

# INTRODUCTION AND SUMMARY REPORT

## INTRODUCTION

The goal of the Minnetonka Transit Study is to evaluate transit service needs and market potential for local transit service in Minnetonka. Based on the review of the Existing Conditions and the Peer Review, service recommendations were developed to address opportunities, as guided by available funding, for transit improvements in Minnetonka. The recommendations are developed for near-term implementation (within the next two years) as well as potential long-term implementation with the opening of the Southwest LRT, which will likely enhance the productivity of local service. The long-term recommendations included here are not intended to be an all-inclusive list of proposed bus connections with LRT and will need to be fully vetted during the review process of the Southwest LRT bus network. They are not presented to circumvent that process, but simply to provide potential improvements to be considered.

This study expands on a 2010 Minnetonka-led study that was conducted to better understand the transit services provided within the city. The study will provide the City with options for provision of transit service that can best meet local transit needs. While extensive express service (mostly in the I-394 corridor) already exists in Minnetonka, it was clear from the 2010 study that the city values both local and express services. However, local and midday services are lacking throughout much of the community. This desire for improved local transit service is the focus of this study.

The Minnetonka Transit Study consists of three chapters:

- **Existing Conditions.** This chapter provides the foundation for the study by providing a review of past planning efforts, a demographic overview, review of existing transit services, and summary of previous community survey efforts.
- **Peer Review.** This chapter focuses on other “peer” communities that are similar to Minnetonka and evaluates the performance of transit services in those communities. The primary goal of the peer review is to assist in the development of local service models in Minnetonka and estimate how a local service would perform.
- **Service Concepts and Alternatives.** Based on the needs and findings from the Existing Conditions analysis and Peer Review, six conceptual service options were developed and presented at an open house for public comment. Using the comments received at the open house, and a more detailed evaluation of the local service concepts, service recommendations were developed for near-term implementation (within the next two years) as well as potential long-term implementation with the opening of the Southwest LRT.

## **SUMMARY OF EXISTING CONDITIONS**

### **Literature Review**

A number of Minnetonka and regional documents were reviewed to gain an understanding of the local and regional context for the study. Minnetonka documents reviewed include the Minnetonka 2030 Comprehensive Plan Guide, the Minnetonka 2010 Transit Study, and the 2002 Opt-Out Study. The primary regional documents reviewed include the Metropolitan Council's 2030 Transportation Policy Plan and plans for the Southwest Corridor 3A alignment and feeder network. Through this review, several key themes and findings emerged:

- The 2010 Minnetonka Transit Study was conducted to help the city better understand the transit services provided to, and available to, the city; whether the city's residents and businesses were receiving transit service levels similar to other communities; and to provide an analysis of options for future transit service that will best meet the needs of the city's residents and businesses, including looking at what happens when LRT becomes operational. The study recommended that the City of Minnetonka renegotiate a new contract with enhanced local service with Metro Transit and noted that the express services were viewed favorably and are serving the city well. The study recommended further exploration of a transit circulator service that met the midday, local needs in Minnetonka. The 2010 study was the basis for this follow-up study.
- Minnetonka's Comprehensive Guide Plan serves as the city's roadmap for future land use and transportation improvements in the city. As such, this document reflects that direction with regard to future development of potential local service alternatives.
- The Metropolitan Council's Transportation Policy Plan provides a regional transportation strategy, including long-range transit strategies, for the region. The TPP identifies five "Transit Market Areas" and defines the typical services appropriate for each area. Minnetonka includes three of those Market Areas, which indicates that the city has a wide variety of land use characteristics and transit demand varies greatly.

### **Demographic Overview**

A demographic review was conducted to understand the transit market for a potential local service in Minnetonka. The review consisted of population and employment density, density of senior and youth populations, density of households with extremely low income, and households without a vehicle available to them. Key findings from this review include:

- Overall residential population density is low in Minnetonka (five or fewer persons per acre). However, there are pockets of slightly higher density (five to nine persons per acre) located around the city and a small number of medium-to-higher density concentrations near transit centers, park and rides, or along major roadway or highway corridors. Employment density is projected to increase at a few locations along the I-394 corridor and in the Opus area, but otherwise remain relatively constant.
- Minnetonka has a relatively high share of seniors (nearly 17% of the city's population). Seniors are distributed throughout the city; however, areas of higher senior density generally correspond to senior housing developments.
- Only 4% of households in Minnetonka are considered extremely low-income, lower than the regional average. Low-income populations have a higher concentration on the eastern side of the city. The percentage of households without access to a vehicle (less than 4%) is also much lower in Minnetonka relative to the region. The highest concentration of households without access to a vehicle is along I-394 (northeast of the Plymouth Road Park & Ride and west of U.S. 169 on either side of Cedar Lake Road). These locations have apartments and other higher density housing. However, block groups with lower

vehicle availability do not necessarily correspond to block groups with the highest low-income concentrations.

## **Local and Regional Commute Patterns**

Data from the U.S. Census Bureau Longitudinal Employer-Household Dynamics (LEHD) was used to determine where Minnetonka residents work, and where people who work in Minnetonka live. In addition to evaluating the city as a whole, Minnetonka was divided into four different sub-areas and worker flows in these areas were evaluated separately: 1) I-394 corridor, 2) Opus area, 3) Minnetonka Corporate Center, and 4) Central Area/Highway 7. Key findings from this analysis include:

- About 10% of Minnetonka workers live in Minneapolis. About 8% of Minnetonka workers both live and work in Minnetonka. With the exception of the Central Area, Minneapolis residents comprise the single largest share of workers in each area while Minnetonka residents make up between 5% and 6% of workers. In the Central Area, 12% of workers live in Minnetonka and represent the largest share of workers. There were nearly 24,000 workers among Minnetonka residents in 2009. Nearly 20% of residents work in Minneapolis while almost 15% of residents both live and work in Minnetonka.

