



The Future Development of the Carver County Transportation Network

An Intentional Approach to Economic Development, Highway
Finance, and Freight Transportation Planning

Brian Kays, Justin Stofferahn, & Zachary Zweifler

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Executive Summary

With a unique mix of urban and rural features, Carver County stands out among the seven-county Twin Cities metropolitan region. The county is connected to the Twin Cities and Greater Minnesota by a robust network of six trunk highways that serve the county. As Carver County begins the process of crafting its 2040 comprehensive plan, a focus has been placed on Trunk Highway 212 (TH 212), a mostly four-lane route that extends across the county from east to west. TH 212 has two short and fragmented segments of two-lane highway in the central portion of the county between the cities of Norwood Young America (NYA) and Cologne, and a portion between Cologne and the City of Carver. Carver County hopes to expand those two-lane portions to create a continuous four-lane route that facilitates efficient movement of freight and ensures the safe passage of commuters. As it embarks on updating its comprehensive plan, Carver County is also looking to opportunities for alignment with the Metropolitan Council's Transportation Policy Plan under Thrive MSP 2040, the region's most recent comprehensive plan.

Looking at Carver's current conditions as it relates to transportation reveals a transportation network that is key to Carver County's economy. Carver County's ability to accommodate freight has helped it develop into an industrial hub where 40% of workers are employed in freight-related businesses with over a quarter of workers employed by manufacturing firms, which are significant freight generators. The strength of Carver County's freight network could be challenged in coming years. While Carver County's strong population growth is anticipated to continue, although not as rapidly as once forecast, MnDOT and the Metropolitan Council will be turning their focus to maintenance and preservation of the existing roadway network while acknowledging that congestion will worsen.

Carver's road network is further challenged by inefficiency in the local labor market. While Carver County infrastructure facilitates the movement of nearly 20,000 workers from outside the county on a daily basis, it also helps over 15,000 residents leave Carver each day for work. This economic mismatch has grown in recent years and will only continue to place stress on the transportation system. Although economic challenges tied to infrastructure are increasing, the county seems to be wary of more intentional economic development efforts. This is compounded by the fact that, through stakeholder interviews conducted for this report, there is a wide array of views on what economic development means for Carver County.

Finally, long-term fiscal forecasts show a massive gap between transportation needs and projected revenues. Such challenges exist at the state, regional and local levels as

the flow downward of these transportation challenges left Carver County with an estimated funding gap of \$649.5 million from 2008-2030. Combined these conditions could challenge the future vision of Carver County's transportation system. This vision includes a transportation system that prioritizes safety and efficiently transports goods and workers into and out of Carver while connecting residents and welcoming visitors. This transportation system will serve as the focal point for a deliberate market-driven economic development strategy that spurs development.

In order to achieve this vision a series of recommendations have been developed to meet the following goals:

- Create a more comprehensive approach to economic development in Carver County that establishes a shared vision among the county's diverse communities while preserving the county's political attitudes toward economic development.
- Explore opportunities to utilize local revenue that can be used for completing the 4-lane expansion of U.S. Trunk Highway 212 and other improvements along the corridor.
- Align the Transportation Chapter of the Carver County 2040 Comprehensive Plan with the *Thrive MSP 2040 Transportation Policy Plan*.

Taken as a whole these recommendations encourage a more intentional approach to transportation and economic development in Carver County. This strategy was developed through analyzing data on the existing conditions in the county, examining relevant case studies, and conducting stakeholder interviews.

This report is organized into three key sections that include an overview of existing conditions in Carver County, a long-term vision for the county's future, and recommendations that will help achieve that vision.

Current Conditions

This section provides an overview of the current conditions in Carver County as it relates to transportation and economic development. This analysis provides insight into the county's existing assets such as the highway network and concentration of manufacturing jobs, as well as external pressures such as high projected population growth. This analysis sets the stage for discussing a variety of issues that confront the county.

This section begins with a roadway system analysis that examines current traffic flows, population projections on the county's major highways, with a particular emphasis on TH 212, detail how population projections and the associated demographic changes impact the county's roadways, and conclude by inspecting how these factors influence the flow of traffic from inside and outside of the county. This is followed by a profile of the county's economic conditions and how it impacts transportation.

These components of the existing conditions feed into overviews of related issues facing Carver County, which includes the Metropolitan Council's focus on transit and exclusion of the county's major road projects, the looming deficits in available federal and state transportation funding, and feedback from stakeholders suggesting a need for more coordinated and intentional policy development.

Roadway Systems Analysis

This analysis looks at Carver County's entire highway network as it is important to the makeup of Carver County's economy and the flow of traffic into and out of the county. This analysis places a particular emphasis on TH 212, which serves as a key freight corridor for the county and the metropolitan region. The following section details the function and importance of the county's four primary freight and commuter routes including an overview of the route corridor through Carver County, general vehicle and heavy commercial vehicle traffic counts, and upcoming maintenance or upgrade projects.

Carver County is connected to the seven county Minneapolis-St. Paul metropolitan area and greater Minnesota through six trunk highways including TH 212 and Minnesota State Highways 5, 7, 24, 41, and 284. Primary freight and commuter routes include TH 212 and Minnesota State 5, 7, and 41 (Figure 1).

Figure 1: Carver County Major Roadways



Trunk Highway 212

Trunk Highway 212 is the primary route through the county extending from the western Carver border near Norwood Young America to the eastern Carver border in Chanhassen. Between 2005 and 2008, the Minnesota Department of Transportation (MnDOT) upgraded a portion of TH 212 from a two-lane highway to a four-lane limited access highway. The project included relocating the highway to a completely new right-of-way extending from Eden Prairie in Hennepin County westward to the city of Carver via central Chaska and Chanhassen.

Two short and fragmented segments of two-lane highway currently prevent TH 212 from being a single cohesive four-lane highway extending 45 miles from the intersection of Minnesota Highway 22 between Sumpter and Glencoe in McLeod County to TH 212's eastern terminus at the interchange of Minnesota Highways 62 in Edina in Hennepin County. These two segments include a five mile section between Norwood Young America to the west of Cologne and a 3.8 mile section between east of Cologne to the city of Carver (Figure 1).

TH 212 is the busiest highway corridor through Carver County according to MnDOT traffic count data.¹ Traffic counts consistently exceed 10,000 through the western portions of Carver, while the freeway section from the City of Carver and eastward supports traffic volumes ranging from 15,000 and to over 46,000 vehicles daily.¹ A freight study commissioned by Carver concluded that heavy commercial vehicle traffic over the two remaining two-lane sections comprised a larger proportion of the traffic volume compared to other similar routes, demonstrating its importance as a vital freight route. This study explained TH 212 highway possessed truck volumes "...significantly exceed[ing] typical truck percentages on state highways."² However, there are not currently plans within the *2040 Transportation Policy Plan* to increase the highway's capacity by upgrading the final two-lane sections.

Minnesota Highway 5

Minnesota Highway 5 (MH 5) serves as a primary east-west route connecting communities across central Carver County extending from Chanhassen west via Victoria, Waconia, and Norwood Young America before proceeding into Sibley County south of Norwood Young America. Communities along the highway corridor classify MH 5 as a residential route that primarily serves commuters and general traffic between Carver County communities.

