 ridership showed significant growth, outpacing the previous year's ridership by nearly 80% and exceeding all ridership projections. Similar ridership growth was seen on Northstar Link,

the commuter bus service that operates between St. Cloud, Becker, and the current Northstar rail terminus at Big Lake.

¹http://www.positivelyminnesota.com/Data_Publications/Employment_Review_Magazine/May_2011_Edition/Projected_Regional_Employment_Growth_2009-2019.aspx

Data suggest that service expansion opportunities, which had been of concern according to some planners and policymakers, may be appropriate in the next decade to provide a full rail commuter connection between St. Cloud and Minneapolis.

One of the major challenges of a commuter rail line, like Northstar, is that its success depends on development patterns in the corridor, freeway congestion levels along I-94 and US 10, fares, parking costs at the destination and a host of other personal considerations for individuals with the option of taking rail. Northstar facilities are new, attractive, and well maintained, which, according to commuters, are important elements of their experience.

District 3 also has a number of rural multi-county systems and local systems. These include Brainerd-Crow Wing Public Transit, which operates in Brainerd, Baxter, and throughout Crow Wing County; Chisago-Isanti County Heartland Express; Friendly Rider Transit in Wadena County; Pine River's "Ride with Us Bus" in Cass County; Rainbow Rider in Todd County; RiverRider in Sherburne and Wright Counties; Timber Trails, serving Kanabec and Mille Lacs Counties; and Tri-CAP, providing services in Benton, Morrison, and Stearns Counties. Metro Bus is District 3's urban system, and provides 15 regular fixed routes and paratransit service to the cities of St. Cloud, Sauk Rapids, Waite Park, and Sartell.

Amtrak's Empire Builder route provides rail transportation with stops in St. Cloud and Staples at early morning and late night hours, making it nearly impossible to use the service for commutes. District 3 has only one intercity bus provider - Jefferson Bus Lines.

The Metropolitan Council oversees the Van-GO! Commuter Vanpool Program for travel to the Twin Cities. At least 10 different vanpools currently operate from District 3 to employers in the Metro Area, but no vanpool programs exist exclusively within District 3.

INFRASTRUCTURE

The major roadways and highways in District 3 provide for freight movement and commute trips between cities. I-94 is a major service corridor for commutes to St. Cloud and the Minneapolis-St. Paul area. Several park-and-ride lots are located along I-94, including Albany, Monticello and Albertville, as well as St. Joseph. US 10, MN 23 and MN 95 all play significant roles in serving commuters traveling to and from the St. Cloud area, while commuters in the Brainerd-Baxter area are likely to use MN 210, MN 371 and MN 25.

One of MnDOT's strategies for encouraging ridesharing has been the development of park-and-ride facilities. District 3 has a total of 20 park-and-ride facilities, including those which serve transit and those which do not (often called park-and-pool lots to distinguish them from those



A Crow Wing Public Transit information display.
Source: Nelson\Nygaard Associates

with transit). Most of the facilities were developed by MnDOT, but many are informal or municipal facilities. The largest facilities are served by Northstar rail or Link service, and those include Big Lake Station, Elk River Station, and the St. Cloud Link facility. Other facilities are located throughout the southern and central portions of District 3, in locations including Albertville, Big Lake, Monticello, Princeton, and Zimmerman, among others. An inventory of park-and-ride facilities found that with the exception of the Becker Park-and-Ride, the existing facilities that serve transit are well maintained and provide adequate amenities. The park-and-rides without transit (park-and-pool facilities) received favorable comments from users, but amenities at the sites are generally minimal and some of the sites are not easily found by first-time users. Improvements to existing facilities and development of new facilities, ideally served by transit, may help facilitate ridesharing in District 3.

Several rail corridors also exist within the study area. All of them are freight lines and most are operated by BNSF. The potential exists for future commuter transit service along two of the corridors.



The vast majority of District 3 commuters drive alone to work or school.
Source: Nelson\Nygaard Associates

EXISTING COMMUTES

Although District 3 is one of the fastest growing regions in Minnesota, trip origins for residents are dispersed while destinations are largely clustered. The economic downturn impacted residential growth, particularly at the southern end of District 3, in many of the cities considered bedroom communities of the Twin Cities. Employment in District 3 is expected to continue to grow, with much of it centered along major roadways, which may make some of it relatively easy to effectively serve by transit. Nevertheless, if employment development patterns continue,

large numbers of new jobs will be created in warehousing, shipping, manufacturing and other industries that have a mix of work shifts and are often in facilities that offer employees ample free parking.