## **Overview of Existing and Future Transit Services**

Fixed-route transit is the predominant form of transit service in Minnetonka.<sup>1</sup> Seventeen fixed routes operate within city limits representing four different service types:

- **Urban local.** Regular-route bus service that is provided mostly within Minneapolis. The vehicles stop frequently to pick up and drop off passengers at designated locations.
- **Limited Stop.** Limited stop service operates on a similar path to a local route but only serves a subset of stops to improve travel time. Limited stop routes may serve all local stops over a portion of the route and then operate closed door over a portion of the route, or serve only major stops resulting in wider spacing between stops.
- **Suburban local.** Regular-route bus service that is provided within suburban communities. The vehicles stop frequently to pick up and drop off passengers at designated locations.
- **Express.** Regular-route bus service with limited stops. These are typically longer routes designed for commuter travel.

Key findings from the evaluation of existing transit services include:

- Transit service in Minnetonka largely consists of peak-period express service to downtown Minneapolis and the University of Minnesota. Express Route 675, , operates all day along the I-394 corridor, while local routes 9, 12 and 615 operate mostly on the eastern edge of the city, in the Opus area or in the I-394 corridor. A large area of the city is not served by fixed route transit during the middle of the day, but TransitLink offers general public Dial-a-Ride service throughout the day, into the evening on weekdays, as well as on Saturday.
- The highest boarding activity is at the two park and rides along I-394 where express services are concentrated (Co. Rd. 73/I-394 and Plymouth Park & Ride). Other areas with high levels of boarding activity include the Opus area and Greenbrier Drive and Cedar Lake Road.

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<sup>1</sup> TransitLink, a Dial-A-Ride service, is provided in Minnetonka as is Metro Mobility service.

- The Southwest Corridor Light Rail project will have a significant impact on transit service in the southwest metro area, including Minnetonka. Two future stations are either in or on the border of Minnetonka: Opus and Shady Oak Road. The Southwest Corridor LRT project is currently in the preliminary engineering phase and expected to be in operation by 2018.
- There are plans for new (or expanded) park and ride facilities at the Opus and Shady Oak LRT stations, and along the I-394 corridor.

## **Minnetonka Residential Survey**

Based on the 2011 Minnetonka residential survey, about a fifth (19%) of residents have taken a bus during the past two years. Of the 19%, 13% are daily riders and 55% ride less than once monthly. Of residents who used transit, 55% are very satisfied and 41% are somewhat satisfied with bus service. Although 28% of these residents ride the bus to get to work, the largest use was for special events, the state fair, and sporting events—a combined 51%.

## PEER REVIEW

To better understand whether a local route might be appropriate in Minnetonka, and to determine how a service might perform, a peer review of other communities was conducted. The peer review compares Minnetonka to other local and national communities that have similar characteristics to Minnetonka. The peer review has three basic objectives:

1. Better understand how Minnetonka compares to other communities in terms of type of transit service provided.
2. Provide insight into the elements that make a local, midday transit service successful (or not successful) in comparable communities.
3. Assist in the development of a local service model in Minnetonka that will be successful and meet established performance standards.

The peer review approached the local peer cities differently than the national peer cities:

- **Local Peer Cities.** Because most stakeholders are familiar with local communities, this section of the peer review identifies three communities in the Twin Cities. The three communities' transit services are then compared to what is provided in Minnetonka (regardless of whether local service is provided). The three local peer communities identified include: **Blaine, Plymouth and Eden Prairie.**
- **National Peer Cities.** This section compares communities similar to Minnetonka from across the country. In addition to comparing the level and type of transit service in the national peer communities, detailed performance data was gathered and used to estimate ridership potential on potential services in Minnetonka. A requirement of the national peer communities is that they must operate some level of locally-focused, midday transit service. The national peer cities that were selected include: **Shoreline, WA; Thousand Oaks, CA; Broomfield, CO; Westlake, OH; Burlington, MA; and Braintree, MA.**

## Local Peer Review Key Findings

- **Transit service in Minnetonka is somewhat unique.** The transit services in both of Minnetonka's closest neighbors (Eden Prairie and Plymouth) are exclusively (or almost exclusively) express, commute-oriented service. While transit service in Minnetonka is also heavily focused on express service, services are more mixed with some local routes and midday service in the strongest transit markets (I-394 corridor, the Opus area, and the far eastern edge of the city). Transit services in Blaine closely resemble the service model in Minnetonka; however Blaine has higher ridership as a result of its connection to Northtown Mall and more urban areas further south.
- **Minnetonka has more service than its closest neighbors.** Compared to Eden Prairie and Plymouth, Minnetonka has a high level of in-service hours. While productivity (passengers per in-service hour) is not an accurate metric unless evaluating the entire route, it is assumed that the services in Plymouth and Eden Prairie are more productive since they are largely express and operate only during peak periods.
- **Minnetonka has some midday and weekend service.** Fixed route transit services in Eden Prairie and Plymouth are not available on weekends or during the week in the middle of the day (with the exception of two midday trips on one Plymouth Metrolink route and some midday service to Southwest Station). Blaine, on the other hand, has several routes that offer midday local service.
- **Local Dial-A-Ride in Plymouth provides local coverage.** Plymouth is the only peer city that offers a general public demand responsive service in addition to the fixed

routes (and as a replacement for TransitLink). Blaine and Eden Prairie have TransitLink service, like Minnetonka (though weekday service hours are extended in Minnetonka and Saturday service is provided).