MnDOT traffic count data reveals that average daily traffic counts were 39,000 in eastern Chanhassen before tapering down to 26,000 at the intersection with MH 41. West of this intersection, traffic counts decrease to 24,700 as the highways extends into Victoria before further decreasing to between 10,000 and 14,000 vehicles between the communities of

¹ Minnesota Department of Transportation. (2016). *MnDOT Traffic Data*. Minnesota Department of Transportation Traffic Forecasting & Analysis: <http://mndotgis.dot.state.mn.us/tfa/Map>

² SRF Consulting Group, Inc. Freight Interviews: TH 212 Corridor Access Management, Safety, and Phasing Plan

Victoria and Waconia.¹ Average traffic counts become less than 6,000 vehicles from Waconia through Norwood Young America to the Carver-Sibley border. Heavy commercial vehicles comprised fewer than five percent of the overall traffic volumes. Despite high average daily traffic counts, MH 5 is mainly two-laned between southern Norwood Young America until MH 41 in Chanhassen where it becomes a four-laned expressway until it merges with TH 212 in Eden Prairie in Hennepin County.¹

There are currently no scheduled highway capacity projects planned for this route. The *Carver County Roadway System Plan* prescribed increasing the capacity to a four-lane highway to accommodate projected population growth for 2030, but sensitive wetland areas within the Chanhassen and Victoria proximities present challenging construction and fiscal constraints on future projects. As detailed later in this section, Carver County's projected population growth will continue placing stress on the roadways such as MH 5, particularly in light of constrained transportation funding at the federal and state levels.

Minnesota Highway 7

Minnesota Highway 7 (MH 7) extends through the northern extents of Carver County, briefly passing through northern Victoria, before entering into Hennepin County before re-entering Carver County. It does not pass through any communities other than Victoria, but collects traffic from Meyer, New Germany, and acts as an alternative route to the Twin Cities from western Minnesota. The highway is designated as a principal arterial by the Metropolitan Council and features a two-lane design through the entirety of Carver County. Traffic counts were over 14,000 in northern Victoria and fewer than 10,000 in western Carver County with heavy commercial vehicles comprising less than 10 percent of total traffic volumes.¹ No major projects or work is scheduled for the highway according to the Metropolitan Council's 2015 System Statement for Carver County.

Minnesota Highway 41

Minnesota Highway 41 (MH 41) extends over nine miles from its junction with Minnesota Highway 7 in Shorewood in Hennepin County and extending south via Chanhassen and Chaska before terminating at U.S. Highways 169 (US 169) in western Shakopee. The highway features two lanes in Chanhassen and four lanes in Chaska between TH 212 and into Scott County. The northern two-lane portion in Chanhassen and northern Chaska experiences traffic volumes between 14,000 and 16,000, with a heavy commercial vehicle volume of approximately 650 to 800.¹ The southern four-lane portion has traffic volumes between 17,000 and 21,000 with heavy commercial traffic exceeding 1,000 vehicles daily.¹ MnDOT traffic count data demonstrates that the heaviest commercial vehicle traffic exists between downtown Chaska and US 169 over the Minnesota River Bridge with 1,500 vehicles daily. High volumes of trucks and heavy commercial vehicles have been problematic for the City of Chaska. The City strives to create a vibrant and walkable environment within its historic

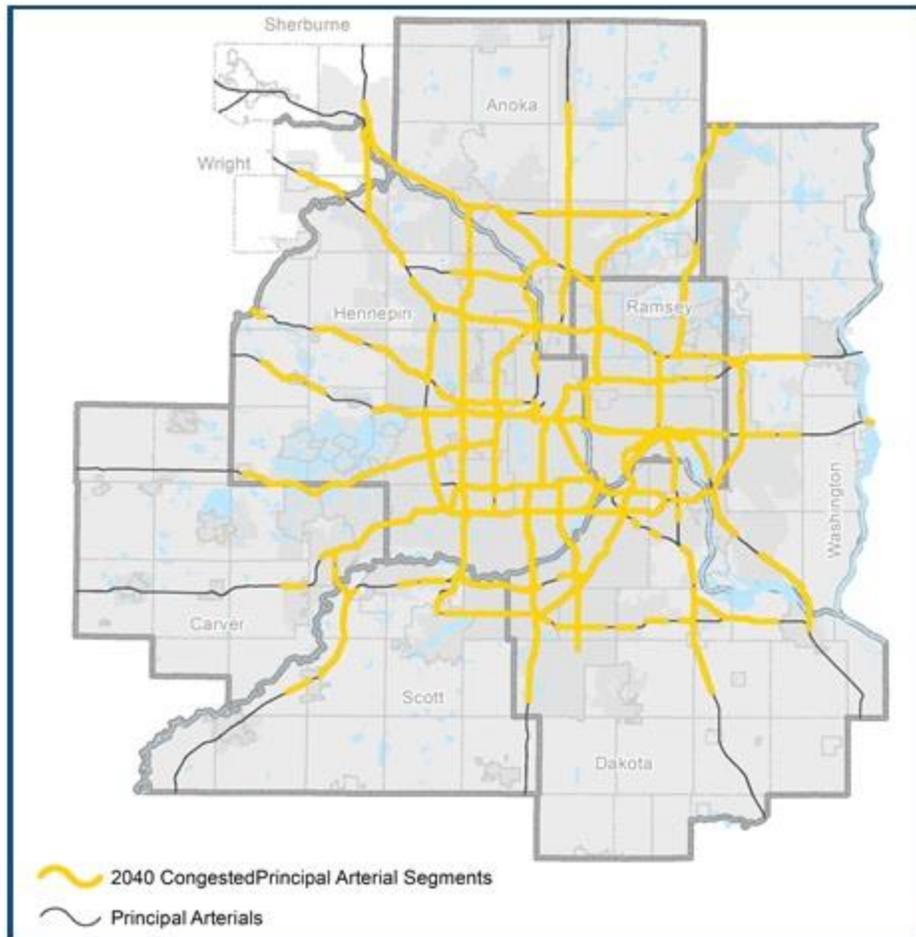
downtown district, but few crossings over the Minnesota River funnel traffic through the City's center, especially commercial vehicles.

These four routes were identified by Carver County officials as the most important highway routes within county boundaries. There are currently no capacity increase projects scheduled for these highways as a result of fiscal resources being dedicated towards maintenance and preservation of existing highways infrastructure. It is evident that TH 212 is the highest priority for capacity increases compared to other routes within Carver County. Its local and regional importance supports heavy commercial vehicle traffic beyond its capacity. This analysis supports Carver County's position that improving the two sections of two-lane highway are vital for the movement of goods and people the Minneapolis - St. Paul metropolitan area, Carver County, and western Minnesota extending into South Dakota. As a result, the remainder of this report will focus primarily on TH 212 when it comes to discussing highway expansion.

Population

Population plays an obvious role in the efficiency of a transportation network, as more people will mean more cars on the road, increasing the likelihood of congestion. However, looking towards 2040, congestion along Carver County's principal arterial highways is not forecasted to be a widespread issue relative to the rest of the metropolitan area. According to Metropolitan Council analysis illustrated in figure 2, congestion is projected to exist throughout the Minneapolis-St. Paul metropolitan area's roadways in 2040, with only a few congested corridors in Carver County. These segments include TH 212 from the City of Carver eastward, MH 7 through Victoria and Chanhassen, and MH 41 extending from TH 212 south to US 169 in Shakopee (Figure 2). Metropolitan Council congestion projections indicate a lack of need for highway upgrades strictly on the basis of congestion. However, heavy commercial vehicle traffic volumes, efficient freight movement, and safety improvements are other justifications for improving vital highways through Carver County, especially TH 212.

Figure 2: 2040 Metro Congestion



Source: 2040 Transportation Policy Plan | Metropolitan Council

While congestion in Carver County might not be a significant regional issue, the county's recent high population growth and the strong growth predicted in the future will place an increased burden on the county's roadway network. However, while the county is anticipated to continue growing, large fluctuations in population estimates from the Metropolitan Council and the Minnesota State Demographer underscore the need for Carver County to remain flexible in its transportation planning.

