

Planning for Transit Oriented Development in the Twin Cities:

A Baseline Study for Corridors of Opportunity

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I Executive Summary

This report is the result of a study done for the Corridors of Opportunity project designed to measure the extent to which cities have planned for Transit Oriented Development (TOD) around transit stations. The study evaluated the planning activities of 20 cities along 6 transitways in the Corridors project: Hiawatha Light Rail, Northstar Commuter Rail, Cedar Avenue Bus Rapid Transit, Central Corridor Light Rail, Southwest Light Rail, and Bottineau Boulevard Light Rail.

The study measured three specific planning activities: comprehensive planning, station area planning (SAP), and zoning. To develop a ‘TOD Planning Score’ to provide a snapshot of TOD planning in the Twin Cities, each station area was assigned a 1 or 0 (yes or no), with special ‘partial’ cases scoring a 0.5, and these scores were averaged across each line. These findings and ratings are based on discussions with a lead planner in each city, and are not a technical review of the plans, zoning ordinances, or maps. Below is a table of these results with the final score (an average of the three subscores) to the far right.

Line	Year Open	Comp Plan Score	SAP Score	Zoning Score	Total TOD Planning Score
Hiawatha LRT	2004	1.00	0.89	0.78	0.89
Northstar Commuter Rail	2009	0.83	0.92	0.75	0.83
Cedar Avenue BRT	2013	1.00	0.33	0.13	0.49
Central Corridor LRT	2014	1.00	1.00	0.92	0.97
Southwest LRT	2017	1.00	1.00	0.33	0.78
Bottineau Boulevard LRT	2019	0.75	0.17	0.08	0.33

Throughout the study, several conclusions have become apparent. One is that each city faces unique challenges to transit planning, created by its geography, demographics, and timing of the transit line which require proactive planning to minimize; on the other hand, these characteristics provide opportunities for cities to create unique areas of their own and utilize TOD principles in a way that is appropriate for their city. Another conclusion is that planning for (and awareness of) TOD has dramatically increased since Hiawatha LRT opened in 2004. Central Corridor LRT, in addition to its advantages of a transit corridor, has shown the value of proactive planning and is primed to fully realize the benefits of TOD. Southwest LRT is already improving upon the lessons learned and strategies developed by Central Corridor LRT, and Bottineau Boulevard LRT stands to benefit even further.

Moving forward, the most important ways to improve planning for Transit Oriented Development are to continue learning the lessons of transit lines as they open, develop best practices for all lines—especially for the Twin Cities first forays into Commuter Rail and BRT—and to continue to expand regional communication and cooperation. Corridors of Opportunity’s main purpose is to maximize the value of transit investment in a way that improves quality of life, improves access to transit, and brings positive and appropriate private investment. Proactive planning for TOD is one of the best ways to ensure this comes to fruition, and as the build-out of the Twin Cities transit system continues, the planning efforts taken today will increase the quality and abundance of efficient, walkable, convenient Transit Oriented Developments, providing new lifestyle options to current and future residents of the area.

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IV List of Acronyms
[In order of appearance]

TOD.....	Transit Oriented Development
VMT.....	Vehicle Miles Traveled
CoO.....	Corridors of Opportunity
LRT.....	Light Rail Transit
BRT.....	Bus Rapid Transit
FAR.....	Floor Area Ratio
SAP.....	Station Area Planning
TSAAP.....	Transitional Station Area Action Plan
BNSF.....	Burlington Northern Santa Fe Railroad
TIF.....	Tax Increment Financing
LCA.....	Livable Communities Act
FAST.....	Focused Area Study
MVTA.....	Minnesota Valley Transit Authority
HKGi.....	Hoisington Koegler, Inc.
COR.....	Center of Ramsey
BRTOD.....	Bus Rapid Transit Oriented Development
HUD.....	United States Department of Housing and Urban Development
TSAAP.....	Transitional Station Area Action Plan
LPA.....	Locally Preferred Alternative
HCRRA.....	Hennepin County Regional Railroad Authority
TPP.....	Transportation Policy Plan

1.0 Introduction

This report is intended to measure the planning activities that strive towards Transit Oriented Development (TOD) in the Twin Cities metropolitan area. Planning for TOD is one of many indicators being used by the Corridors of Opportunity project to evaluate the project's impact on leveraging public investment in transit to positively affect the equity and competitiveness of the Twin Cities. Planning activities such as comprehensive planning, station area planning and zoning will be measured along six of the seven transitways considered in the Corridors of Opportunity project and compared to each other to determine a baseline of TOD readiness for the region.

1.1 Transit Oriented Development

Transit Oriented Development is defined as “a type of community development that includes a mixture of housing, office, retail and/or other commercial development and amenities integrated into a walkable neighborhood and located within one half-mile of quality public transportation.”¹ These features combine to make life in TOD areas efficient and enjoyable while making transit more convenient; they also are becoming more popular as a response to market demand, where smaller homes closer to amenities are becoming more attractive to a variety of consumers, including members of the baby-boom generation whose children no longer live at home.²

Transit Oriented Developments also reduce residents' reliance on automobiles. In addition to the numerous environmental benefits of reduced automobile use, and the cost savings experienced by the consumer, increasing use of transit is one of the best ways to reduce vehicle-miles traveled (VMT). Reducing VMT will become an even greater priority in the coming years, as congestion in the Twin Cities is estimated to grow by more than 51% by 2030.³

1.2 Corridors of Opportunity

Corridors of Opportunity (CoO) is a broad-based initiative to accelerate the build out of a regional transit system for the Twin Cities in ways that advance economic development and ensure people of all incomes and backgrounds share in the resulting opportunities.⁴ CoO promotes TOD, affordable housing, small business support, community engagement and the development of tools and demonstration projects through approximately two dozen planning and

implementation activities. The project is focused on seven transitway corridors in the Twin Cities: Hiawatha Light Rail (LRT), Central Corridor LRT, Southwest LRT, Bottineau Boulevard LRT, Northstar Commuter Rail, Cedar Avenue Bus Rapid Transit (BRT), and the Gateway Corridor.

The program was formed in 2011 in a merging of two grants: the first was jointly submitted by The Saint Paul Foundation and McKnight Foundation in fall 2010, who won nearly \$16 million in grants and loans from the Living Cities Integration Initiative. At the same time, the Metropolitan Council was awarded a \$5 million Sustainable Communities Regional Planning Grant from the U.S. Department of Housing and Urban Development.

2.0 Methodology

The findings and ratings presented in this report are based on discussions with a lead planner in each city with a station along one of the lines. They are *not* based on a technical review of the plans, zoning ordinances, or maps. Since it is a baseline study, its methodology is meant to be repeated in approximately 3 years once Corridors of Opportunity projects have finished to measure impact of the activities funded by CoO. The planners and community development staff that were interviewed for this study can be found in Appendix D.

2.1 What Will Be Measured

Transit Oriented Development is not easily quantifiable or measurable. There are varied levels to which properties can be developed depending on what the market will support; however, properties on the spectrum from downtown Minneapolis to an outer suburb like Lakeville can increase the use and value of transit by promoting the same characteristics of TOD near their respective transit stations. These characteristics include: a diverse mix of uses, including housing, employment, services and retail, higher density housing and employment, an attractive environment to pedestrians (street-facing buildings with limited setbacks, wider and visually defined sidewalks and paths, and connections throughout the development), and limited surface parking. Where locations differ is the scale of the development: to qualify for TOD grants from the Metropolitan Council, developments on light rail lines are required to have 30 units of housing per acre while bus or commuter rail lines are only required to have 7 units per acre. Floor Area Ratio (FAR) requirements are also lower for bus or commuter rail, with 0.25

FAR required, compared to 1.5 FAR for light rail.⁵ Floor Area Ratio is defined as the ratio of a building's total floor area to the size of the parcel of land upon which it is built.

What can be done, however, is measure the level to which Transit Oriented Development has been implemented and/or planned for in the Twin Cities, since only two of the six lines studied in this report are operational (Hiawatha LRT and Northstar Commuter Rail). Though redevelopment can happen without certain policies in place, cities can make the redevelopment process quicker and easier as well as steer development towards TOD through certain activities. These activities are what were measured in this study.

2.1.1 Comprehensive Planning

The first of the activities measured is Comprehensive Planning. Every city under the jurisdiction of the Metropolitan Council is required have a Comprehensive Plan and submit updates to it as well. The extent to which these plans describe what the city desires for TOD varies by city, but without even a mention of TOD or TOD principles in their comprehensive plan, a city cannot go forward with TOD-style redevelopment. A city's comprehensive plan can be considered its vision for the future and is a critical first step for identifying TOD areas.