## National Peer Review Key Findings

- **National peers are less focused on express service.** While express service is provided in all peer communities, all national peers also had higher levels of local or regional service (that also provided service locally). Two of the peers (Thousand Oaks and Burlington) offer local services as an overlay to the regional transit services, and Thousand Oaks has somewhat limited regional service. Shoreline, Broomfield and Braintree all have a significant amount of regional service (not unlike the I-394 corridor in Minnetonka) that provides local service in the respective cities. Two other factors influencing the level of express service versus local service are the average central business district (CBD) all-day parking rate and the distance from the CBD. The CBD for Burlington and Braintree (Boston) has the highest average all-day parking rates of any peer city, followed closely by Thousand Oaks (Los Angeles) and Shoreline (Seattle). While the average all-day parking rates in downtown Minneapolis are lower than in peer regions, express service in Minnetonka is much more extensive than the peer cities. Therefore, a key finding is that it's the combination of distance from the CBD *and* average all-day parking rates that influences the level of express versus local service.
- **Local-serving systems are less productive.** Two peer communities providing local-serving service (Burlington and Thousand Oaks) have the lowest overall route productivity when compared to the other peer cities that provide local service as part of a larger regional network. However, Thousand Oaks has higher productivity than the local portions of service in Westlake and the local portion of Route 354 express service in Burlington.
- **Routes that serve regional connections and serve rail stations are most productive.** The local and regional routes serving Braintree connect to major rail stations. As a result, the Braintree routes are some of the most productive routes overall. Highly productive routes in Shoreline indicate connecting major transit hubs (including a future rail station) can have a similar effect.
- **Serving a rail station or transit hub is not a substitute for strong anchors.** Regional routes that terminate at a rail station are more productive than routes without such an anchor. However, the local (tail) portions of these routes have a significantly lower productivity than the route as a whole.
- **Midday service headways vary.** The local transit routes operated in most of the peer cities operate about every hour during the midday with some routes operating more frequently (every 30 minutes). Thousand Oaks Transit and Burlington Public Transit System operate midday services every 45 to 90 minutes and every 60-210 minutes, respectively.
- **Weekend service is more common on regional routes.** The two local-serving services in Burlington and Thousand Oaks, and the shorter route in Westlake (46) do not provide any weekend service, whereas the regional routes provided in Burlington (350), Broomfield, Braintree, Shoreline, and Westlake (49 only) provide service on weekends. Some routes, such as Route 76 in Broomfield operates only a portion of its route on the weekends.
- **No local Dial-A-Ride.** Except for Broomfield, none of the national peer communities operate a local, general public dial-a-ride.

## Best Practices from the Peer Review

Based on the peer review, a set of “best practices” were developed for how local service in Minnetonka could be designed and operated. The best practices are based on the peer route information related to route design, service characteristics, funding, and marketing/branding.

- **Routes should have strong anchors, ideally at both ends.** Local peer routes are most productive if they terminate at a strong destination. Ideally, this would occur at both ends of the route. Strong destinations include park and rides and transit centers with all-day service, major employment centers, and shopping centers. The more productive routes in Broomfield and Braintree terminate at either at a transit station, park and ride, or rail station.
- **Regional routes connecting communities are most productive.** By far the most productive local routes are those directly serving a major downtown or other regional center. While the local segments of the routes serving a downtown or other regional center are not as productive as the route overall, the connection to the more productive segments enables less productive “tails” to be provided. This design is common in the Twin Cities as many urban local routes have tails serving less productive areas (e.g., Routes 9 and 12, which serve eastern portions Minnetonka, are good examples).
- **Routes should not be designed exclusively around political boundaries.** Routes traveling beyond the boundaries of the peer cities are usually more productive than those that stay within the city limits as the opportunity to access regional destinations increases beyond city boundaries.
- **Transit is most productive if it serves a rail station.** There are strong incentives to use local transit services when they connect to a rail station. This is especially true when parking costs in the urban core are high and/or traffic congestion is an issue. Serving a rail station also gets local passengers into the primary transit network where connections to most other places in the region can be made.
- **Saturday (and ideally Sunday) service is preferred.** While most express services operate on weekdays only, many of the regional and suburban routes in national peer cities operate service on the weekends. Saturday service is generally more frequent than Sunday frequencies. While weekend service comes at an additional cost, it is preferable, especially for local services where it is important to serve a market that needs service outside of the weekday commute periods.
- **Local-serving transit requires strong political support.** Several of the peers have local or state financial support to provide local-serving transit services. Providing local funding support should be done with caution, as peer providers that do so now have the obligation to provide local funding for a service that is identified with the city.
- **Marketing and Branding.** Clear and well-designed marketing materials, as well as unique or contextual branding, can make using transit easier and more dignified. Most peer communities rely on the regional provider to develop and produce marketing materials, and brands for transit service. While this arrangement is not expected to change in Minnetonka, it is important for any local service to reflect local needs and desires.