Carver County has experienced significant population growth in the past decade. Between 2000 and 2014, the county's population increased by nearly 39 percent (over 20,000 people) from 70,205 to 91,042. Over the same time frame, Minnesota experienced a nearly 11 percent growth in population. The current rate of growth (over twice that of the rest of the state) has already begun to affect the Carver County transportation system as continued development has negatively impacted service levels with the addition of thousands of commuters and vehicles every year.

Table 1: Comparison of Population Change (2000-2014)

	<i>2000 Population</i>	<i>2014 Population</i> <i>*Estimate</i>	<i>Change in</i> <i>Population (%)</i>
<i>Carver County</i>	70,205	97,338	38.6%
<i>Minnesota</i>	4,919,479	5,457,173	10.9%

Source: US Census Bureau

U.S. Census Bureau estimates indicate that the population and relative share of the 25-44 age group marginally decreased between 2010 and 2014 while all other age categories increased. Tables 2 and 3 demonstrate the distribution of ages among Carver County's population. The age distribution reveals that Carver County primarily comprises families, demonstrated through high proportions of residents within the 19 and under, 25-44, and 45-64 age categories. The decrease of this specific age group may be attributed to its recent changes in preferences for housing and amenities. In the past decade 25-39 year olds have shifted their preferences to housing options that minimize use of automobiles, are located in communities that feature high levels of walkability, and are in close proximity to amenities such as healthy food options, parks, and trails.³

Table 2: Comparison of Age Distribution (% of Population)

<i>Age Group</i>	<i>Carver County</i>	<i>Minnesota</i>
<i>19 and under</i>	31.4%	26.5%
<i>20-24</i>	4.6%	6.6%
<i>25-44</i>	26.4%	26.2%
<i>45-64</i>	28.5%	27.2%
<i>65 and older</i>	9.2%	13.6%

Source: US Census Bureau, 2014 American Community Survey

³ <http://urbanland.uli.org/economy-markets-trends/evolving-housing-preferences-millennials/>

Table 3: Change of Carver Age Distribution (% of Population)

<i>Age Group</i>	<i>2010 Population</i>	<i>2014 Population estimate</i>	<i>% Change</i>
<i>19 and under</i>	24.9%	31.4%	30.7%
<i>20-24</i>	4.3%	4.6%	10.8%
<i>25-44</i>	27.8%	26.4%	-1.6%
<i>45-64</i>	27.4%	28.5%	7.2%
<i>65 and older</i>	8.4%	9.2%	12.4%

Source: US Census Bureau, 2014 American Community Survey

2040 Population Projections

While Carver County has recently experienced strong population growth, it is anticipated strong growth will continue into the coming decades. While they differ on the exact amount, the Metropolitan Council and the Minnesota State Demographer anticipate population growth of between 27 and 65 percent. These significant increases along with changing demographics could shift transportation usage in Carver County.

Utilizing prior trends, the Minnesota State Demographics Office predicts Carver County will have 124,672 residents by 2040, a difference of nearly 40,000 people compared to the Metropolitan Council's prediction. Projections indicate that the largest age cohorts will be young adults between 35 to 39 and 40 to 44, and older adults between 70 to 74 and 75 to 79, with each cohort containing respective population totals above 8,000. Infants and toddlers through adolescents additionally contain populations over 7,000. The key change projected for the makeup of Carver County's population is an expected tripling of the population over 65 years old.

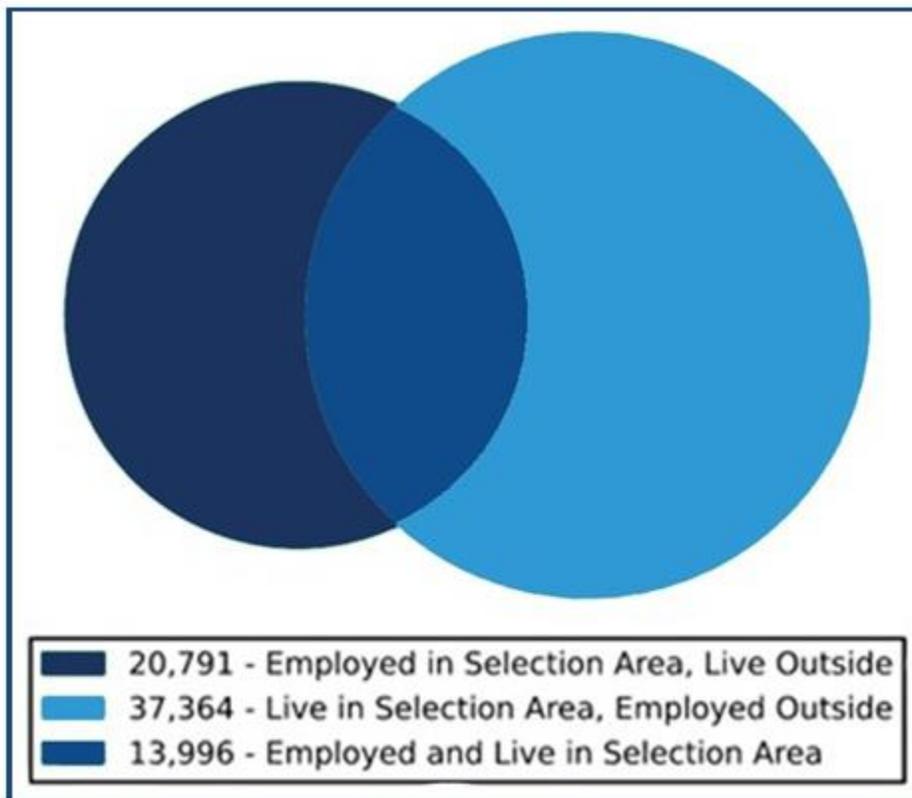
The stark differences in population projections between the Metropolitan Council and the Minnesota State Demographic Office reinforce the uncertain nature of long-term plans, and suggest Carver County should do what it can to develop flexible long-term strategies that can adapt to changes in predicted conditions. Carver County already experienced this challenge after completion of its most recent comprehensive plan as it prepared for a population of 191,000 by 2030, a Metropolitan Council projection that has since been revised heavily downward. Moving forward, if the rationale for a particular project is anchored only by a population projection, than the county should seek out additional reasons for taking action. It would be reasonable for Carver to expect the Minnesota State Demographic Office's population of 124,000 for the year 2040, but conduct planning anticipating the Metropolitan Council's projection of 161,000.

Movement of Carver County Traffic

Anticipated increases in traffic counts only tell part of the story when it comes to traffic flows. Another critical piece involves the movement of vehicles into and out of Carver County. Longitudinal Employer-House Dynamics (LODES) data identifies the location each worker starts and ends their daily commutes in. The analysis of this data reveals Carver County has an employment inefficiency that is placing an unnecessary burden on the roadway network.