2.1.2 Station Area Planning

The second activity measured in this study is station area planning (SAP). Station area planning takes on many names and styles, but the general idea is the same: develop a plan for the features and designs of a parcel or area surrounding a current or future transit station to maximize the use and redevelopment potential of the land. Station area planning also can help stimulate developer interest in a site. For the purposes of this study, station area planning means any planning done within a half-mile of a transit station. Sometimes this is done along an entire transit corridor, like the currently underway Transitional Station Area Action Plans (TSAAPs) for the Southwest Light Rail, or sometimes it is done where a transit station is part of an existing neighborhood, like Minneapolis' small area plans. Regardless of the style, station area planning is important not only to flesh out a city's hopes for an area, but to maximize the utilization of its transit station and provide a visualization of what the area could become to developers and citizens. This makes a city which has planned around current or future transit stations another step ahead in planning for TOD.

2.1.3 Zoning

The third and final measurement of planning for Transit Oriented Development in this study is zoning. A much more concrete measure of what can be done to facilitate TOD, zoning creates districts which allow for certain types of buildings and restricts other uses. On a basic level, for example, a gas station could not be built in an area zoned residential. Zoning, more specifically, can control how many stories a building can be, how far they can be from the street, restrict how much parking can be on a site—it is a toolbox for city planners to help guide their city’s land use. Zoning for TOD has given planners the opportunity to create new zoning districts: instead of a typical commercial, residential or even industrial zoning, many cities have designed entirely new zoning designations around TOD features. Some are site-specific in name, like Bloomington’s ‘South Loop’ zoning district, but many share the same TOD-friendly features, and allow for a mix of uses, higher density, easy pedestrian connections, less parking, and ample green space. This study will attempt to measure these TOD-friendly zoning changes (or lack thereof) around each transit station.

In contrast to Bloomington’s South Loop district, which has some vacant properties in the TOD area, some areas have existing uses that make zoning changes controversial. Generally, cities do not want to change zoning such that existing properties are in non-compliance, which creates an adversarial relationship with business owners who are now restricted from expansion and alteration of their property, and are slowly being forced out. In this situation, some cities have elected to pass a zoning overlay district, which does not change the land use designation but instead restricts any additional undesirable uses to come into the area. This strategy is commonly found along future transit lines, where the exact composition of the area is unknown, or areas with incompatible land uses. Anoka is a good example of the latter, which rezoned the area around its transit station previously dominated by heavy industrial businesses.

2.2 How Activity Will Be Measured

In order to more easily analyze the qualitative information gathered in this study, each station along every line has been designated with a 1 or 0 (yes or no, respectively) for whether or not their comprehensive plan has a TOD mention, if station area planning has been completed, and if there have been changes to their zoning code. Averaging these scores along lines and communities will illustrate the extent to which cities have prepared to take advantage of TOD

principles and hopefully will make it quicker and easier for developers to build TOD-friendly developments that take advantage of transit connections.

There are situations, however, in which a ‘yes’ or ‘no’ (1 or 0) answer does not apply. For example, a city might prepare zoning changes but not pass them through city council in order to prevent existing uses from entering non-compliance. Technically, this example would score a 0. In some cases, though, approval of the zoning changes is a mere formality once a developer is in place (such is the case for certain properties in Bloomington), making a score of 0 not a proper measurement of the city’s intentions. Several other situations defy a 1 or 0 score, like in cities where TOD does not make sense for certain station areas, or temporary zoning overlays which will be replaced in the future. These situations will be scored a 0.5, and each score of 0.5 will be explained in the text.

Averaging the scores of 0, 0.5, and 1 for comprehensive planning, station area planning, and zoning for each station in each city by line will produce the line’s ‘TOD Planning Score’. This tool’s use is meant only as a means for comparison, is not a number to be statistically analyzed, and is only useful in the context of the qualitative information of this report.

There are other measurable tools that can facilitate TOD which are not measured specifically in this study. One of these is market studies, which combine economic and demographic information, infrastructure, as well as many other features of station areas and make judgments about what each area can support. This increases the likelihood that planning is done to scale, and mistakes are not made which end up compromising a station area’s potential. While acknowledging its limitations, this study’s methodology is designed to be a qualitative yet effective way to identify areas which are considered to be completely planned for TOD—areas that will take advantage of their accessibility to transit such that they become lasting, meaningful and efficient areas to live, work, and play. This also will allow interested parties to study TOD planning success stories, and dig deeper to find best practices and apply those to areas which, currently, have not taken advantage of the tools to maximize the impact of transit around their station areas.

3.0 Line-by-Line Information

In this section, results of the study are presented by transit line. Information comes from interviews with city planning staff conducted from September to December 2012. The TOD Planning Score will be presented in the context of the line as well as in a table with other summary information at the start of each section. Varied levels of detail will be provided depending on availability of information and extent to which planning has been conducted. Every city in the study was interviewed.

3.1 Hiawatha LRT—Blue Line



Figure 1. Hiawatha LRT Route Map.⁶

The Hiawatha Light Rail line opened in 2004 as the first component of the Twin Cities' new regional transportation system. The line is 12.3 miles long, cost \$715 million, has 19

stations and travels from Target Field in downtown Minneapolis, through the Minneapolis-St. Paul Airport, and terminates at the Mall of America in Bloomington.

Line Summary	
Line	Hiawatha LRT
Year Approved	1997
Year Construction Began	2001
Year Open	2004
Length	12.3 miles
Cost	\$715 million
Number of Stations	19
Number of Cities Served	2
TOD Planning Scores	
<i>Comprehensive Planning</i>	1.00
<i>Station Area Planning</i>	0.89
<i>Zoning</i>	0.78
Overall TOD Planning Score	0.89

Table 1. Hiawatha LRT Line Information Summary.

As the first light rail line built in the Twin Cities, planners did not necessarily have the experience or the learned best practices that they do now. This means that much of the planning measured in this report for this line came after its opening; for example, Minneapolis finished rezoning the areas along the line as recently as 2011. Nonetheless, planners in Minneapolis and Bloomington have embraced TOD everywhere appropriate along Hiawatha and this report is intended to be a snapshot of where TOD planning is today.

Minneapolis, the largest city in the state of Minnesota, has 25 stations across 5 of the 6 lines being studied in this report. Not coincidentally, Minneapolis has a large planning staff and has prepared Small Area Plans for many of the most critical areas in the city that have potential for redevelopment. Along Hiawatha LRT, these stations are Cedar-Riverside, Franklin Avenue, Lake Street, 38th Street, and 46th Street. Hiawatha faces significant challenges along this route: the tracks lay on the west side of the wide Hiawatha Ave/Highway 55, much of the west side is single family homes, and some of the east side of the route is industrial. However, the recent planning and rezoning done by Minneapolis at these stations (which was performed along the entire corridor, and included TOD-friendly components), combined with the slow improvements in the economy, have led to positive TOD redevelopments. In fact, several new developments have been approved, are under construction, or have just finished construction, including the Currie Park lofts near Cedar-Riverside, Station 38 Apartments and Longfellow Station adjacent to the 38th street station, and projects in the 46th Street station area. The 50th Street and

Minnehaha station has no small area plan. However, it was scored a 0.5 for zoning because the station is adequately zoned—just not for TOD. There has been little developer interest in the site, and its geography of Minnehaha Park to the west and single family homes to the east make it an unlikely place for TOD in the near and medium term future.

The Hiawatha line experienced much criticism since it opened due to the train's perceived failure to create redevelopment. However, Minneapolis has shown that planning-- having a small area plans with community involvement and appropriate zoning-- is critical to redevelopment as a whole, as well as guiding redevelopment areas towards TOD. Building the line is not enough to reap the benefits of the transit investment; city policies must also be in place to take advantage of the accessibility and efficiency of the train.

Bloomington has done substantial planning around Bloomington Central Station, even creating two new zoning designations (Information Technology and Mixed Use) while expanding the area designated for TOD around the station (high density mixed use). Though substantial planning has been completed, Bloomington has waited to rezone in order to prevent non-compliance for tenants in the TOD area who do not fit the future, especially since no projects were in the pipeline for a couple years after the financial downturn. Now that there is developer interest again, and properties may be changing hands, the zoning is moving forward and may be changed by the middle of 2013. This proactive planning by Bloomington results in a score of 0.5 for zoning, even though most of the zoning has not been changed. Long term Bloomington hopes the 34th Street and American Boulevard station can be redeveloped for TOD, but for now is occupied by a profitable and successful park and fly.

The stations excluded from the Hiawatha LRT analysis are as follows: Mall of America in Bloomington, the VA Medical Center and Fort Snelling stations, and the downtown Minneapolis stations (Metrodome, Government Plaza, Nicollet Mall, Warehouse District, and Target Field). Mall of America is a destination for shoppers and access to transit is important, but it is not to be redeveloped anytime soon; the current infrastructure and zoning fits its use perfectly. The VA Medical Center and Fort Snelling stops are technically not in Minneapolis, and both have extremely limited potential for TOD. The downtown stops were excluded because downtowns are already transit-oriented—and are properly zoned for high density mixed use, pedestrian connections, etc. No further planning was needed to 'implement' TOD in downtown Minneapolis.