## RECOMMENDED LOCAL SERVICE IMPROVEMENTS

Based on the review of the Existing Conditions and the Peer Review, service recommendations were developed to address opportunities, as guided by available funding, for transit improvements in Minnetonka. The recommendations are developed for near-term implementation (within the next two years) as well as long-term implementation with the opening of the Southwest LRT, which as noted earlier will likely enhance the productivity of local service. The long-term recommendations included here are not intended to be an all-inclusive list of proposed bus connections with LRT and will need to be fully vetted during the review process of the Southwest LRT bus network. They are not presented to circumvent that process, but simply to provide potential improvements to be considered.

### RECOMMENDED NEAR-TERM SERVICE IMPROVEMENTS:

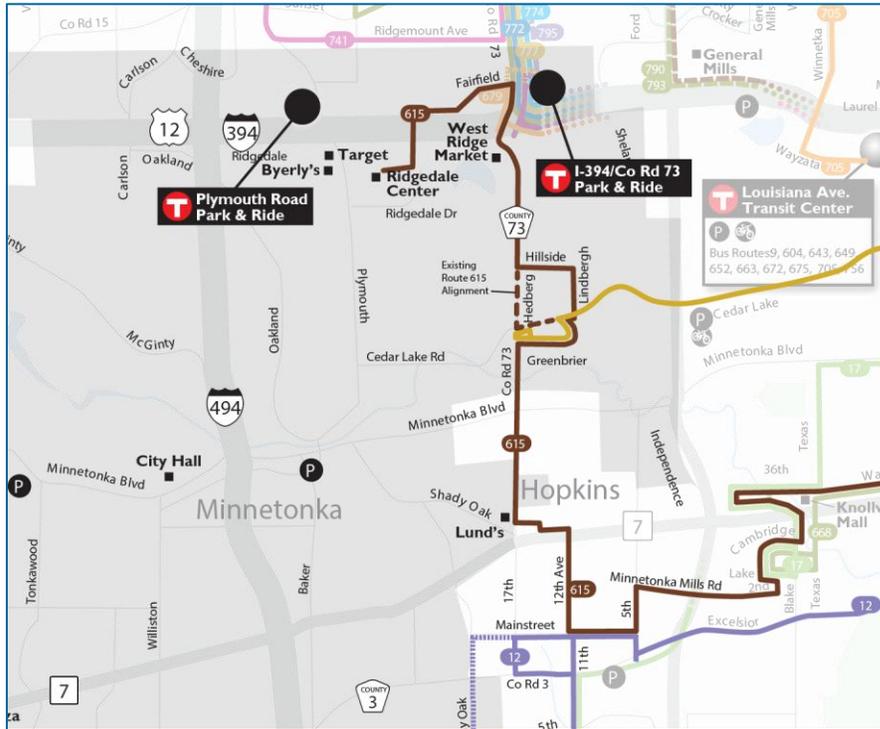
#### Minor Re-route on Route 615

This route is recommended for a minor re-route in northeast Minnetonka. Currently, the route connects downtown Hopkins and Ridgedale Center mostly via County Road 73 with the exception of a deviation to serve the apartment complexes along Greenbrier Road. Based on feedback from the open house meeting, and a review of ridership data, the following recommendation is made:

- From Greenbrier Drive and Cedar Lake Drive, continue east to Lindbergh Drive, north on Lindbergh Drive, west on Hillside Lane, and north on County Road 73. The route would then continue via the existing alignment to Ridgedale Center.

Weekday ridership data by stop was analyzed to assess the impact to existing riders and little impact was determined. Three northbound and three southbound stops are recommended for this new segment (exact location to be determined). No additional running time is needed with this change, and thus no impact on in-service hours. In fact, the proposed alignment is slightly shorter than the existing alignment, which could result in a slight running time savings.

Figure ES-1 Route 615 Modifications



### New Local Route between Minnetonka Heights and Ridgedale Center

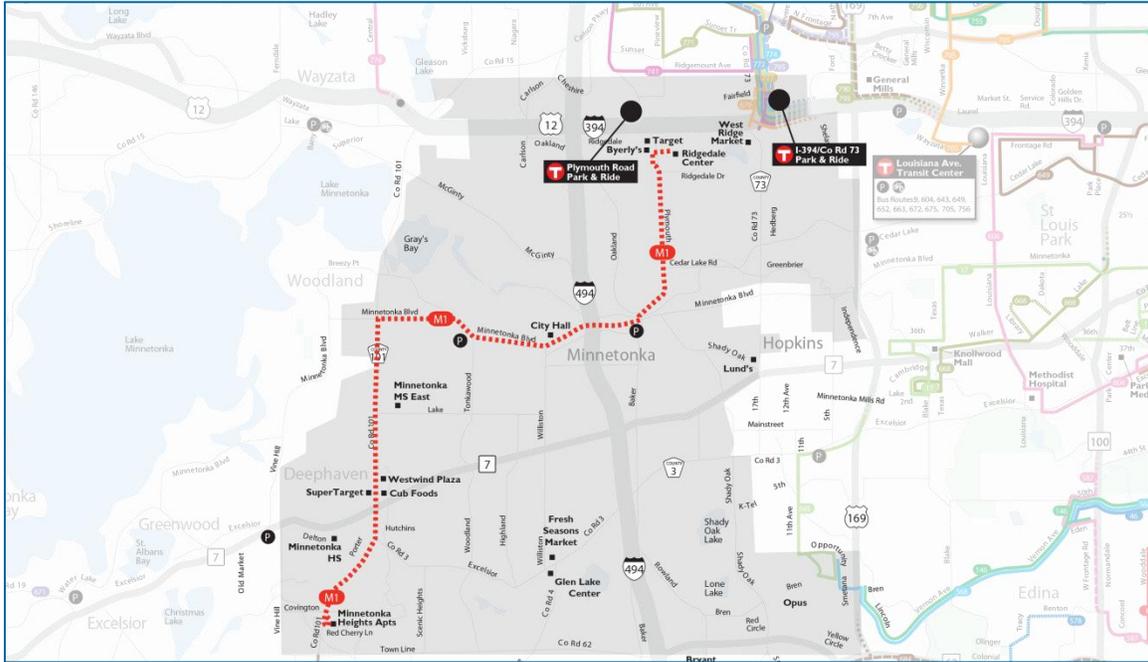
Based on the needs identified in this study, a new local route was designed to connect a major destination in the city (Ridgedale Center) and the I-394 corridor with a number of destinations in the city that do not have midday regular route transit service:

- 7-Hi shopping center area (Super Target, Cub Foods, etc.)
- Minnetonka Heights Apartments
- Minnetonka City Hall

The new route, shown below in Figure ES-2, would operate Monday through Saturday with service frequencies every 60 minutes from 9:00 am until 5:00 pm on weekdays and from 9:30 am until 3:30 pm on Saturday. Based on these operating characteristics, it is estimated that this route would require approximately 6.7 weekday in-service hours and 6.0 Saturday in-service hours, or approximately 2,000 annual in-service hours.

With the new regular route service, there would be less reliance on TransitLink service given that TransitLink does not duplicate regular route service.

Figure ES-2 Proposed Minnetonka Local Route (M1)



It is estimated that productivity (passengers per in-service hour) would be between 7.8 and 9.5, or an estimated annual ridership between 23,400 and 28,550.

### Expanded Weekday Service Hours on Route 9

The recommendation to extend hours on Route 9 (and make service hours consistent on the weekdays) takes into account the need expressed by existing riders, the Minnetonka City Council, as well as attendees of the open house. It was also identified in the peer review that longer regional routes operating on a consistent schedule are more productive than routes that operate irregular schedules.

While there are additional routes that serve the Greenbrier/Cedar Lake area on weekdays (Routes 643 and 663), there are significant midday and evening gaps in service during the weekday. It is estimated that providing six additional round trips to this area would require an additional 24 minutes of round-trip running time per trip, or 2.4 in-service hours per day. This assumes service would be extended from Park Place Drive and Gamble Boulevard in St. Louis Park. This additional service would require an estimated 610 additional in-service hours per year (assuming operation 255 days per year).

It is important to note that Route 9 is a very long route that connects Minnetonka to south Minneapolis. As such, scheduling additional running time to certain trips could create scheduling challenges or require additional vehicles to cycle properly resulting in an inefficient use of resources with long layovers.

## Summary of Near-Term Service Improvements

Figure ES-3 provides a summary of the improvements for near-term implementation.

**Figure ES-3 Summary of Recommendations for Near-Term Implementation**

Recommendation	Estimated Daily In-Service Hours	Estimated Annual In-Service Hours
Minor Re-route on Route 615	0	0
Modified Route M1 (with reduced service hours)	6.7 (weekday) 6.0 (Saturday)	2,000
Add six additional weekday round trips to the Greenbrier/Cedar Lake Road area on Route 9	2.4 (weekday)	610
<b>Total</b>		<b>2,610</b>

### POTENTIAL LONG-TERM SERVICE IMPROVEMENTS:

#### **Extended Route 615 Hours**

As with Route 9, several members of the public noted the need for improved evening service on Route 615. Expanding service hours later into the evening was noted as a way to improve options for youth and workers, especially those traveling to and from Ridgedale Center. This recommendation extends service hours on Route 615 until 8:00 pm on weekdays only. Because Route 615 extends beyond Minnetonka (to Hopkins and St. Louis Park), the hours to expand service hours are not exclusive to Minnetonka and would have other regional benefits.

It should be noted that Ridgedale Center is open until 9:00 pm, and therefore it would be preferable to extend hours until 10:00 pm if additional resources become available. In addition, many of the peer local routes operate until 10:00 pm. Because of the cost constraints of this alternative, and other local service needs, extending hours slightly was a first step for testing the market for later service on this route.

It should also be noted that transit ridership drops off significantly after 6:00 pm on most local routes in the Twin Cities (and throughout the nation). As such, it is assumed that ridership on this route would be lower in the evening.