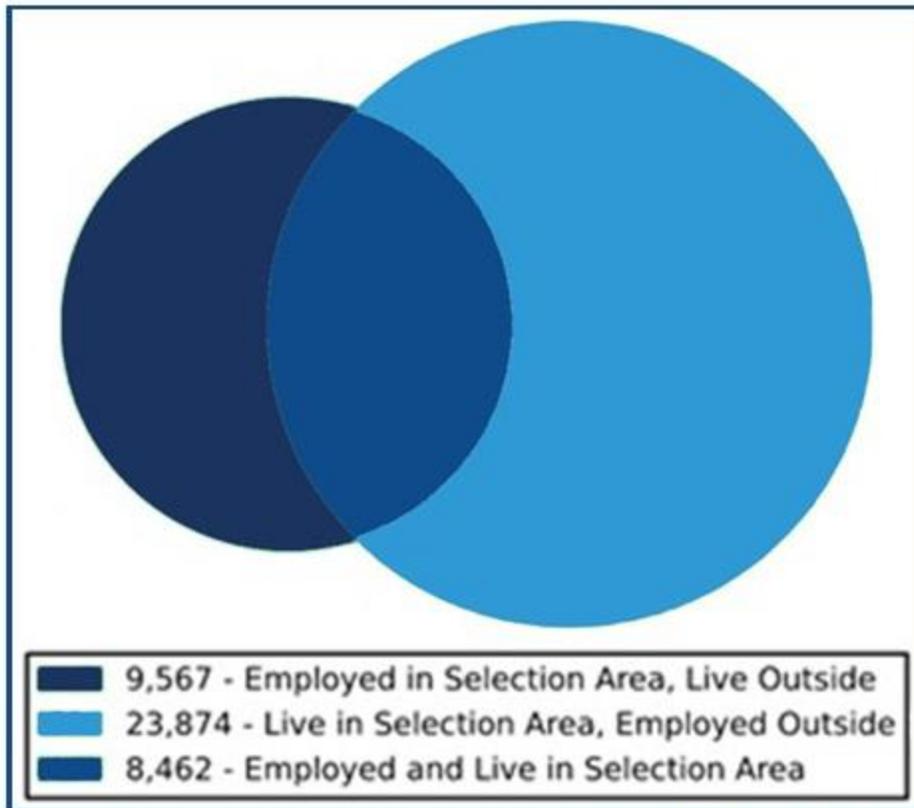
As illustrated in Figure 3, Carver County is a net exporter of workers with 15,314 more people leaving Carver than entering from other areas each day in 2014. Additionally, when examined by industry sector, the net export is strongest through the service sectors which provide the highest wages for Carver County residents. This net export of jobs creates an employment inefficiency that forces Carver's transportation system to support more traffic on its roads as Carver residents leave the county to go to work, and residents of other counties commute into Carver County. An improved match between the jobs available in Carver County and the skills of county residents could alleviate this additional pressure on the roadway system by providing more opportunities to live and work in the same county.

Figure 3: Carver Commuter Job Flows in 2014



Source: US Census Bureau

Figure 4: Carver Service Sector Commuter Job Flows in 2014



Source: US Census Bureau

In addition to the current export of jobs, it is important to note that this situation has become worse over the past four years, as identified in table 4. This increase in employment inefficiency is only intensified by the change of preferences of the 25-39 year age group as described in the *Demographics* section above. This age based difference can be directly correlated to changes in the younger age segments participation in Carver County commutes as illustrated in tables 5 and 6.

Table 4: Change of Carver Commuter Job Flows

<i>Direction of Commute</i>	<i>2010 Commuters</i>	<i>2014 Commuters</i>	<i>% Change</i>
<i>Inflow</i>	16,216	19,666	21.3%
<i>Remain</i>	11,594	12,780	10.2%
<i>Outflow</i>	31,809	34,980	10%

Source: US Census Bureau

Table 5: Change of Inflow Carver Commuter Job

<i>Age Group</i>	<i>2010 Commuters</i>	<i>2014 Commuters</i>	<i>% Change</i>
<i>29 and under</i>	3,665	4,106	-1.7%
<i>30-54</i>	9,920	11,558	-2.4%
<i>55 and older</i>	2,631	4,002	4.1%

Source: US Census Bureau

Table 6: Change of Outflow Carver Commuter Job

<i>Age Group</i>	<i>2010 Commuters</i>	<i>2014 Commuters</i>	<i>% Change</i>
<i>29 and under</i>	6,456	6,607	-1.4%
<i>30-54</i>	20,591	21,624	-2.9%
<i>55 and older</i>	4,762	6,749	4.3%

Source: US Census Bureau

Carver County Economic Profile

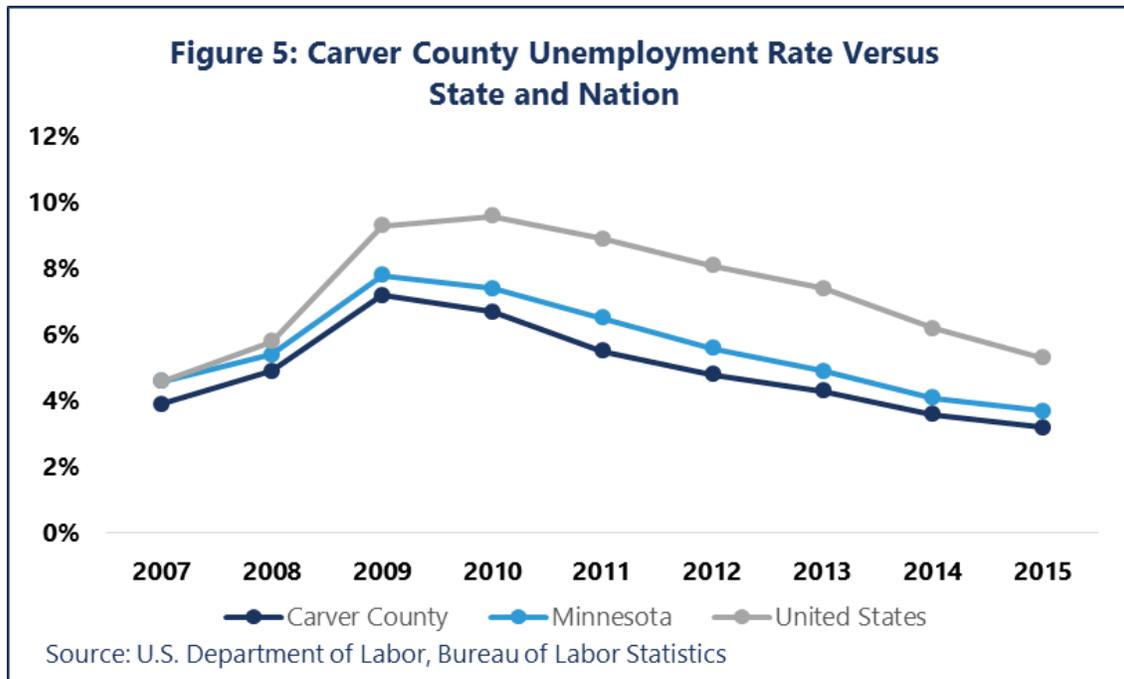
The first section of the current conditions has provided an overview of Carver County's roadway network, with a particular focus on TH 212, and examined several current and future pressures on the system related to population growth and changes. Another key component to understanding Carver County's transportation network is the makeup of the county's economy. This section will examine the county's economy broadly with a look at its high incomes and low unemployment before focusing in on the critical role manufacturing and other freight generators play in making Carver County an industrial hub in Minnesota. Narrowing the focus to freight will also provide further context for the county's focus on the expansion of TH 212.

Carver County households enjoy median incomes over 40 percent higher than the average Minnesota household, as shown in table 7. It is important to remember that not all Carver County residents work within the county, and a significant portion of Carver's labor force lives outside the county. While analysis later in this section will demonstrate Carver County's high concentration of manufacturing and the high wages associated with that industry, local family incomes are also high because of work residents do throughout the Twin Cities metro. Despite this, the data signals the value of the employees that reside in Carver County and the strength/sustainability they provide to the county's economy.