Under our methodology, the Hiawatha LRT line scored 0.89. Minneapolis, after 8 years of operation, is finally seeing redevelopment occur that has happened as they finished small area plans and rezoning of their non-downtown stops. The score is negatively affected by Bloomington’s lack of zoning changes, but as was discussed, those are coming soon. Once Bloomington City Council endorses the changes, Hiawatha LRT will be, for all intents and purposes, as ready for TOD as possible. Though much of the planning was completed after the line opened, both Minneapolis and Bloomington have committed time and money to pursue transit oriented developments along the line. As with each line discussed here, the true impact will be discovered years from now, but Hiawatha is poised to further succeed once current TOD projects finish construction, and continue to be one of the most utilized and developed lines in the Twin Cities’ transit system.

3.2 Northstar Commuter Rail



Figure 2. Northstar Commuter Rail Route Map.⁷

The Northstar Commuter Rail line opened in 2009 and travels along existing BNSF track and right-of-way. The line is 40 miles long, cost \$317 million, has 7 stations in operation, and travels from Target Field in downtown Minneapolis through Fridley, Coon Rapids, Anoka, Ramsey, and Elk River to Big Lake in the northwest metro. The line has potential for expansion approximately 2 miles northwest to St. Cloud, but funding has yet to fall in place. There are also

other options for fill-in stations along the line; a second stop in Coon Rapids, Foley Boulevard, is one station area being considered.

Line Summary	
Line	Northstar Commuter Rail
Year Approved	2005
Year Construction Began	2008
Year Open	2009
Length	40 miles
Cost	\$317 million
Number of Stations	7
Number of Cities Served	7
TOD Planning Scores	
<i>Comprehensive Planning</i>	0.83
<i>Station Area Planning</i>	0.92
<i>Zoning</i>	0.75
Overall TOD Planning Score	0.83

Table 2. Northstar Commuter Rail Line Information Summary.

Each city has one station along the line, and Fridley is the first stop. Fridley has been thoughtful and forward thinking with its planning. They are one of many communities who has chosen to do a zoning overlay district, which do not force existing properties into non-compliance (which can make properties hard to insure, among other drawbacks). Fridley also believes that overlay districts invite more investment as they can be flexible to the market. Fridley received a score of 0.5 for station area planning through no fault of their own. The consultant hired to do the work failed, forcing Fridley to move on to a new firm (SRF Consulting), and their work is due to be completed in 2013. Also of note is Fridley’s TIF district, whose special legislation allows this funding mechanism to be applied to a TOD area.

Coon Rapids has been planning two TOD areas, one at their current Northstar stop at Coon Rapids Riverdale, and the other at a potential future fill-in station at Foley Boulevard, which currently has a park and ride serving two Metro Transit bus routes. A station area plan for Riverdale was published around 2008 and the consultant came up with an approximately 23 acres of land that could be rezoned towards TOD. This land was easy to rezone because much of the parcels are vacant, and the changes were approved in 2010. For the future, Coon Rapids may look to replace the surface parking with structured because of the demands of anticipated higher density residential housing. The Foley station has applied for LCA TOD grants from the Metropolitan Council and has been recommended for approval for land use and infrastructure planning around the station area, with the goal of producing a station area plan similar to that of Riverdale’s.

Anoka has higher density in their TOD area than most of the communities on Northstar, simply because the city allowed higher density residential previously. The city also made zoning changes to be proactive instead of reactive and guide the development as best they could, as much of the TOD area was zoned for heavy industrial uses. Anoka also recently hired Hoisington Koegler Group Inc. (HKGi) to redo their station area master plan, incorporating the zoning changes.

Ramsey is the newest stop on the Northstar line, opening in November 2012, about 3 years after the line began operating. The station was added for many reasons, among them the densification of the station area and hopes of increasing ridership. The station area is in the ‘Center of Ramsey,’ or COR, an area the city has envisioned for TOD for years. Ramsey included the COR as a redevelopment area in their comprehensive plan and worked with the community to create an identity for the area—one that focused efficient growth in the station area, allowing other areas of Ramsey to stay more rural. Ramsey built their new city hall adjacent to the transit station and worked with the Metropolitan Council on structured parking for the area. An area about 300 acres was rezoned to a TOD-friendly mixed use designation around 2004, replacing the previous agriculture designation.

Elk River is the next stop along Northstar. The city wrote and passed a Focused Area Study Plan (FAST) to leverage investment in trips generated by the train station to reinvestment in the surrounding private property. In Elk River’s view, however, the presence of Northstar is not a trigger for development and is not a driver for TOD. The city viewed the train as a tool to identify the area for future growth opportunity, but is not considered a formal redevelopment area. Elk River has no mention of TOD in their Comprehensive Plan and has not passed new zoning for the station area. The city looks forward to changes to Highway 10, more planning, and changes to the city’s comprehensive plan next year to address the zoning around the station area.

Big Lake is the terminus of the Northstar line, and has embraced TOD despite its relatively rural demographics. The Comprehensive Plan does mention TOD potential at the station site, and from this the city created a TOD committee and focused their efforts into a TOD master plan done by LSA Design and adopted in 2010. Big Lake has not yet changed the zoning around the station but will once there is more developer interest; currently, the site is zoned for agriculture which Big Lake views as a ‘holding pattern’ until TOD zoning goes through. Big

Lake also just approved a 78-unit apartment complex which will begin construction soon and is the first development within the master plan area.

Using our methodology, the TOD score for the Northstar line is 0.83. The Northstar line is unique because it is the Twin Cities' first commuter rail line. Some communities along the line have fully embraced TOD while others have not; some of this could possibly be attributed to the financial downturn into which Northstar opened in 2009, but also to the fact that the communities along Northstar are more rural. It is most likely that the full development of these TOD areas will happen several years down the line, but the planning being done now will ensure growth in these cities progresses to the satisfaction of the city, leaving intact the majority of their less dense single family housing. A positive development for Northstar is the effort currently underway to perform market analysis around each of the station areas, an important consideration for Northstar, whose communities and the region need to have an understanding of what type and size of development commuter rail can support and how best to maximize the access to transit. This work is being done by SRF Consulting. The outlook for Northstar is positive, but troubles have arisen along the way as the Twin Cities adjust to and learn about commuter rail.

3.3 Cedar Avenue BRT—Red Line

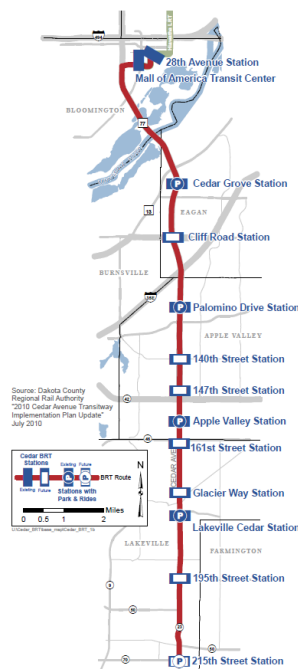


Figure 3. Cedar Avenue BRT Route Map.⁸

The Cedar Avenue Bus Rapid Transit line, after several delays, is scheduled to open spring 2013. The line is 16 miles long and travels south from Mall of America in Bloomington through Eagan and Apple Valley to Cedar Station in Lakeville. This is only Phase I of the line. Phase II will expand service beyond peak hours as well as other improvements while Phase III includes new stops at Cliff Road in Eagan, Palomino Hills station in Apple Valley, and four new stops in Lakeville: 161st Street, Glacier Way, 195th Street, and 215th Street. Total cost is estimated at \$250 million, with \$112 million for Phase I. Phases II and III are tentatively scheduled to open in 2014 and 2019, respectively, but planners in Eagan and Apple Valley both indicated this timetable is somewhat dependent on market demand, ridership, and funding.

Line Summary	
Line	Cedar Ave BRT
Year Construction Began	2011
Year Open	2013
Length	16 miles
Cost	\$250 million
Number of Stations	5 current/ 8 more planned
Number of Cities Served	4
TOD Planning Scores	
<i>Comprehensive Planning</i>	1.00
<i>Station Area Planning</i>	0.33
<i>Zoning</i>	0.13
Overall TOD Planning Score	0.49

Table 3. Cedar Avenue BRT Line Information Summary.

Bloomington has two stops along the line, Mall of America and 28th Street. However, neither of these have much potential for TOD. 28th Street is a park and ride for Hiawatha LRT and the Mall of America, while a destination, will be served by Cedar Ave BRT as another line that connects to their transit station in the first floor of the east parking garage. Bloomington, at the time of this report, was looking for a consultant to develop design concepts to make this transit station visible to the street, accessible to pedestrians and inviting and open, instead of its current gray concrete façade with no signage.