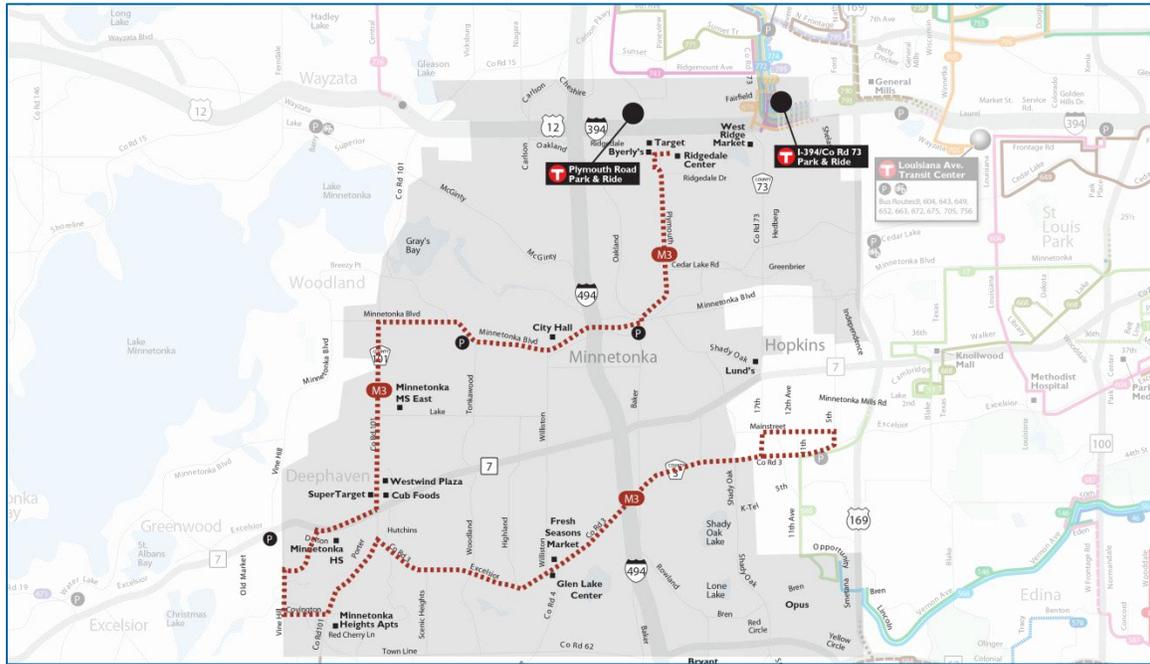
#### **Implement New Suburban Local Route between Ridgedale Center and Hopkins via Minnetonka Heights and 7-Hi Area (Route M3)**

This recommended route, labeled as M3, is shown below in Figure ES-4. This route is designed using several of the best practices identified in the peer review, including:

- Provides service to two anchors (Ridgedale Center and downtown Hopkins)
- Would connect to a future rail station
- Is designed around connecting major destinations instead of political boundaries

This route was developed because it provides connections through Minnetonka (along Excelsior Boulevard), has a strong anchor in downtown Hopkins and will serve a future light rail station.

Figure ES-4 New Suburban Local Route (M3)



This new route would operate Monday through Saturday. Weekday headways on this route would be every hour on weekdays and Saturday. Weekday service would be provided from 7:00 am until 6:00 pm and from 8:00 am until 4:00 pm on Saturday. Based on these operating characteristics, it is assumed that this route would require approximately 18.5 weekday in-service hours and 13.5 Saturday in-service hours, or approximately 5,400 annual in-service hours.

Ridership estimates for this new route are higher than the new local route presented in Alternative 1 because it serves a larger area and connects multiple strong destinations. It is estimated that productivity (passengers per in-service hour) would be 12.4 and 15.1, or an estimated annual ridership between 75,000 and 92,000 when Southwest LRT stations are operational.

## Summary of Potential Long-Term Service Improvements

Figure ES-5 provides a summary of the long-term improvements to be implemented with the opening of Southwest LRT. As noted earlier, the recommendations included here are not intended to be an all-inclusive list of proposed bus connections with LRT and will need to be fully vetted during the review process of the Southwest LRT bus network. They are not presented to circumvent that process, but simply to provide potential improvements to be considered.

**Figure ES-5 Summary of Potential Improvements Implemented With Opening of Southwest LRT**

Recommendation	Estimated Daily In-Service Hours	Estimated Annual In-Service Hours
Expand service hours on Route 615 until 8:00 pm on weekdays only.	3.4 (weekday)	870
Implement new Suburban Local route from Ridgedale Center to downtown Hopkins via Minnetonka Heights (with reduced midday hours) (M3)	18.5 (weekday) 13.5 (Saturday)	5,400
<b>Total</b>	<b>21.9 (weekday) 13.5 (Saturday)</b>	<b>6,270</b>

## EVALUATION OF MINNETONKA EXPRESS NETWORK

In addition to local routes, Minnetonka is served by a network of express routes that primarily provide weekday peak period service to downtown Minneapolis. While express routes in Minnetonka are generally productive, there are some parts of this service that have been identified as either providing overlapping service or having low ridership. Five peak period express routes are the focus of the proposed changes in the express network (664, 665, 667, 670 and 671).