Out-of-county journeys to work are typical for most residents of District 3. In five counties, more than half the working population leaves the county for employment, including Sherburne County, where nearly 70% of residents commute to jobs outside of the county.

The two primary nodes of employment within District 3 are the St. Cloud metropolitan region and the Brainerd-Baxter area. Many employers are also situated throughout Stearns, Sherburne, and Wright Counties. Regional commuting is heaviest to the Twin Cities, but St. Cloud is a major employment draw for counties in Region 7W and Region 7E, and even for residents of Minneapolis. Commuting from Region 5 and points north is much less prevalent. The Brainerd-

(under \$25,000) annual incomes were more likely to use transit than those with moderate incomes. Nearly 20% of residents surveyed indicated a likelihood to take a bus during peak commuting hours to either St. Cloud or the Twin Cities. Only 14% of Wright County and 12% of Sherburne County residents said they would consider using a commuter bus service to the Minneapolis-St. Paul area during peak commute hours.

Based on survey responses, men were more likely to work full-time or from home; women were more likely to work part-time, volunteer, or be retired or not working. No major differences between the genders arose regarding mode of transportation to work, though slightly more men than women use transit and men tended to have longer commutes. Women were slightly more likely to walk or bike to work than men. Men were found to be more cost-sensitive with regard to potential commuter services.

People who currently use park-and-ride facilities indicated a much greater level of interest in regional commuter bus services than the general population. Park-and-ride users generally noted that park-and-rides are located in convenient locations, but require improved lighting, sheltered waiting areas, and other amenities.

The employer survey found that that driving is unquestionably the primary commute mode in Central Minnesota, and that although major employers may be supportive of transit or ridesharing, they do not have policies in place to encourage employees to use alternative modes. The employer survey found that non-auto commutes are a minor consideration for large employers. Based on the data collected, it can reasonably be assumed that most major employers in the study area, outside of those with worksites in very dense or geographically constrained areas like downtown St. Cloud, offer free parking for their employees and have very few employees who use transit (if it is available to them).

GOALS, OBJECTIVES AND PERFORMANCE STANDARDS FOR REGIONAL COMMUTER SERVICES

Designing services to meet commuter mobility goals, to operate efficiently and to meet existing and changing public mobility needs is critical. Goals were developed to provide guidance for evaluating specific commuter services. They provide strategic direction for defining service alternatives and recommendations. The following goals, in support of the overall commuter transportation study, were developed based on stated priorities of stakeholders, and the markets for commuter transportation services:

- Develop effective services for commuter transportation markets.
- Expand transit services into areas where transit has a likelihood of success.
- Coordinate commuter services with transit providers in the greater region.
- Tie the provision of transit and investments in transit to land use and the resulting demand levels.
- Encourage sustainable development practices that support ridesharing and transit.
- Increase the visibility and elevate the image of ridesharing and public transportation programs in District 3.

To determine how successful District 3 is in achieving goals, it is important to define service measures and standards. Specific performance measures were identified for regional transit, including passengers per revenue hour, service to total hours ratio, passengers per mile, farebox recovery, on time performance, etc. Standards were also identified for dwelling units per acre, frequency of service, stop spacing, and route speed.

Basic measures and standards were also identified for vanpools, including pick up location characteristics, maximum number of drop off locations, travel time ratio to autos, and monthly cost to vanpool users. Additional performance measures were proposed for ridesharing programs.

By having adopted standards, they can be written into approved service and operating policies, and offer District 3 providers a good justification for implementing new services or not approving funding for others.



Employer meetings were conducted in Baxter and St. Cloud.
Source: NelsonNygaard Associates

SERVICES PROPOSED FOR CENTRAL MINNESOTA

In suburban, rural and small communities, fixed route public transit may not always be the most cost-effective solution for providing mobility. The land use data shows some communities where residents are not typical transit markets, but where intercity commuter demand is expected to increase. In addition to transit service, some other strategies that may be considered for maximizing mobility include new carpools, vanpools, and supportive commuter programs. Sometimes, rideshare programs offer a worthwhile pilot program that can be evaluated to determine whether the corridor may be appropriate for new transit services at a later date.