Eagan is the next stop, just south of the river from Bloomington. Phase I of the line, opening next year, will only have one stop in Eagan at Cedar Grove, an existing transit station. Eagan saw the potential of this area but since it was poorly connected, the city knew there needed to be incentives for the area to develop the TOD-friendly density and mixed use they prefer in the area. The city has been slowly acquiring properties in a 65 acre area east of the Cedar Grove station. Recently announced was an outlet mall anchor tenant for Cedar Grove,

opening in 2014, whose developer Paragon purchased 29 acres of the land from the city. Paragon is also putting in some money for structured parking, which will allow more density in the future. The area has a special area plan and has been rezoned, with a designation specific to the development. The zoning is flexible but emphasizes TOD principles, especially pedestrian connections. The largest problem with the Cedar Grove station is that it is off the line, which means buses have to exit Highway 77 to pull into the station, significantly slowing the route down. Eagan's future goal is to engineer a solution to this, speeding up travel time and allowing for true Bus Rapid Transit, which traditionally has dedicated lanes, routes or shoulders to travel on. A future station at Cliff Road is planned, but with high uncertainty, no special area plan or zoning changes have taken place. As is true with many planned future stations on Cedar Ave BRT, the popularity and ridership of the line will dictate how quickly the line's future phases are completed.

Apple Valley has three stations that will be operational with Phase I, 140th Street, 147th Street, and Apple Valley Station. Apple Valley Station is already built and operating as an MVTA park and ride while 147th Street and 140th Street are under construction. A fourth station, Palomino Drive, is planned for the future but is currently an off-line park and ride. Of these, Apple Valley Station is the most likely to develop into a 'traditional' TOD area, with higher density mixed use in its future. While Apple Valley has done an impressive amount of planning, this has not yet resulted in formal station area plans or zoning changes. However, a BRTOD study is due at the end of December 2012 from HKGi that will develop a guide plan for Apple Valley BRT stations, similar to station area planning. For these efforts, they score a 0.5. For zoning they received a 0, for while some exclusive-to-BRT zoning designations are being discussed, changes are not imminent. Apple Valley faces a conundrum that many outer-ring suburbs do, which is that city planners want to increase transit availability and accompany that with efficient TOD areas, but they also understand that automobiles are engrained in the suburban lifestyle. This comes to a head when automobile businesses, for example, a fast food restaurant with a drive through, want to build in a potential TOD area. Apple Valley is looking to balance these needs, and has been working with these businesses to allow them to invest in Apple Valley but also make efforts to increase pedestrian connections and a pleasant street view. For this and other reasons, it is likely Apple Valley will enact some sort of TOD overlay for their

comprehensive plan, which will guide uses in the station areas but lack the preventative power of zoning.

Lakeville will have no stations on the line when Phase I opens in 2013. However, the line includes 5 eventual stations in Lakeville: 161st Street, Glacier Way, Lakeville Cedar, 195th Street, and 215th Street. Lakeville Cedar is an existing station serving express bus service, and was considered for Phase I, but most Lakeville residents drive to the Apple Valley station and wait for the bus in the shelter there. Depending on funding and ridership, Cedar Avenue BRT service will expand to Lakeville Cedar station by 2020 at the latest, with the other 4 stations opening by 2030. Since the opening of these stations is seemingly far in the future, no specific station area planning or zoning changes have taken place. Though there is a mention of TOD in Lakeville's current comprehensive plan, city staff are looking towards the 2018 comprehensive plan update to specifically address Cedar Ave BRT. However, the city is waiting on the results of the Red Line Market and Development Standards study, currently underway and funded by a CoO--HUD Sustainable Communities Regional Planning Grant, being performed along the entire line, to see whether or not the planning process should be sped up to meet earlier than anticipated demand. Lakeville views these planning activities as just beginning, and for most of the stations, this would be planning towards development, no *redevelopment*, as Lakeville still has large tracts of undeveloped land.

Mall of America station was excluded for the same reasons as it was for Hiawatha, though it is encouraging that Bloomington is seeking to maximize the transit stop's potential impact for pedestrians and commuters. Future stations were included so that the TOD planning score would reflect the relative infancy of the line and the uncertainty surrounding BRT that can only be remedied through experience. Under the study's methodology, the TOD planning score for Cedar Ave BRT is 0.49. The cities along the line are excited about the possibilities of development, understand the value of TOD, but much of the line—specifically Lakeville—is so new to transit and especially to the development power of BRT that more time, more planning, and the results of the line-wide Market and Development Standards study are necessary tools to move forward.

3.4 Central Corridor LRT—Green Line

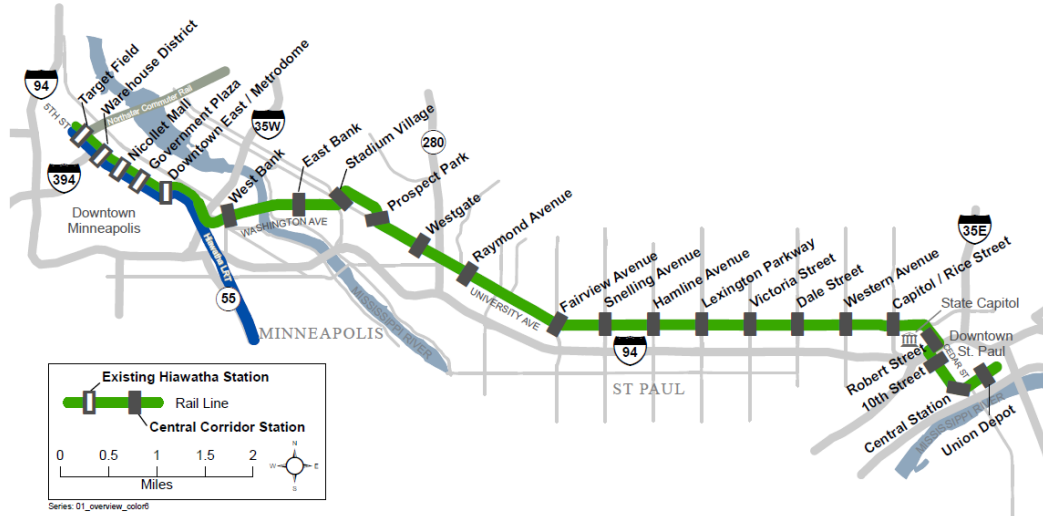


Figure 4. Central Corridor LRT Route Map.⁹

The Central Corridor Light Rail line connects Minneapolis and St. Paul along University Avenue and is scheduled to open in mid-2014. Construction is near 85% complete as of today. The line is 11 miles long, cost \$957 million, and has 23 stations—5 existing, where the line connects with Hiawatha LRT. The line begins at Target Field (and will be the third line to service The Interchange, a multimodal transit hub under construction adjacent to the current LRT and commuter rail station at Target Field) and terminates at a renovated Union Depot on 4th Street in St. Paul.

Line Summary	
Line	Central Corridor LRT
Year Approved	2006
Year Construction Began	2010
Year Open	2014
Length	11 miles
Cost	\$957 million
Number of Stations	23
Number of Cities Served	2
TOD Planning Scores	
<i>Comprehensive Planning</i>	1.00
<i>Station Area Planning</i>	1.00
<i>Zoning</i>	0.92
Overall TOD Planning Score	0.97

Table 4. Central Corridor LRT Line Information Summary.

St. Paul has 14 stations, 5 of which are being excluded from this analysis (see below), leaving 9 in need of study for TOD planning. These 9 are (from west to east): Westgate,

Raymond Ave, Fairview Ave, Snelling Ave, Hamline Ave, Lexington Parkway, Victoria Street, Dale Street, and Western Avenue. St Paul has been actively planning for the Central Corridor for years, with much of the attention being paid to these 9 stations along University Avenue. In 2011, their planning came to a milestone when these stations were rezoned. Most of the changes involved changing the designations from B3—general commercial—and I1—light industrial—to ‘Traditional Neighborhood’ districts, which encourage compact, walkable, mixed use development. There are three T districts, including a new T4, which allows more height and density. Another step St. Paul took to leave the community intact is that existing businesses and buildings can remain indefinitely, even those non-conforming to the zoning code. Since University Avenue has been a transit corridor for many decades, including street cars before the 1960’s, the LRT being built complements more than it disrupts the neighborhood (except for construction). The rezoning, combined with St. Paul’s comprehensive station area plans for each of these 9 stations (and one additional for downtown), are part of the Central Corridor Development Strategy, which guided planning and other activities related to the line. St. Paul also made significant efforts to engage with the community, leading to an understanding that zoning should not encourage development to encroach on single family homes to the north or south of University Ave. The Westgate station area is about half in Minneapolis, and this as well as its industrial properties in the area make planning for it more complicated than a normal station, but nonetheless St. Paul created a station area plan, rezoned its jurisdiction, and Minneapolis is in the process of doing the same. The comprehensive and proactive approach taken by St. Paul with respect to TOD planning has resulted in a score of 1 for all three categories at all of their stations.