Table 7: 2014 (est.) Household Incomes in Dollars

	<i>Carver County</i>	<i>Minnesota</i>	<i>Difference</i>
<i>Median Income</i>	86,391	60,828	42% above state
<i>Mean Income</i>	107,401	79,106	36% above state

Source: US Census Bureau, 2014 American Community Survey

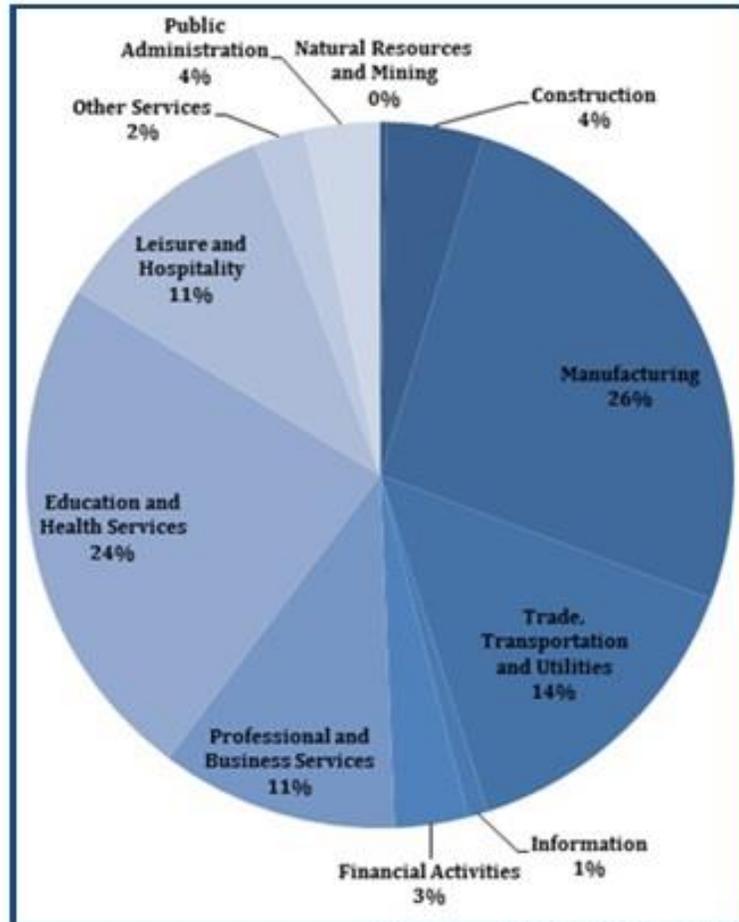


The primary strength of the local economy is in manufacturing, which employs over 26% of those that work in Carver County (Figure 6).⁴ This high concentration of manufacturing jobs is in no small part a result of the access to national, international, and major local markets provided by the county’s transportation network. The efficient movement of freight is a key concern that is likely to only grow in importance as technology continues to transform logistics and supply chain management.

Manufacturers are not the only industries whose fate is tied to freight movement, however. Other potential freight-related employers in Carver County include those in the Trade, Transportation and Utilities sector, which combined with manufacturing makes up 40 percent of Carver’s workforce (Figure 6). As demand grows for just-in-time inventory practices, optimization of distributional facilities, and utilization of multiple transportation modes it will be critical for policymakers to better understand the needs of freight generators across economic sectors.

⁴ MN DEED, 2015. *Data only available for first two quarters of 2015.

Figure 6: Carver County Employment by Industry



Source: MN DEED, 2015

A recent MnDOT study⁵ of freight in Western Minnesota anticipates the following impacts of the growing importance of logistics:

- Higher levels of freight activity in population centers as product movement becomes more sensitive to local consumption patterns.
- Alternative product movement strategies such as using regional population centers as a hub for further product shipment will impact land use strategies.
- The pressures of the global economy will drive businesses to seek environments where transportation systems allow integrated supply chain strategies to succeed in order to meet the just-in-time expectations of consumers and large commercial, industrial and retail receivers.

⁵ Minnesota Department of Transportation (September 2009). *Western Minnesota Regional Freight Study*. St. Paul.

In order to remain a competitive place for manufacturers, transportation, in addition to a skilled and ready workforce, will be key as each step of the supply chain involves the movement of goods as a product makes its way to market. Another key feature to this sector in Carver County is that most freight-generating employers are relatively small and spread out throughout the county as exemplified in table 8, which lists the five largest manufacturing employers throughout the County, all of which employ fewer than 200 workers.

Table 8: Largest Manufacturers in Carver

<i>Company</i>	<i>Employees</i>	<i>Type of Business</i>	<i>Location</i>
<i>Exlar Corporation</i>	184	Electrical Equipment	Chanhausen
<i>ProTech Interconnect Solutions</i>	110	Computer and Electronics	Chaska
<i>PMT Corporation</i>	100	Miscellaneous Products	Chanhausen
<i>Data Metalcraft</i>	100	Fabricated Metal	Chaska
<i>Vector Engineering Co.</i>	52	Sheet Metal, Stamping, Machined Parts	Chaska

Source: Made in Minnesota Director, MN DEED, March 2015

Turning back to manufacturing, firms in this industry place an emphasis on pavement condition and speed in regards to transportation infrastructure. In interviews conducted by MnDOT with manufacturers in Western Minnesota, respondents said rough roads could increase costs by inflicting damage on materials, trucks and live cargo.⁶ Those same interviewees also pressed MnDOT to expand several highways to four lanes to increase economic expansion and potentially improve safety. Carver County conducted a survey of freight generators and found similar results, with firms citing high average speeds, smooth pavement, wide shoulders and turn lanes at major intersections as top needs.⁷

Manufacturing and other freight-generating industries can provide a strong base for further development of Carver's service sector. Recent research stresses the importance manufacturers in particular place on transportation, but there is still more to learn. MnDOT has historically had less information regarding the supply chains of manufacturing firms in Minnesota compared to those for agricultural products.⁸ This is a key information gap for Carver County as it works to remain economically competitive.

⁶ MnDOT; Humphrey School of Public Affairs, & UMN-Extension. (February 2014). *Understanding District 8 Manufacturers' Perspectives on Transportation: An Industry Cluster Approach*.

⁷ SRF Consulting Group, Inc. (September 2014). *Freight Interviews: TH 212 Corridor Access Management, Safety, and Phasing Plan*.

⁸ MnDOT; Humphrey School of Public Affairs, & UMN-Extension. (February 2014). *Understanding District 8 Manufacturers' Perspectives on Transportation: An Industry Cluster Approach*.

Future Challenges

This report has established that Carver County is a rapidly expanding community that will see an increased number of vehicles on the road in the coming decades. This growth is likely to increase the role the county's road system plays in connecting workers to jobs whether that is county residents that travel elsewhere in the metro for work, or travel from outside Carver to get to their jobs. In addition to this key function, the transportation network will continue to serve as key asset to the county's strong freight-related sectors including manufacturing.

As Carver County considers how to adapt to these changing conditions, it must also be aware of future challenges that could limit the county's ability to adjust. This section looks at the limits of the Metropolitan Council's vision for Carver County in the *Thrive MSP 2040 Transportation Policy Plan*, the fiscal constraints the county faces as it advocates for investment in expanding TH 212, and the critical feedback provided by county stakeholders.

Thrive MSP 2040

The *2015 System Statement for Carver County* issued by the Metropolitan Council is a document summarizing the impacts of *Thrive MSP 2040* on Carver County and outlining the planning areas Carver County needs to address when creating its comprehensive plan. The overarching message in *Thrive MSP 2040* to Carver County in regards to transportation is that funding will be allocated for maintenance and preservation of the current roadway network only. This is an acknowledgement that region-wide congestion cannot be greatly reduced, and therefore resources will support alternatives versus highway expansion projects. Representatives from MnDOT similarly confirmed that highway projects will concentrate on maintenance and preservation given the lack of funding for highway capacity expansion projects.