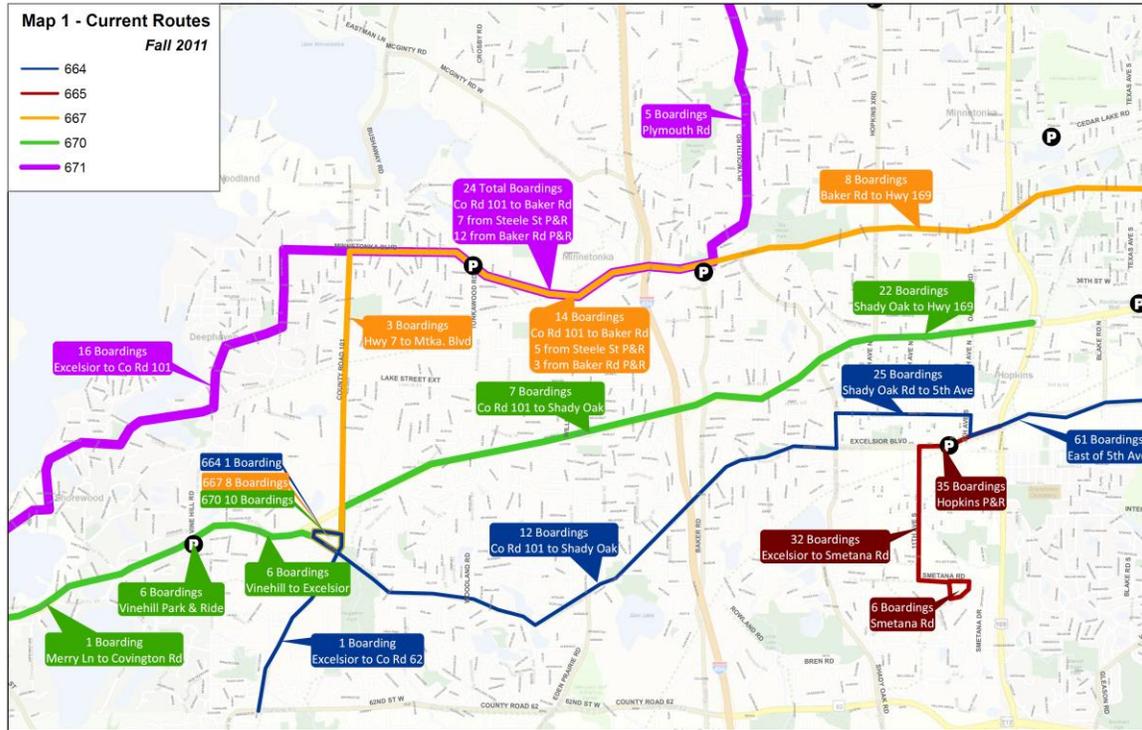
The current service provided by these routes is as follows:

- **Route 664** provides service between southwest corner of Minnetonka to downtown Minneapolis via County Road 101, Excelsior Boulevard, Highway 100 and I-394. In addition to the Glen Lake area of Minnetonka, it serves Mainstreet in Hopkins and Excelsior Boulevard in St. Louis Park. There are four inbound and five outbound trips averaging 25 passengers per trip with the majority of riders boarding east of Highway 169 in St. Louis Park. 88% of the riders are boarding in Hopkins or St. Louis Park.
- **Route 665** provides service between the northeast corner of Opus in Minnetonka to downtown Minneapolis via Smetana Road, 11<sup>th</sup> Avenue, Excelsior Boulevard, Highway 169 and I-394. In addition to the northeast Opus area of Minnetonka, it serves the concentration of apartment complexes along 11<sup>th</sup> Avenue in Hopkins and the Hopkins park-ride on Excelsior Boulevard at 8<sup>th</sup> Avenue. There are three inbound and three outbound trips averaging 25 passengers per trip with approximately 6 boardings in the northeast corner of Opus, 32 boardings along 11<sup>th</sup> Avenue and 35 boardings at the park-ride.
- **Route 667E** is a long line branch that provides service in Minnetonka along County Road 101 between Highway 7 and Minnetonka Boulevard and along Minnetonka Boulevard between County Road 101 and Highway 169. The route continues along Minnetonka Boulevard providing service to St. Louis Park east of Highway 169 to Highway 100 where it takes Highway 100 to I-394 and downtown Minneapolis. There are five inbound and five outbound trips averaging 30 passengers per trip. However, the majority of the ridership is in St. Louis Park with only 17% of the ridership in Minnetonka. In Minnetonka, there are an average of 3 boardings along County Road 101, 14 boardings along Minnetonka Boulevard between County Road 101 and Plymouth Road and 8 boardings along Minnetonka Boulevard between Plymouth Road and Highway 169.
- **Route 670** provides service to Minneapolis from Orono, Tonka Bay, Shorewood, Excelsior, Minnetonka and Hopkins via County Road 19 and Highway 7 to Highway 169 and I-394. There are three inbound and three outbound trips averaging 20 passengers per trip with 38% of the boarding in Minnetonka. Along Highway 7 between County Road 101 and 5<sup>th</sup> Avenue, the segment of the route recommended below for elimination, there are 7 boardings in Minnetonka and 23 in Hopkins.
- **Route 671** provides service to Excelsior, Greenwood, Deephaven and Minnetonka via Water Street, Lake Street, Excelsior Boulevard, Minnetonka Boulevard and Plymouth Road to I-394. There are three inbound and three outbound trips averaging 25 boarding per trip. Along Plymouth Road between Minnetonka Boulevard and the Plymouth Road park-ride, the segment of the route recommended below for elimination, there are 5

boardings. Forty-five percent of the boardings on this route occur at one of the three park-rides along the route (Steele Street, Baker Road and Plymouth Road).

The existing ridership by segment is shown below in Figure ES-6 for these five express routes.