Minneapolis has three stations to take action on the Central Corridor (East Bank station has been excluded from this analysis, see below): West Bank, Stadium Village, and Prospect Park. The West Bank Station is particularly interesting. It is included in the Cedar-Riverside small area plan, and has been rezoned. The innovative part of its planning activities is the inclusion of an implementation plan, which identifies what infrastructure investments need to be made to make the station area plan a reality. This involved active community engagement as well. Improvements like reconstruction of Riverside Ave have been sped up and completed, and early returns show that station area planning including implementation and infrastructure plans as well are a more comprehensive and effective planning tool. The West Bank station, in the

Washington Avenue ‘ditch’, is already a mixed use area with higher density, but in dire need of better pedestrian connections and streetscapes. Prospect Park station is mostly included in the Stadium Village small area plan, which was just completed this year. Rezoning for Stadium Village is likely to follow in 6 months, though it is already seeing a lot of redevelopment, and guidance for zoning is coming shortly for Prospect Park. Both station areas have been scored a 0.5 for zoning for the above reasons.

The stations excluded from our analysis are Capitol/Rice Street and Robert Street stations, which are under the jurisdiction of the Capitol Area Planning Board, 10th Street, Central, and Union Depot stations, which are considered downtown St. Paul (which, like downtown Minneapolis, are already true TOD areas and need no changes), and the East Bank station in Minneapolis, which is under the jurisdiction of the University of Minnesota and also needs no zoning changes.

The Central Corridor’s history as a transitway in the Twin Cities is reflected in its TOD planning score of 0.97—it is a natural connection between Minneapolis and St. Paul and the LRT is enhancing and reinvesting in the corridor, not blazing a new trail, per se. However, compared to Hiawatha, it is clear that our region has done some learning collectively about planning for transit; Central’s planning has been proactive instead of reactive, and not only are all the station area plans in place but all zoning changes (except for two stations in Minneapolis, Stadium Village and Prospect Park, which will be rezoned in the near future) are in place right now. Already Central has seen massive private investment, as multiple housing and mixed use developments are finished, under construction, or beginning soon. This proactive, and, to a somewhat lesser degree, regional planning, is a model that the Twin Cities can apply to its future lines, and already has begun to with Southwest LRT.

3.5 Southwest LRT—Green Line Extension

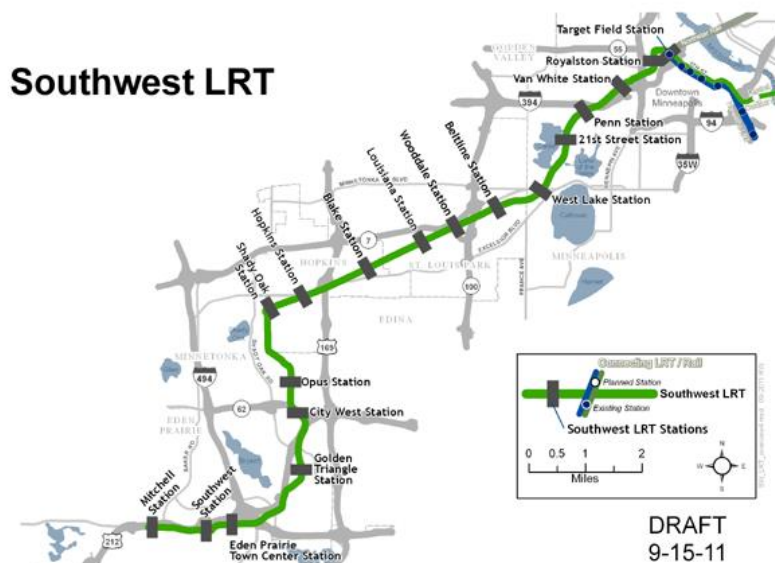


Figure 5. Southwest LRT Route Map.¹⁰

The Southwest Light Rail line is currently in preliminary engineering and scheduled to open in 2017. The line is 15 miles long, is estimated to cost \$1.25 billion, and would have 18 stations, 17 of which would be new. The 18th station is the line’s origin in Minneapolis, Target Field (the fourth line to service the future Interchange), traveling past St. Louis Park, Hopkins, Minnetonka, terminating in Eden Prairie. Station area planning was completed for the entire line in 2009, but the reaction from city planners is that the outlook and recommendations from this report are only feasible in the long term, perhaps for 2030. Though it proved a helpful exercise, and got planners thinking, a more reasonable look at the station areas when the line opens has been pursued and is underway. These Transitional Station Area Action Plans (TSAAPs) are being conducted by HKGi and will likely be published in 2013. These TSAAPs will also provide a basis for city planners to pursue any additional station area planning they may wish to conduct.

Line Summary	
Line	Southwest LRT
Year Approved	2010
Year Construction Began	TBD
Year Open	2017
Length	15 miles
Cost	\$1.25 billion
Number of Stations	18
Number of Cities Served	5
TOD Planning Scores	
<i>Comprehensive Planning</i>	1.00
<i>Station Area Planning</i>	1.00
<i>Zoning</i>	0.33
Overall TOD Planning Score	0.78

Table 5. Southwest LRT Line Information Summary.

Minneapolis has 5 new stops along the future Southwest LRT (the 6th is Target Field station, at the Interchange, which has been previously discussed): Royalston, Van White, Penn Ave, 21st Street, and West Lake. Royalston, Van White and Penn Ave all have Minneapolis-written small area plans, but only Van White has been rezoned (The currently-under-construction Van White Memorial Bridge will significantly alter the area, especially since the station platform will lie underneath it). 21st Street and West Lake stations may not need rezoning unless major changes to the areas will be made, which is unlikely; 21st Street does not need new zoning and West Lake already has most of the uses the neighborhood needs. Though Southwest LRT is 5 years away from completion, even active planning cities like Minneapolis have areas that are less ripe for major TOD redevelopment.

St. Louis Park, with three stations (Beltline, Wooddale and Louisiana), is the next city along the line as the train travels southwest. The majority of planning in St. Louis Park has focused around the Beltline Station, for which the city received a grant from the Metropolitan Council to study design guidelines for the station area. Not only does the Beltline station area present unique access challenges, there are some adjacent industrial uses. The guideline report suggested a sort of transition district between the industrial with some mixed use but likely no residential. The Beltline station area is also undergoing a circulation study which will outline needed improvements to car, pedestrian and bike connections to the future LRT station. For these efforts, and a partial zoning district in the Beltline station area resulted in a score of 0.5 for zoning. The city has made less progress on the Wooddale and Louisiana stations, and zoning for all three stations in the city is still evolving (only Beltline has experienced any zoning changes,

however). St. Louis Park is one of the cities whose land use planning is somewhat undecided until a decision is made on whether or not to move the freight rail traffic, a decision which will likely come sometime in 2013.

Hopkins has three stops along Southwest LRT, Blake, Downtown Hopkins, and Shady Oak. Hopkins has accomplished comprehensive planning and station area planning, yet only partial zoning for Downtown Hopkins, which earned a score of 0.5. This is because the station area is already fairly walkable, with some mixed use and higher density, and will require few zoning changes. Hopkins' comprehensive plan created new mixed use land use districts, but zoning has not actually changed yet. The city realizes that a few parcels are critically important to develop with TOD principles, but does not want to limit the rest of the businesses' development in the area when the line is not due to open until 2017. Hopkins also believes that consolidating parking in the Downtown station area is important, as some citizens will chose to drive, and the city wants to balance their needs with TOD principles of limited parking and walkable pedestrian connections.

The next city along the line is Minnetonka, which has the Opus station and also half of the Shady Oak station—which is on the border of Minnetonka and Hopkins. Minnetonka has already seen developer pressure, has some willing property sellers near Shady Oak, and believes the time is now to capitalize on private investment along the line. With that in mind, the city is waiting to see recommendations from the TSAAPs and their own housing inventories to enact permanent zoning. What Minnetonka has done, though, is create a zoning overlay district for both station areas, enacted in 2011, which is in place to restrict how much investment can be made to properties in the area. This effort was scored a 0.5 for zoning because it is not permanent zoning, but should be recognized for the city's proactive planning.

Eden Prairie is the final city along Southwest LRT, with 5 stations: City West, Golden Triangle, Eden Prairie Town Center, Southwest, and Mitchell stations. The most interesting thing about Eden Prairie's stations are their diversity: Golden Triangle is one of the largest job centers outside of the downtowns, Southwest is already one of the largest park and rides for commuters, and Town Center has the potential for traditional TOD. The city is actually quite far along in planning for TOD in the Town Center area, which has already been completely rezoned with new Town Center-specific zoning designations, one of the largest of which is mixed use. Eden Prairie also scores a 0.5 for zoning for the other 4 stations, as the city recently received a grant

from the Metropolitan Council to conduct a study to determine appropriate zoning ordinances to promote TOD principles at each of their stations. That study will likely be completed in 2013.