Carver County has responded to this by pursuing alternative funding sources, such as MnDOT's Corridors of Commerce, a competitive grant program providing aid for highway corridors demonstrating the need for expansion in order to support economic growth. As a result, Carver County's vision for an expanded 212 is not included. Instead the primary opportunities for Carver County to align its transportation plan with the *Thrive MSP 2040 Transportation Policy Plan* fall within bicycle network planning and freight planning. Increasing emphasis is being focused on these two areas due to their growing importance.

Carver County should consider creating a completely connected network of trails and bicycle infrastructure. Carver County is currently connected to the Twin Cities regional bicycle network through the Luce Line and Dakota Rail trails. Opportunities exist to integrate bicycle infrastructure when redoing or repaving highways in order to link into the greater regional network. For example, when Carver County Highway 10 was reconstructed north of Waconia, the project lacked integrating comfortable bicycle infrastructure between the Waconia and the Dakota Rail trail. Given the frequency of highway reconstruction projects, it may be years

before a link between the Dakota Rail Trail and Waconia is established. Due to this report's focus on trunk highway and freight planning, bicycle planning is not discussed further.

Freight planning is an area the Metropolitan Council encourages counties and communities to actively evaluate in order to maintain or increase the health of freight networks and facilities and facilitate economic development. The Metropolitan Council acknowledges in the *Thrive MSP 2040 Transportation Policy Plan* that trucks are the primary methods of shipping goods throughout the Twin Cities, greater Minnesota, and the entire nation and will remain the predominate mode. This presents an opportunity for the county, which has already illustrated in this report, plays a vital role as the gateway to the Twin Cities region.

Fiscal Climate

As Carver County continues to seek funding for the expansion of TH 212, it will face a daunting fiscal challenge. Transportation investment in Minnesota is projected to remain constrained in the coming decades without significant changes to current policy. Declining revenues, increasing costs, and aging infrastructure has shifted focus away from new projects and expansions to maintaining the current network. The gloomier outlook for federal and state funding has put more emphasis on providing local governments in Minnesota additional options for generating their own revenues. This section provides an overview of these fiscal constraints while offering a more detailed look at several local options for revenue.

The Highway Trust Fund (HTF) is the federal government's primary source of transportation funding and accounts for approximately one-quarter of all highway and mass transit spending across the country.⁹ The HTF is funded primarily by the federal excise tax on motor fuels, but with Americans driving less and cars becoming more fuel efficient, the HTF has recently been in a near constant state of flux as Congress continually passes temporary measures to stave off the fund's insolvency. The recently authorized FAST Act provides some temporary stability by providing dedicated funding until 2020. However, the FAST Act did nothing to create a more sustainable source of revenue for the HTF and it is anticipated that once the law expires, the HTF will again fall into insolvency.¹⁰

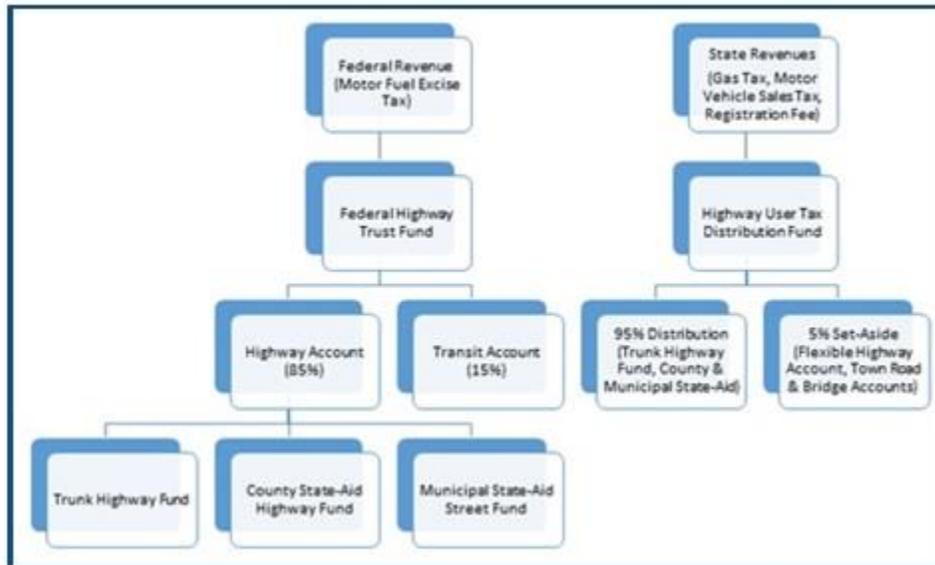
The FAST Act largely maintains current program structures and funding shares, but is meant to increase long-term certainty for state and local governments. The law increases highway funding to Minnesota by five percent in Fiscal Year (FY) 2016 and between two to two and a half percent in the remaining years. As a result federal highway spending in Minnesota will increase from \$629 million in FY 2015 to \$722 million in FY 2020. The act makes significant investments in freight through two programs: a formulaic freight program that will provide Minnesota with \$104 million over the life of the new law, and a competitive grant program for "nationally significant" freight projects that eliminate bottlenecks, improve critical freight movements, and enhance safety. The new formula-based National Highway Freight Program

⁹ <http://www.concordcoalition.org/issue-briefs/2016/0223/fixing-highway-trust-fund>

¹⁰ MnDOT NewsLine newsletter – New Federal Transportation Bill Provides Stability, \$4 Billion to Minnesota

will provide funds for states to invest in freight projects on the National Highway Freight Network.

Figure 7: Federal and State Transportation Revenues



These federal challenges are particularly critical in Minnesota, as most state funding is highly formula-based as is illustrated by figure 7 above. As state revenues continue to decline, it will reduce the opportunities for funding dedicated to expansion projects, as most formula-based funding will be put towards preservation and maintenance efforts. Collectively the Transportation Funding Advisory Board (TFAC), MnDOT through the Minnesota State Highway Investment Plan (MnSHIP), and the Metropolitan Council through the Transportation Policy Plan (TPP) anticipate that the needs of the state and metro region’s current road and bridge system cannot be met under existing revenue streams. Furthermore, in order to remain economically competitive, Minnesota will need significantly more revenue than is currently forecast.

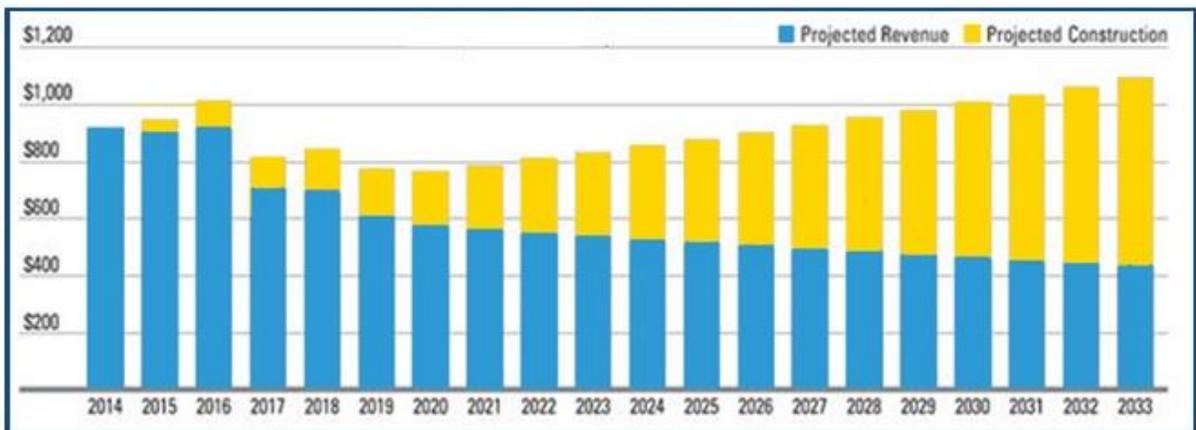
Transportation Finance Advisory Committee (TFAC): Created by Governor Mark Dayton in 2012, TFAC projected that only \$18 billion will be available from 2013-2033 for state highway investment, yet \$23 billion is needed over that period just to maintain the current system. In order to make the system “economically competitive and world-class,” an additional \$10-12 billion is needed. Under the current scenario, TFAC foresees pavement conditions worsening, possibly reaching as high as 25 percent in poor condition. Congestion will also increase with any expansion projects undertaken at the expense of pavement and bridge conditions.