The primary services identified as part of a District 3 commuter program toolbox include (1) a guaranteed ride home (GRH) program, which provides commuters who travel to work without using their personal vehicles a free taxi or rental car ride home in case of unexpected events, (2) a vanpool program to serve longer-distance commutes along corridors with very limited or no existing transit service and could serve commute trips made within the region, and (3) facilitated rideshare matching. A number of other employer-sponsored regional commuter service options are identified.

Four different types of regional transit services are also defined for Central Minnesota, including regional commuter rail service (Northstar commuter rail is currently the only regional commuter rail line that operates in District 3), regional express bus services (similar to Northstar Link), regional arterial routes that would operate on regular arterials and rural highways, and local feeder routes and community circulators.

EVALUATION OF FUTURE COMMUTER SERVICE CORRIDORS

Based on the analysis of data, a number of corridors were evaluated for potential transit service or vanpool service. These included the following:

- Corridors serving the Brainerd-Baxter Area
 - Brainerd to Onamia (Grand Casino Mille Lacs)
 - Pequot Lakes to Baxter/Brainerd
 - Staples to Baxter/Brainerd
 - Crosby to Brainerd
- Corridors serving destinations in the St. Cloud Area
 - Brainerd to St. Cloud
 - Cold Spring via St. Joseph to St. Cloud
 - Milaca to St. Cloud
 - Sauk Centre to St. Cloud
- Corridors that link cities in District 3 and do not provide a direct connection to Brainerd or St. Cloud
 - Buffalo to St. Michael
 - Buffalo via Monticello to Big Lake
 - Milaca to Elk River
- Corridors serving destinations in the Twin Cities
 - Annandale to Minneapolis
 - Mora to Minneapolis
 - St. Cloud to Minneapolis
 - St. Michael to Minneapolis

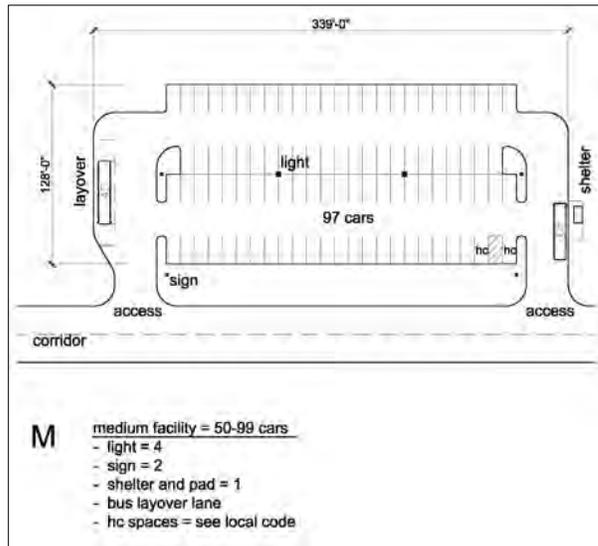
The evaluation found that most of the longer corridors are appropriate for ridesharing, and several may support vanpooling, but only four of the corridors (or segments of them) approach the projected ridership thresholds that would support regular commuter transit operations: (1) Cold Spring to St. Joseph to St. Cloud, (2) St. Michael to Minneapolis, (3) Buffalo to Minneapolis, and (4) St. Cloud to Minneapolis. Each of these corridors was conceptually defined in terms of alignment, service schedule and service hours, stop and park-and-ride locations, ridership estimates, costs and service considerations. They were also further evaluated based on a number of other measures. Figure ES-1 provides a summary of the preferred regional transit routes.

Figure ES-1 Summary of Preferred Regional Transit Routes

Route	Route Destinations	Weekday Route Trips		Service Days	Vehicles Required	Annual Revenue Hours	Annual Ridership Estimates
		AM	PM				
Cold Spring via St. Joseph to St. Cloud	Cold Spring park-and-ride Metro Bus Transit Center	3 from St. Joseph; 2 from Cold Spring (IB only)	3 to St. Joseph; 2 to Cold Spring (OB only)	M-F	2	1,292	29,500 - 33,800
Buffalo to Minneapolis	Buffalo park-and-ride	3 (IB only)	3 (OB only)	M-F	2	1,640	11,200 - 21,300
St. Michael to Minneapolis	St. Michael park-and-ride Albertville park-and-ride	4 (IB only)	4 (OB only)	M-F	3	2,720	67,000 - 111,800
St. Cloud to Minneapolis	St. Cloud Northstar park-and-ride Becker park-and-ride	5 IB 1 OB	5 OB 1 IB	M-F	4	3,370 ¹	62,000 - 108,000 ¹

(1) Incremental revenue hours and ridership estimates are only for the St. Cloud and Becker stations.