The Southwest LRT received a TOD planning score of 0.78. This score reflects the active planning taking place along the line, which is in a great position to take advantage of realistic recommendations coming from the TSAAP study. The ‘lack’ of zoning changes along the line are not alarming, as the line will not be operational until 2017; it is clear the cities along the line are working diligently to take advantage of this investment in our transit system for their city but also for the region as a whole, which ought to reap greatly positive benefits for the Twin Cities. Southwest LRT is also in a position to take advantage of new lessons learned once the Central Corridor LRT opens in 2014.

3.6 Bottineau Boulevard LRT—Blue Line Extension



Figure 6. Bottineau Boulevard LRT Route Map.¹¹

The Bottineau Boulevard light rail line is currently in the process of endorsing the Locally Preferred Alternative (LPA), with all cities endorsing but one (Golden Valley). The proposed line is 13 miles long, is estimated to cost approximately \$1 billion, and would have 10 new stations, with the 11th station again originating the line at the Interchange at Target Field in

Minneapolis. From there, it will travel northwest through Golden Valley, Robbinsdale, Crystal, and ending near the Target north campus in Brooklyn Park. As part of the funding and construction process, the Metropolitan Council must adopt the Hennepin County Regional Railroad Authority’s (HCRRA) LPA into the region’s 2030 Transportation Policy Plan (TPP) before the line can move forward. This cannot be done until all cities along the line give preliminary consent, which recently happened December 18th of 2012, when the final city, Golden Valley, having previously voted against the LPA, approved it.

Line Summary	
Line	Bottineau Blvd LRT
Year Approved	2013
Year Construction Began	TBD
Year Open	2019
Length	13 miles
Cost	\$1 billion
Number of Stations	11
Number of Cities Served	5
TOD Planning Scores	
<i>Comprehensive Planning</i>	0.75
<i>Station Area Planning</i>	0.17
<i>Zoning</i>	0.08
Overall TOD Planning Score	0.33

Table 6. Bottineau Boulevard LRT Line Information Summary.

Due to the fact the line is still very early in the planning stages, the locations of some stations and features of the line could change. After Golden Valley’s vote to approve, actions will be taken by the Metropolitan Council to begin answering these questions and prepare the line for application for FTA funding. With a target date of 2019 for opening of the line, there is much time to plan and prepare, which will be reflected in the relatively small amount of planning that has been completed to date.

Despite the uncertainties, there is still pertinent information and activities the cities are undertaking along the line. Bottineau Boulevard LRT is the final LRT line planned to begin at the Interchange at Target Field, and, again, after excluding the Target Field station, Minneapolis has 3 stations: Van White, Penn Ave, and Plymouth Ave. Van White and Penn Ave are the same station names as those on Southwest LRT, but are actually different stations—each located approximately 1 mile north of the Van White and Penn Ave stations on Southwest LRT. Like noted above, since the line is still so young, and there was great dispute about which alignment to choose, Minneapolis has yet to implement small area plans or change zoning in the areas.

The next city along the line, Golden Valley, has a complicated situation. Though two stations—Plymouth Ave and Golden Valley Road—are listed in the spreadsheet (Appendix A), will only have one station when the line opens. Golden Valley and its residents have also had the most reservations about the line because of the tracks traveling through a park, adjacent to single family homes, and the possible changes to freight train service through the area. The city has completed no station area planning or zoning changes due to its yet to be resolved uncertainties and the lack of a decision on which station will be built. From the city's perspective, Plymouth Ave station is a poor choice because the station would literally be in a park, with little chance for short or medium-term benefit for citizens of Golden Valley, with no space for development and a long walk for any pedestrian. Another factor in this is that Golden Valley is not currently served by transit much at all, and few citizens take or rely on the bus system regularly. In the cities view, TOD has a few possible areas in the future—the fire station or St. Margaret Mary Catholic Church, both of which are in the Golden Valley Road station area. Bottineau LRT is still very early in the planning stages, but the next several months will be critical to addressing some of the uncertainties in Golden Valley.

Robbinsdale has one station, about 500 feet west of West Broadway Avenue, on the western edge of their downtown, which already contains some TOD principles. Though the city does not have a large planning staff or budget, several planning activities have already taken place for its future LRT station, including both station area planning and zoning changes, leading to it being the only city with 1s for comprehensive planning, station area planning and zoning for TOD along the Bottineau LRT. Robbinsdale was an old street car Main Street type of town, so walkable storefronts and mixed use already exists in the station area. The city is hoping for traditional street level commercial development with residential above, but is willing to be flexible and work laterally so developers feel welcome and interested. Robbinsdale again utilized funds available from Hennepin County to do station area planning, hiring LSA Design, a firm which specializes in transit oriented developments. As a result of these robust planning activities, Robbinsdale has a fairly firm vision for the area, as well as ideas for parking needs and design concepts for the station. Robbinsdale is also looking forward to the delivery in 2013 of station typology possibilities along Bottineau LRT, work which is being performed by Stantec Consultants and paid for by Hennepin County. Robbinsdale is small, but unique in their

preparation for Bottineau LRT and stand to benefit greatly from their proactive planning through positive TOD redevelopment.

The next city along the line as it continues northwest is Crystal, which also has one station, Bass Lake Road. Crystal received a 0 for all three categories, as the city does not even have a mention of TOD in its comprehensive plan. Another small city, Crystal is limited in what planning activities it can undertake by itself. The city shares a common belief along the line that it is too early to know exactly what the market holds for Bottineau LRT, and they look to respond to market demands in their planning down the line. Crystal does believe it will better serve nearby citizens, who could access destinations up and down the corridor through a short LRT ride, but since their zoning code has flexibility, changing it is not an imminent need. The city is approximately 80% single family detached homes, and its planning staff realizes the limitations of TOD when the demographics of their town are as such. Perhaps in the future, the big box retail and single family homes will give way to more TOD-friendly developments, but until the market dictates that, Crystal is focused on maximizing the line's benefit to its current citizens. This conflict of uses and perception of multifamily developments as undesirable because of previous problems with crime and rental owners are somewhat common along the northern parts of the Bottineau LRT.

Brooklyn Park is the terminus of Bottineau LRT, and has 6 stations: 63rd Avenue, 71st Avenue, Brooklyn Boulevard, 85th Avenue, 93rd Avenue, and 97th Avenue (the 71st Avenue station may not be constructed with the line, but added in the future). Brooklyn Park has some similar concerns to Crystal, and also has yet to conduct station area planning or zoning changes for every station in their city except for preliminary station area planning at the 63rd Avenue station, which has the greatest potential for TOD. Brooklyn Park realizes the value of LRT to their community, especially with one of the region's largest job centers in Target's Corporate North headquarters, which currently serves approximately 2500 employees, is currently nearly doubling its campus size, and owns more adjacent land with future plans for expansion. Target has thus far been a willing partner, and continues to work with city staff to develop TOD-friendly spaces near their campus for their employees and Brooklyn Park citizens to enjoy. North Hennepin Community College is another actor that stands to benefit greatly from and contribute to Bottineau LRT. The students are excited to have much greater access to the school and the Twin Cities as a whole. With these two strong anchors for development, and opportunity at the

63rd Avenue station, the city wants to create meaningful transit for Brooklyn Park even as its demographics are largely single family homes, and plans on doing so by working with the community, waiting for the line to mature a bit, and promoting development that is both culturally and financially appropriate for Brooklyn Park. Brooklyn Park is also unique in that it sees potential for transit access to industrial businesses, which are higher, living-wage paying jobs that the city wants to make available to its citizens.

The Bottineau Boulevard LRT received a TOD planning score of 0.33. In addition to the seven or more years that stand between today and the line's opening, cities along Bottineau face concerns not found in more dense areas, including an abundance of single family homes and few low-hanging-fruit opportunities for TOD, perceptions of multifamily rentals, and citizen demand for non-TOD friendly land uses. However, none of these will prohibit Bottineau LRT from becoming a reality or a success. Many of the questions and concerns of Bottineau LRT will begin to be addressed once the Metropolitan Council moves forward with the LPA by adopting it into the region's Transportation Policy Plan. With active community engagement, creative engineering solutions, learning from Central and Southwest planning and construction, and regional expertise and attention, Bottineau is primed to be another proactively planned transitway that promotes TOD everywhere appropriate.

4.0 Analysis/Comparison of Scores

By the study's methodology, the Central Corridor LRT (.97) has achieved the highest TOD planning score, followed by (in order of score) Hiawatha LRT (0.89), Northstar Commuter Rail (0.83), Southwest LRT (.78), Cedar Avenue BRT (.49) and Bottineau Boulevard LRT (0.33). By no means is this comprehensive; however, it does accurately represent the situation for each line. Central Corridor LRT has the 'perfect storm' of TOD planning: previous experience, good timing, an already TOD-friendly dense corridor, enthusiastic and engaged city planning staff, and funding availability, all of which are important. Southwest is well on its way to implementing and improving upon Central Corridors' Development Strategy, with Bottineau likely following a similar planning path as well. Those corridors are just not far enough along to have accomplished all these planning activities. Cedar Avenue BRT and Northstar are in unique situations as their cities are less dense and their transit modes are the first of their kind in the Twin Cities. In these corridors, planning for TOD is determined by the factors above as well as

the particular land use (layout, property owners, current uses, etc.) of their station areas and the zealously with which the city pursues planning and funding.