**Figure ES-6 Existing Routes 664, 665, 667, 670 and 671 and Daily Ridership by Segment**



The proposed changes are as follows:

- Route 671** service would be combined with Route 667, service along Minnetonka Boulevard (and be designated Route 671). For existing riders who would be served by the new route, riders east of Plymouth Road would be served as they are today. Riders between County Road 101 and Plymouth Road would receive approximately 50% service as they currently do. However, ridership along this segment is not high, and the current service levels are a function of two routes running through the area, and not due to actual demand in the area. Three current riders along County Road 101 between Highway 7 and Minnetonka Boulevard and 5 current riders along Plymouth Road north of Minnetonka Boulevard would be left without service by the change.
- Route 670** service west of County Road 101 would be combined with Route 664 service east of County Road 101 (and be designated as Route 670). Route 670 now provides three trips in each direction and Route 664 now provides four AM inbound and five PM outbound trips. The existing Route 664 provides additional trips to accommodate higher demand on Excelsior Boulevard east of Highway 169. However, with the modifications proposed for Route 664 and 665 (see below), demand on Excelsior Boulevard west of Highway 169 does not justify this much service. Thus, three round trips on the modified Route 670 are proposed. Route 670 is re-routed to serve Excelsior Boulevard east of County Road 101 and the section of Highway 7 east of County Road 101 now currently served by Route 670 would be without service. There area total of 23 daily riders would

be without service on Highway 7 east of County Road 101., Most of who board in Hopkinseast of Shady Oak Road.

- **Route 664** would be shortened to start at Smetana Drive and Smetana Road which is the current Route 665 terminal. Route 665 would be eliminated and the modified Route 664 would serve 11<sup>th</sup> Avenue south of Excelsior Boulevard, Mainstreet in Hopkins between 11<sup>th</sup> and 5<sup>th</sup> Avenues and Excelsior Boulevard between 5<sup>th</sup> Avenue and Highway 100 (as it currently does). The primary change for Route 665 riders would be a slightly longer express trip (about 4 minutes per direction).

As described above, express ridership is low throughout sections of Minnetonka, and very low in some areas. As a result, the consolidation of express service would provide service more cost-effectively and still maintain service for the large majority of existing Minnetonka express riders.

### **Maintenance of Service along Highway 7**

The major impact of the proposed express service reductions would be along Highway 7, both in terms of coverage and the number of passengers impacted (23). The City has expressed a desire to maintain service in this corridor. A relatively cost-effective way to maintain this service would be to **extend** Route 668 (Hopkins – St. Louis Park – Minneapolis Express) westward into Minnetonka. In this case, the cost to provide service along Highway 7 in Minnetonka would be limited to the cost of the extension, rather than the cost of the entire service between Minnetonka and Minneapolis.

Estimated savings in terms of weekday in-service hours, assuming the extension of Route 668, is provided below in Figure ES-7.

**Figure ES-7 Summary of Proposed Express Route Changes (with Optional Highway 7 Service)**

Route	Modification	Estimated Change in Weekday In-Service Hours
664	Reduced from four/five weekday trips per direction to three weekday round trips. Route would combine Route 665 and the portion of Route 664 east of downtown Hopkins. Running time would be shortened between 14 and 17 minutes per trip.	- 3.6
665	Route eliminated (replaced by modified Route 664).	- 3.8
667	All trips extending to Minnetonka would be shortlined to St. Louis Park and the Minnetonka Boulevard segment would be replaced by changes to Route 671. All existing trips to Amhurst in St. Louis Park would remain.	- 6.5
668	Extend route 668 to Hutchins/Porter, three weekday round trips.	+ 2.0
670	Add one additional round trip to account for higher demand on Excelsior Boulevard and modified routing via Excelsior instead of Hwy 7.	+ 1.5
671	Route combined with Route 667 and would operate via Minnetonka Boulevard to Highway 169. Assumed to be approximately the same running time as existing alignment.	0
<b>Total</b>		<b>- 10.4</b>

A map of the proposed Express changes is provided in Figure ES-8 below.



## SUMMARY OF RECOMMENDED SERVICE CHANGES

Figure ES-9 below summarizes all of the near-term recommended service changes and long-term service improvement options that were developed in this study.

**Figure ES-9 Summary of Recommended Service Changes**

Route(s)	Reason for Service Change	Proposed Near-Term Recommendation	Potential Long-Term Improvements
<b>Express Service Changes</b>			
667, 671	Low ridership segments and service duplication	Route 667 service in Minnetonka replaced by Route 671, which would be modified to operate via Minnetonka Boulevard to Highway 100. Route 667 shortened to focus on express trips in St. Louis Park.	
664, 668, 670	Low ridership segments	Route 670 re-routed via Excelsior Boulevard and replace this segment of Route 664 service. Route 668 extended into Minnetonka to provide service in the Highway 7 corridor.	
664, 665	Low ridership and service duplication	Route 665 is eliminated and replaced with a shortened and modified Route 664.	
<b>Local Service Changes</b>			
M1, M3	Desire to provide midday, local service	New route (M1) connecting Ridgedale Center with Minnetonka City Hall, 7-Hi shopping area, and Minnetonka Heights	Expand route (M3) to serve Minnetonka High School, Excelsior Boulevard, downtown Hopkins and the future Southwest LRT line.
9	Desire for expanded service hours	Adds six additional weekday round trips.	
615	Better local service coverage	Minor re-route via Lindbergh Drive and Hillside Lane	Extend service hours from 5:00 PM to 8:00 PM.

## NEXT STEPS

Prior to implementation of the service improvements or changes outlined in this chapter, a public process of outreach and review by stakeholders will be necessary. Implementation of any service improvements or changes would be guided by available funding and stakeholder input. The near-term service improvements and changes could occur as early as August 2013. Long-term potential service improvements would be scheduled to be implemented with the opening of the Southwest LRT. As noted earlier, the recommendations included here are not intended to be an all-inclusive list of proposed bus connections with LRT and will need to be fully vetted during the review process of the Southwest LRT bus network. They are not presented to circumvent that process, but simply to provide potential improvements to be considered.