PARK-AND-RIDE FACILITY IMPROVEMENTS



A proposed layout for a medium park-and-ride facility
Source: LSA Design

The review of and recommended alternatives for park-and-ride facilities is based on potential ridership demand for each of the evaluated commuter corridors. A hierarchy for facilities was developed, based on the projected number of users, along with prototypical designs with proposed amenities. For example, a small facility with fewer than 50 parking spaces needs some basic amenities such as lighting and signage, but larger facilities would typically include transit service and would require bus shelters, bicycle racks, security, etc. Recommendations are made for specific improvements at park-and-ride facilities in District 3, as well as the expansion or development of new facilities in

Nisswa, St. Cloud, St. Joseph, Albertville, St. Michael, Buffalo, Isanti, and Becker.

Although MnDOT develops park-and-ride facilities, the department has a relatively hands-off approach to managing park-and-ride lots. Each district is responsible for the development of its own park-and-ride policies. While some districts maintain their park-and-ride lots, others, like District 3, turn over maintenance to local jurisdictions and have a more limited role in marketing. MnDOT maintains a listing of lots on its website at dot.state.mn.us/transit/riders/park.html, but the information available is relatively limited compared with the sites maintained in other states, some of which show images of the lots, provide maps, and offer links to specific transit operators. Information about how some other states maintain and manage their park-and-ride facilities is provided as potential guidance to MnDOT.



This park-and-ride lot in Zimmerman is an "unofficial" lot according to MnDOT: it was developed and is managed by the City of Zimmerman.
Source: Nelson\Nygaard Associates

OTHER CONSIDERATIONS

A number of services are identified in the study; only a few are likely to provide significant benefits and achieve proposed performance standards. The preferred corridors are carried forward for purposes of implementation considerations and to define a financial strategy. Ultimately, whether these new services are developed will depend on a number of factors, most importantly whether funding is available and whether an organization or agency can champion their implementation.

Existing District 3 transit operators may not have the resources or political support to provide service across jurisdictional boundaries. They are focused on serving local trips, and outside of St. Cloud, the Brainerd-Baxter area, and the Northstar rail corridor, most of the transit operators are providing service to transit-dependent riders, who are not necessarily the same markets as those who would opt to ride a regional commuter bus service.

Vanpools, which may be among the most effective solutions for some of the long distance commutes, are not in operation or administered formally by any agency or organization within District 3.

Based on relevant research and this study's survey findings, parking and congestion constraints, as well as increased fuel costs, encourage individuals to seek other commute transportation alternatives. For intra-district commutes, the only existing constraint for many people is the high price of gasoline.

In most of the rural portions of District 3, commuter options will be very limited. Strategies to facilitate ridesharing in these areas may have some merit, but may not significantly impact commuter mode choice. Neither commuter transit nor vanpooling will be cost-effective or meet productivity performance standards in most of District 3's smaller communities.

FINANCIAL STRATEGY

Developing a funding plan that is agreeable to all key stakeholder parties is likely to be a challenge, not because they are unlikely to support regional commuter transportation, but because local transit agencies and programs also need capital and operating money. The St. Cloud Metropolitan Area 2035 Transportation Plan notes that in 2010, the APO received \$1.9 million of the local federal share. District 3 received \$27.76 million, and the remaining local units of government received a combined total of \$7.35 million. Without a district-wide taxing authority, and with major employers indicating they are unlikely to provide private funding for commuter transportation, it will be necessary to look for creative solutions to pay for new services.

Existing transit providers in District 3 receive operating revenues from various federal, state and local sources. These funding programs are expected to continue in the coming years, enabling them to support their existing services, with some potential expansions in funding from various sources, although reductions are also possible. The financial strategy assumes that the preferred regional commuter bus services might be implemented, along with a future expansion of Northstar rail as far north as St. Cloud. It also assumes a District 3 vanpool program would be developed.

Total operating costs for the regional commuter routes is assumed to be about \$934,000 with preliminary costs for Northstar operating costs along the corridor between Big Lake and St. Cloud at nearly \$3.8 million during its first year. By 2022, assuming no changes in service levels, estimated operating costs for the three bus services and rail extension are assumed to be \$5.6 million. Fare revenues are expected to cover only 20% of operating costs on some services, but up to 70% of costs on others. Regardless, a mix of federal, state and local funds will be required for operations.