The value of this study, besides establishing a baseline measure of where planning for TOD is in the Twin Cities, is that from interviewing and learning about each city along each line, potential best practices and shared learning opportunities have arisen. These are detailed in the next section.

4.1 Potential Best Practices & Shared Learning Opportunities

The following are possible best practices which have stood out as innovative, effective and/or unique ways to address the challenges of planning for TOD in the Twin Cities. Many of these are not new or groundbreaking activities, rather an aggregation of the Twin Cities experience thus far.

- Fridley is using a Tax Increment Financing (TIF) district around its Northstar Commuter Rail station. Tax increment financing is when a city uses future increases in tax revenue from redevelopment to pay for the debt service of current infrastructure improvements. In short, TIF creates funding for projects by borrowing against the future increase in property-tax revenues created by these projects. Fridley is one of the first to create a TIF district strictly for a TOD area, and in doing so, is creating a unique area along commuter rail that is set up for long term success and stable financing. Ramsey also has a similar TIF district which was allowed by special legislation in 2006.
- Minneapolis creates small area plans, much like station area plans, for areas in need of planning for the future. For the Cedar-Riverside small area plan, Minneapolis included infrastructure investments that were needed to fully realize the plan in addition to the normal planning efforts. The plan includes an implementation plan, which lays out steps in a timeline and possible financing mechanisms to achieve the vision for Cedar-Riverside. By including these critical parts, Minneapolis has increased the value of its planning efforts and brings a brighter future for Cedar-Riverside much closer to reality. Already Minneapolis has realized the benefits of this planning, as several roadway improvements have been made over the years in preparation of the Central Corridor LRT opening in 2014—improvements which might not have happened without the foresight of the comprehensive nature of Cedar-Riverside’s small area plan.

- Many lessons can be learned from St. Paul and their Central Corridor LRT planning efforts. First is their proactive planning process, which allowed rezoning to be completed two years before the train was operational. St. Paul also focused on community involvement, and operated the planning and construction process with more community outreach than has been seen in the past. Perhaps most importantly, St. Paul responded to citizens' concerns by establishing a small business fund that attempted to help small and minority businesses survive the construction period. Not every business was saved, but certainly these efforts have maintained several businesses that might have gone out of business otherwise. This is a critically important exercise because traditionally, light rail has been known to increase property values such that small business is pushed out of the area. St. Paul's comprehensive efforts to ensure community involvement and small business survival are components of TOD and transit planning that ought to be repeated.
- Another best practice identified in this study is the market study. Especially for BRT and Commuter rail, where the potential for extremely dense development is different than it is for light rail, market studies help identify what the demographics of an area can support and what the current and future market might demand from transit, housing and commercial developments. Market studies are critical to understanding what is appropriate for an area but also ensuring that infrastructure and zoning are changed to facilitate short and long term growth. Wasting time and money on a development not fit for an area is easy *unless* a market study is performed. Some have been performed along Northstar and a set of market studies are currently underway for the entire Cedar Avenue BRT.
- Along the same lines as the lessons learned from market studies, it is important for cities to realize the potential of their transit line. Eagan and Apple Valley are already aware that BRT lines, at least initially, are more for park-and-ride commuters and do not demand housing development like LRT does. Understanding this leads to better and more successful developments unique to each city.
- Another lesson is that zoning is done on case by case basis and is vastly different for each city. From overlay zoning, traditional ordinance changes, property-by property zoning, or municipal purchases of land, cities use a vast array of mechanisms to adjust their zoning codes as they see fit. Best practices in zoning are difficult to identify. Cities also must

balance what automobile users want while steering future development towards more efficient TOD and these discussions are often sorted out by how cities approach zoning.

- As lines are built into more suburban communities, it will be important to investigate the possible harmonies of commuter use of transit—i.e., traditional suburban park-and-ride users—and traditional TOD-style efficient living. Some believe the two are incompatible, and perhaps this is true in definition. However, suburban living is an important part of life in the Twin Cities, a lifestyle many enjoy. Balancing this with the preferences of those who prefer to live in denser, close-to-amenities TOD areas will be a challenge but ultimately will lead to the best and heaviest use of public transit, resulting in improvements in the accessibility and quality of life of the majority of residents—not just a few.

5.0 Conclusion

This study's purpose was to establish a baseline of TOD planning activities along six transitways in the Twin Cities Corridors of Opportunity project. Through research and interviews with planners in each city along every line, it is clear that many factors comprise the level to which a line, or single community, has planned for TOD. Though opportunities have arisen for cities to share TOD experience, each city faces unique challenges determined by its geography, demographics, and timing of the line which require proactive planning to minimize. Planning for TOD in the Twin Cities has already improved significantly since Hiawatha LRT first opened in 2004, and Hiawatha is finally reaping the benefits of those lessons eight years after its opening. Effects of the financial downturn of 2008 have been real, and affected certain lines more than others—the Northstar line, which opened in 2009, was especially hurt. However, moving forward, the most important ways to improve planning for Transit Oriented Development are to continue learning the lessons of transit lines as they open, develop best practices for all lines—especially for the Twin Cities first forays into Commuter Rail and BRT—and finally, to continue and expand regional communication and cooperation.

Corridors of Opportunity's main purpose is to maximize the value of transit investment in a way that improves quality of life, improves access to transit, and brings positive and appropriate private investment. Proactive planning for TOD is one of the best ways to ensure this comes to fruition, and as the build-out of the Twin Cities transit system continues, the abundance

of efficient, walkable, convenient Transit Oriented Developments will hopefully rise sharply, providing new options to current and future residents of the area.

6.0 Appendices

6.1 APPENDIX A: TOD Planning Score Spreadsheet

By Station			TOD Step		
City	Line	Station	TOD Mention in Comprehensive Plan	Station Area Plan	Zoning In Place
Anoka	Northstar	Anoka	1	1	1
Apple Valley	Cedar Ave BRT	Palomino Drive (future station)	1	0.5	0
		140th St	1	0.5	0
		147th St	1	0.5	0
		Apple Valley Station (155th)	1	0.5	0
Big Lake	Northstar	Big Lake	1	1	0.5
Bloomington	Hiawatha	American Blvd	1	1	0.5
		Bloomington Central	1	1	0.5
		28th Ave	1	1	0.5
		Mall of America	N/A		
	Cedar Ave BRT	28th Ave	1	1	0.5
		Mall of America	N/A		
Brooklyn Park	Bottineau	63rd Ave	1	1	0
		71st Ave	1	0	0
		Brooklyn Blvd	1	0	0
		85th Ave	1	0	0
		93rd Ave	1	0	0
		97th Ave	1	0	0
Coon Rapids	Northstar	Coon Rapids Riverdale	1	1	1
Crystal	Bottineau	Bass Lake Road	0	0	0
Eagan	Cedar Ave BRT	Cedar Grove	1	1	1
		Cliff Road (future station)	1	0	0
Eden Prairie	Southwest	City West	1	1	0.5
		Golden Triangle	1	1	0.5
		Eden Prairie Town Center	1	1	1
		Southwest Station	1	1	0.5
		Mitchell	1	1	0.5
Elk River	Northstar	Elk River	0	1	0
Fridley	Northstar	Fridley	1	0.5	1
Golden Valley	Bottineau	Plymouth Ave*	0	0	0
		Golden Valley Road*	0	0	0
Hopkins	Southwest	Blake	1	1	0
		Downtown Hopkins	1	1	0.5
		Shady Oak	1	1	0
Lakeville	Cedar Ave BRT	161st St (future station)	1	0	0
		Glacier Way (future station)	1	0	0
		Lakeville Cedar (future station)	1	0	0
		195th St (future station)	1	0	0
		215th St (future station)	1	0	0
*Note: There will be only <i>one</i> Bottineau LRT stop in Golden Valley and will be either Plymouth Ave or Golden Valley Rd.					