Minnesota State Highway Investment Plan: The current MnSHIP, which will be updated in January 2017, projects \$30.19 billion in need from 2014-2033 and only \$18 billion in

available revenue. Asset preservation accounts for 58.2% of that need, which includes funding to meet the state’s long-term pavement condition targets, replace aging bridges, and maintaining roadside infrastructure such as rest stops. MnSHIP details that while available revenues will continue to grow at a two percent annual rate, but costs will grow at an annual rate of five percent (see Figure 8).

Thrive MSP 2040: The Metropolitan Council uses the work of TFAC as the basis for its projections. It assumes that state highway revenues and federal highway revenues will grow at 1.2% and 1.4% respectively while inflationary pressures on operations and capital spending are estimated at 2.5% annually. Consequently, local governments will have to either increase property taxes or reduce transportation spending levels. Under the Met Council’s current revenue projections MnDOT is able to meet its needs for system operations and capital asset preservation in the first decade but has very limited funding for capital mobility/access projects, but will only have revenues available for asset preservation after 2025.

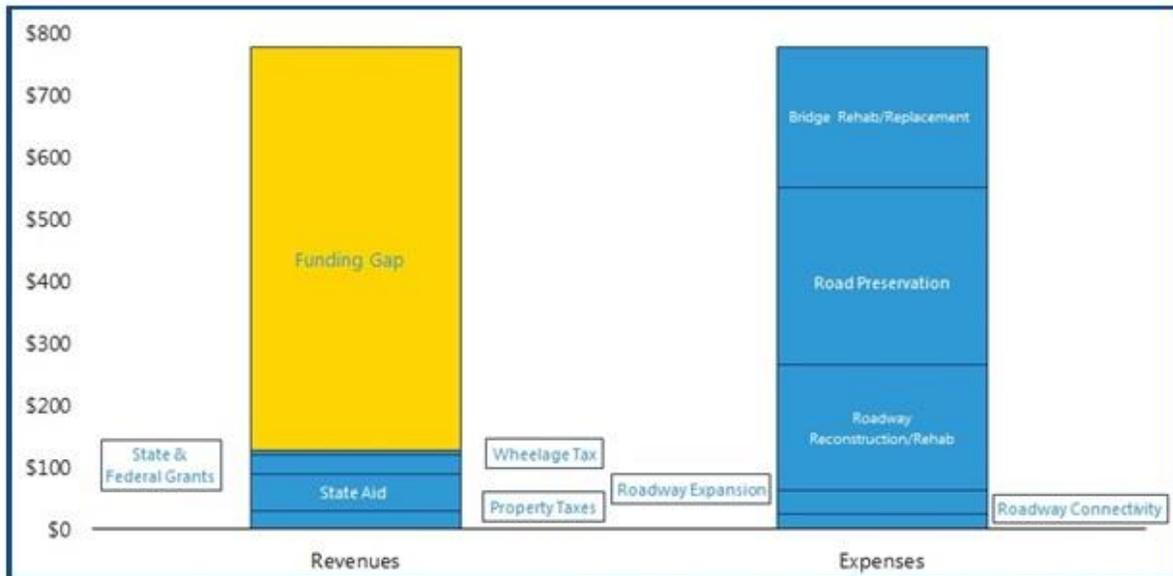
Figure 8: Projected Minnesota Transportation Funding Gap by State Fiscal Year (Millions of \$)



Source: MnDOT

Carver County’s projection from the Transportation Section of the last comprehensive plan also concludes the county is likely to face a significant transportation funding gap. At that time Carver County projected the roadway system would have \$774.8 million in need over 23 years (2008-2030) while anticipated revenues would only total \$125.3 million for a funding gap of \$649.5 million. The funding the county projects would only cover the anticipated costs of road and bridge preservation and rehabilitation. Very little revenue would be available for expansion and improvement projects.

Figure 9: Projected Carver County Funding Gap for 2008-2030 (millions of dollars)



Source: Carver County Roadway Systems Plan

Given this dire scenario, coupled with the fact that increases in federal and/or state transportation funding are likely to only be used on system maintenance, it is important for Carver County to understand the options it has to generate local revenues for transportation investment. Furthermore, with many federal and state grants requiring various levels of local match, increased expenditures by DOT or MnDOT are likely to require Carver County to supplement some percentage of funding. While not all-inclusive, the revenues examined include the property tax, local options sales tax, impact fees, and public-private partnerships.

Given the projections that transportation costs will outpace available federal and state funding, the Met Council has framed the choices available to metro governments as either increasing property taxes or reducing local transportation investment. Various factors constrain the ability for Carver County to generate additional transportation revenue from the property tax. First among them is Minnesota’s Fiscal Disparities Program. This is particularly true for any investments in the trunk highways that run through Carver County. A key reasoning for investments in those roadways is to improve freight traffic through Carver County and spur further growth in freight-related manufacturing businesses, which will expand the county’s commercial and industrial property tax base.

That expansion would be subject to the fiscal disparities program, which requires local units of government in the 7-county metro area to annually contribute 40 percent of the growth in its commercial and industrial tax base since 1971 (the year the Metropolitan Fiscal Disparities Program was enacted) to the “area wide tax base.” This value is distributed across the metro region per a statutory formula that attempts to assist counties with less robust tax bases and

limit the benefits of subsidy competition between local jurisdictions.¹¹ In 2015 Carver County contributed nearly \$8.5 million in commercial and industrial property tax capacity, while only receiving \$4.1 million back.¹² Future growth in the county's commercial and industrial base will only further exacerbate that gap. This does not mean Carver County should limit efforts to increase the commercial and industrial base, but that using property tax dollars to do so might not be the most cost-effective option.

Carver County's current effective property tax rates also limit the ability to place heavier reliance on the tax. In 2015 Carver's effective property tax rate of 1.26% was in line with the other Twin Cities suburban counties, so any increase in taxes could put Carver at a competitive disadvantage.¹³ The per capita property tax levy in Carver County (\$467.52) is also the second highest among metro counties, although this is also a reflection of the higher median home values and family incomes in Carver County.¹⁴ However, Carver has also taken pride in keeping property tax rates flat for 11 consecutive years, and an increase could come up against stiff opposition.