Transportation providers in District 3 have had success in securing federal, state and regional funds for capital investments and would likely have to rely on these sources for the capital investments required for new commuter services. Discretionary capital grants to cover a portion of infrastructure needs and other investments will be essential. The primary capital costs are for improvements to and construction of park-and-ride facilities, and for extension of rail service in the Northstar corridor. Vehicle purchases, a significant capital expense, could be avoided with the use of existing transit vehicles in District 3 or contracting with a provider that would supply vehicles.

Annual costs for administering a vanpool program, GRH program, and supportive ridematching programs are assumed to be less than \$150,000. Contracting with a vanpool leasing company would make it unnecessary to procure vanpool vehicles, shifting all of the vanpool costs to the vanpool users.

MnDOT administers state and federal funds in District 3 and for all of Greater Minnesota. Operating funds come from four primary sources: fare revenues, miscellaneous revenues (leases, contracts, etc.), Federal Transit Administration (FTA) formula funds (Sections 5307 and 5311) and special-purpose funds, and the State Motor Vehicle Sales Tax (MVST).

Capital funds come from a wider variety of federal, state, regional, and local sources. With the exception of FTA Section 5307 and state funding formula allocations, most other capital funding sources are one-time, competitive grants.

IMPLEMENTATION

For regional commuter transportation services, a number of options exist to manage and administer a program (or more than one program) in Central Minnesota. It will be critical to identify which organizations and entities would be responsible for implementing new commuter bus routes, and what responsibilities they would have with regard to policy oversight and day-to-day management/operations. It will also be important to determine who can manage vanpooling and other commuter services programs. The study finds that a transit coordinating council could play a beneficial role in helping to develop the region's commuter programs and define the operating parameters of the proposed services.

A number of alternatives are provided for who might lead a Central Minnesota commuter transportation program, recognizing there may be roles for multiple providers. Some of the alternatives considered in the study include a county — ideally Wright County and/or Stearns County due to the demand for commuter services in those counties — or a nonprofit agency, local organization or rural transit provider. Other potential lead agencies include St. Cloud Metro Bus, the St. Cloud APO, MnDOT, or a new agency or organization, which could be a public-private partnership such as a new Transportation Management Association (TMA) funded, in part, by employers in the region.

Different organizational models are also suggested, including multiple operator agreements, establishment of a consortium, development of a Joint Powers Authority (JPA), or agency consolidation. A JPA is considered perhaps most appropriate for District 3 because it is relatively flexible, easy to form, and would centralize the responsibilities of overseeing and administering commuter services, but would be accountable to participating organizations and jurisdictions.



Nice pedestrian areas and mixed uses make an area like downtown Brainerd (above) more supportive of transit than an area like the Wal-Mart in Baxter (below), with a large parking lot between the front door and the street.



Source: NelsonNygaard Associates

A number of other considerations are provided regarding the implementation of new service, including the need to develop more detailed plans for the routes presented in this study, as well as considerations about finalizing services for operation, modifying rural transit services to serve as feeders to the regional commuter operations, implementing new vanpool services, and marketing/providing public information about the commuter services and other transit programs operating in District 3.

Central Minnesota's communities, just like many suburban and rural communities elsewhere in the state and across the US, have not really been built with transit in mind. A general threshold for transit-supportive residential uses is 15 units per acre for high-frequency bus service. Commercial, institutional and corporate space with high employment densities (e.g., offices, medical centers, colleges) support more transit use than do those with lower employment densities (e.g., industrial parks or warehousing). Extensive areas of retail can become auto-dominated if not scaled appropriately and mixed with other uses.

Long term strategies to improve the potential for effective and efficient commuter transportation will include the need to work with local communities and developers to orient new growth and locate new facilities so they can be affordably and effectively served by transit. Some tools may include design guidelines to ensure land uses are mixed both horizontally and vertically, activity centers are diversified to maximize transportation choice, land use intensities encourage use of transit and support pedestrian and bicycle activity, and parking requirements (and parking provision) are compatible with compact, pedestrian and transit-supportive design and development. Engagement and education with political leaders, planners, and developers can help them understand the true costs of building a new college campus or social services facility on remote, inexpensive land that will require an expensive investment in parking facilities and will ultimately be too costly to serve by commuter transit.