Legend:

Key	1= yes
	0=no
	0.5=partial
	Hiawatha
	Bottineau
	Central
	Southwest
	Cedar BRT
	Northstar

6.1 APPENDIX A: TOD Planning Score Spreadsheet, continued

By Station			TOD Step				
City	Line	Station	TOD Mention in Comprehensive Plan	Station Area Plan	Zoning In Place		
Minneapolis	Hiawatha	Fort Snelling	N/A				
		VA Medical Center	N/A				
		50th St/Minnehaha	1	0	0.5		
		46th St	1	1	1		
		38th St	1	1	1		
		Lake Street/Midtown	1	1	1		
		Franklin Ave	1	1	1		
		Cedar-Riverside	1	1	1		
		Downtown Minneapolis		Dwtm East/Metrodome	N/A		
				Government Plaza	N/A		
Nicollet Mall	N/A						
Warehouse District	N/A						
Target Field	N/A						
Central Corridor		West Bank	1	1	1		
		East Bank	N/A				
Southwest		Stadium Village	1	1	0.5		
		Prospect Park	1	1	0.5		
		Royalston	1	1	0		
		Van White (South)	1	1	1		
		Penn Ave (South)	1	1	0		
		21st St	1	1	0		
		West Lake	1	1	0		
Bottineau		Van White Blvd (North)	1	0	0		
		Penn Ave (North)	1	0	0		
Minnetonka	Southwest	Opus	1	1	0.5		
		Shady Oak (Half)	1	1	0.5		
Ramsey	Northstar	Ramsey	1	1	1		
Robbinsdale	Bottineau	Robbinsdale	1	1	1		
St. Louis Park	Southwest	Beltline	1	1	0.5		
		Wooddale	1	1	0		
		Louisiana	1	1	0		
St. Paul	Central Corridor	Westgate	1	1	1		
		Raymond Ave	1	1	1		
		Fairview Ave	1	1	1		
		Snelling Ave	1	1	1		
		Hamline Ave	1	1	1		
		Lexington Parkway	1	1	1		
		Victoria St	1	1	1		
		Dale St	1	1	1		
		Western Ave	1	1	1		
Capitol Area Planning Board		Captiol/Rice St	N/A				
		Robert St	N/A				
Downtown St. Paul		10th St	N/A				
		Central	N/A				
		Union Depot	N/A				

Legend:

Key	1=yes
	0=no
	0.5=partial
	Hiawatha
	Bottineau
	Central
	Southwest
	Cedar BRT
	Northstar

6.2 APPENDIX B: TOD Planning Score Results Table

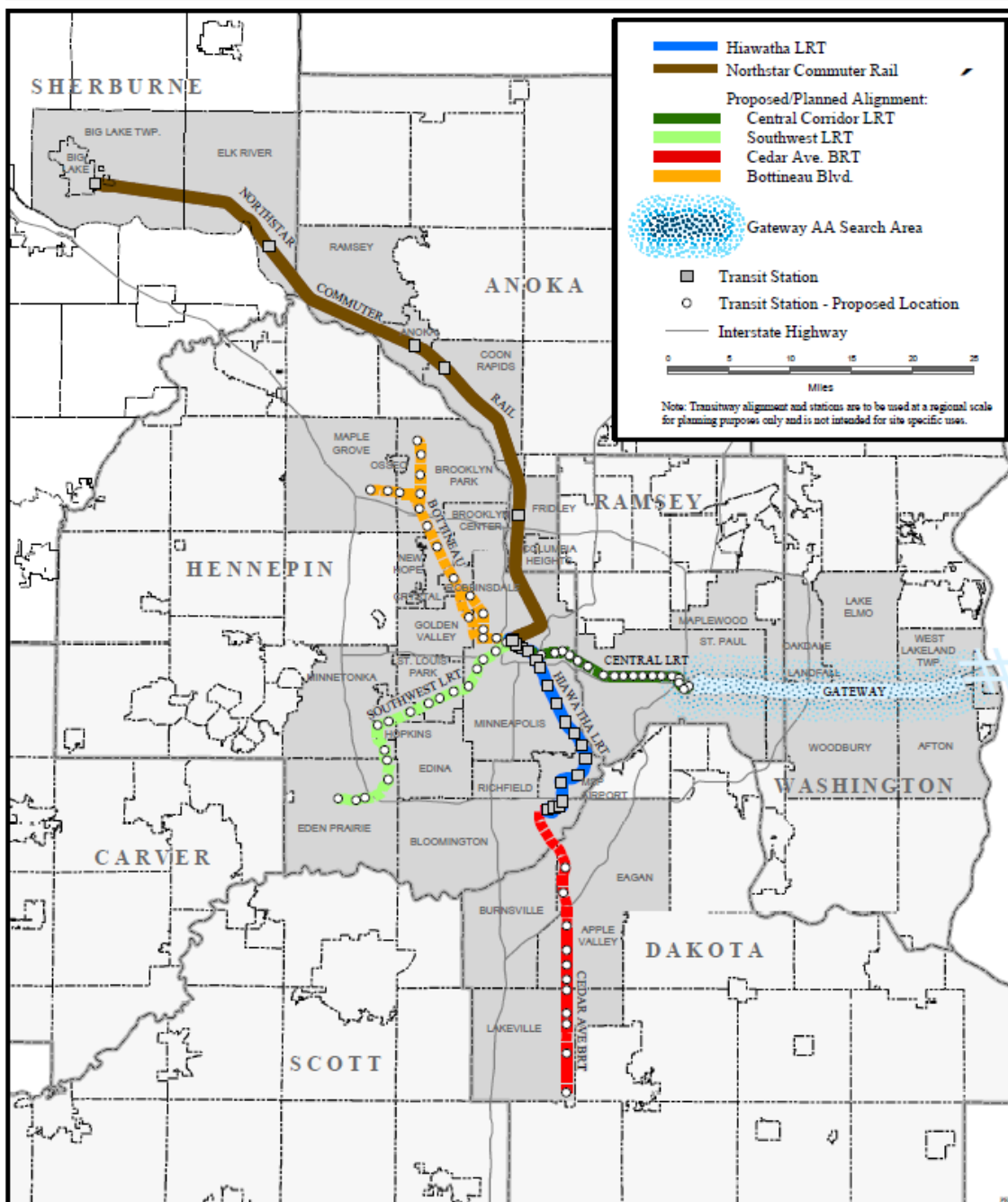
Line	Year Open	Comp Plan Score	SAP Score	Zoning Score	Total TOD Planning Score
Hiawatha LRT	2004	1.00	0.89	0.78	0.89
Northstar Commuter Rail	2009	0.83	0.92	0.75	0.83
Cedar Avenue BRT	2013	1.00	0.33	0.13	0.49
Central Corridor LRT	2014	1.00	1.00	0.92	0.97
Southwest LRT	2017	1.00	1.00	0.33	0.78
Bottineau Boulevard LRT	2019	0.75	0.17	0.08	0.33

6.3 APPENDIX C: Corridors of Opportunity Transitway Map

Twin Cities Metropolitan Area

Corridors of Opportunity

March 2011



6.4 APPENDIX D: List of Interviewees

Date	City	Planner	Title
2-Nov	Bloomington	Julie Farnham	Planner
6-Nov	Hopkins	Tara Beard	Community Development Coordinator
7-Nov	St. Paul	Donna Drummond	Director of Planning
9-Nov	Big Lake	Katie Larsen	Senior Planner
16-Nov	Golden Valley	Joe Hogeboom	City Planner
16-Nov	Anoka	Erik Thorvig	Economic Development Coordinator
16-Nov	Brooklyn Park	Todd Larson	Senior Planner
30-Nov	Crystal	John Sutter	City Planner/Assistant Community Development Director
30-Nov	Minnetonka	Elise Durbin	Community Development Supervisor
30-Nov	Elk River	Jeremy Barnhart	Planning Manager
3-Dec	Minneapolis	David Frank	Director of Transit Development
6-Dec	Eden Prairie	Janet Jeremiah	Community Development Director
7-Dec	Ramsey	Tim Gladhill	Development Services Manager
7-Dec	Eagan	Erik Slettedahl	Community Development/GIS Specialist
7-Dec	Coon Rapids	Matt Brown	Community Development Specialist
11-Dec	Fridley	Scott Hickok	Community Development Director
11-Dec	St. Louis Park	Meg McMonigal	Planning and Zoning Supervisor
11-Dec	Robbinsdale	Rick Pearson	Community Development Coordinator
13-Dec	Apple Valley	Kathy Bodmer	City Planner
19-Dec	Lakeville	David Olson	Community & Economic Development Director

7.0 References

- ¹ Center for Transit Oriented Development, <http://ctod.org/faqs.php>.
- ² Metropolitan Council Guide for Transit-Oriented Development.
- ³ Metropolitan Council Guide for Transit-Oriented Development.
- ⁴ Corridors of Opportunity: <http://www.corridorsofopportunity.org/about-initiative>.
- ⁵ Metropolitan Council: Livable Communities 2012 Transit Oriented Development Grant Application.
- ⁶ Metro Transit: <http://metrotransit.org/light-rail>.
- ⁷ Northstar Corridor Development Authority: <http://www.northstartrain.org/images/ExpansionMapRev1sm.jpg>.
- ⁸ Metropolitan Council: <http://metro council.org/transportation/Cedar/CedarBRT.htm>.
- ⁹ Metropolitan Council: <http://metro council.org/transportation/ccorridor/centralcorridor.asp>.
- ¹⁰ Metropolitan Council: <http://metro council.org/transportation/SW/SouthwestLRT.htm>
- ¹¹ Metropolitan Council: <http://metro council.org/transportation/Bottineau/index.htm>.