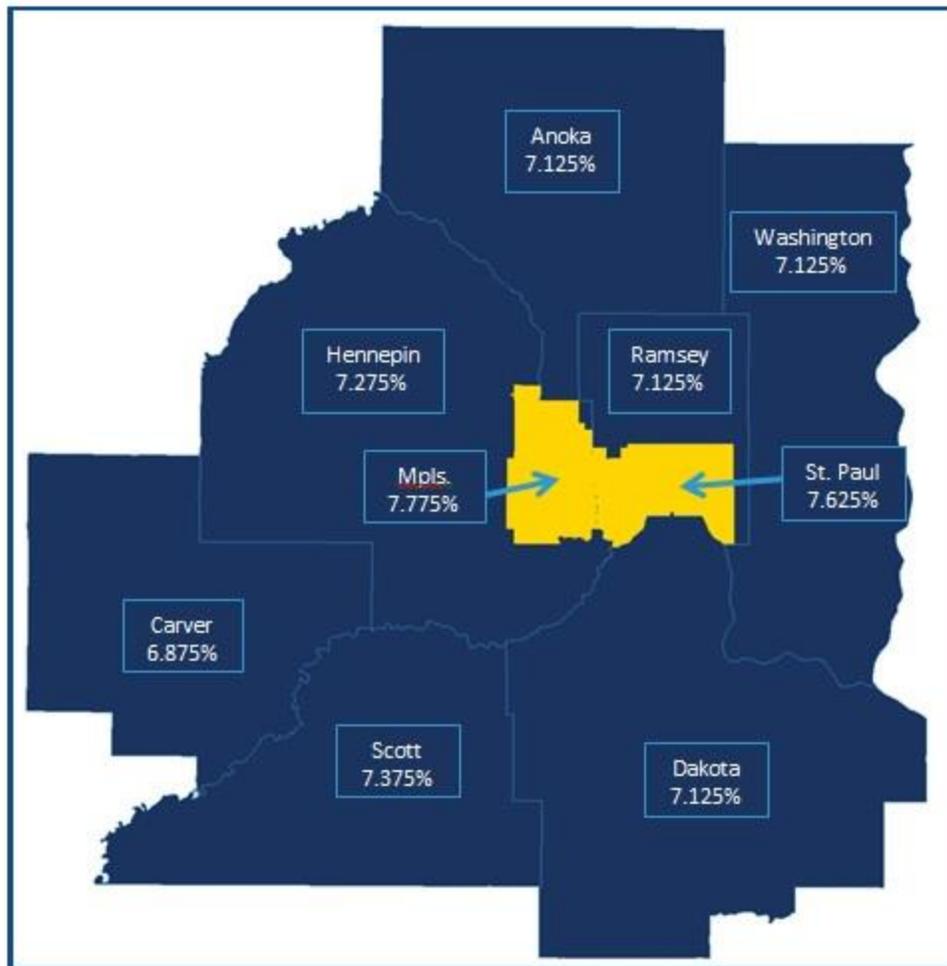
¹¹ Minnesota House Research - The Fiscal Disparities Program: Commercial-Industrial Tax-Base Sharing

¹² 2015 Carver County Taxpayer Services Guide - <http://www.co.carver.mn.us/departments/property-financial-services/taxpayer-services/taxpayer-services-guide>

¹³ This effective property tax rate is for a residential homestead at the median market value.

¹⁴ <https://www.auditor.state.mn.us/Search/CountySearch.aspx>

Figure 10: Sales and Use Tax by Jurisdiction



Another taxing tool available to Carver County is the local option sales tax counties can implement to fund transportation projects. Unlike Carver County's effective property tax rate, Carver's sales tax rate is the lowest in the metro as all other counties have implemented some form of a local option sales tax.¹⁵ As Figure 10 demonstrates, Carver County could implement a local option sales tax of 0.50% and remain in line with metro-wide sales tax rates.

It is possible that a local option sales tax will fall more equitably on the range of individuals utilizing Carver's infrastructure on a daily basis than the property tax. While it is safe to assume that Carver County residents consume the majority of the public services the county provides, they are not the only ones that benefit from Carver's public spending. Visitors to Carver County, whether traveling in for work each day or for a leisure opportunity are beneficiaries of the county's transportation infrastructure.

¹⁵ Anoka, Dakota, Hennepin, Ramsey, and Washington counties are members of the County Transit Improvement Board and Scott County has instituted a local option sales tax of 0.50%.

Nearly 20,000 individuals travel into Carver for work each day. These workers could be eating at local restaurants during the lunch hour and possibly even running various errands before leaving the county to return home. In addition to workers making the daily commute, Carver County serves as a leisure and hospitality hub for some, generating over \$155 million in taxable tourism sales in 2014. This economic activity includes money spent on the performing arts, recreation, accommodation, and most significantly food service. All told Carver County generated over \$692 million in taxable transactions in 2014, netting Minnesota \$48.9 million in sales tax revenue.¹⁶ A local option sales tax presents an opportunity for Carver County to capture some of the revenue it is helping generate to improve local infrastructure and do so in a way that distributes the burden to residents and visitors alike.

The use of development impact fees has grown substantially over the past 30 years. While use has been concentrated across rapidly growing areas in the West, nearly half of counties and approximately 60% of cities in the United States utilize some version of these fees. Development impact fees are one-time fees local governments use to manage development and pay for the infrastructure, such as local roads and sewer and water connections, required of new developments whether a new subdivision or new industrial park. The rationale behind these fees is to make new development “pay its way” for the public services it requires.¹⁷ While these fees are paid by developers, the assumption is those costs are passed along to homeowners and businesses.

However, if Carver County sought to use development impact fees as a financing tool for transportation projects, the county would run into several limitations. The first of those is the legal ambiguity around local government’s authority to assess development impact fees in Minnesota. Minnesota statutes neither explicitly prohibit nor authorize development impact fees, and it is not clear what authority county governments might have. The closest example of a development impact fee in Minnesota was a road access fee in Eagan that was struck down by the Minnesota Supreme Court in 1978 as it was found to be a tax, not an impact fee.¹⁸ Given the legal ambiguities around the authority of local government to charge such fees and whether counties in particular can assess these charges, Carver County would be best served by focusing attention on other alternative sources of local financing.

Interest in public private partnerships (PPP) has grown in recent years as transportation needs have started to outpace available revenues. In Minnesota efforts at using PPPs have fallen short of expectations and without dramatic changes are likely to be used rarely. In fact MnDOT’s first attempt at using a PPP for a large-scale project was a tolling project on TH 212 in 1995 called TranSmart. The law authorizing PPPs in Minnesota allows any community

¹⁶ 2014 Annual Minnesota Sales Tax Statistics – Explore MN website link

¹⁷ Adams, John S., et al. "Development impact fees for Minnesota? a review of principles and national practices." (1999).

¹⁸ Olson, Floyd B., Daniel J. Greensweig, and Scott J. Riggs. "Future of Impact Fees in Minnesota, The." *Wm. Mitchell L. Rev.* 24 (1998): 635.

impacted by a project to exercise veto authority, which is what Eden Prairie did to the TranSmart project. Since then, the use of PPPs for large-scale transportation projects has failed to take hold in Minnesota.

PPPs are also held back because of misconceptions regarding their use. While PPPs lack a formal definition and can be created in a wide variety of ways, such arrangements are popular in Europe primarily as a financing tool in-lieu of the tax-exempt bond structure that exists in the United States.¹⁹ This structure typically involves a private entity allocating the funds necessary to complete a project in exchange for payback of that financing, often through a fee or toll arrangement. Lease agreements are another PPP example that provides government with an immediate infusion of cash, and in exchange the private entity receives the long-term proceeds of a project.

Despite these setbacks and limitations, PPPs could still play a role in the future of transportation finance in Minnesota and is a tool that could still hold potential for Carver County. One recent successful PPP was the reconstruction of the interchange at US 169 and Bren Road in Minnetonka. The project leveraged \$10 million through a "trip fee" structure levied on new development in the adjacent business park. In California a container fee on rail shipments was used to fund construction of a rail "expressway" that connects the national rail system to the Port of Los Angeles and Port of Long Beach. These fees were used to secure bonding necessary for half the project's cost.²⁰ While this is an example of rail infrastructure, the concept of collecting revenues specifically from freight generators could prove a model for Carver County. Use of PPPs could also further unlock innovative financing opportunities such as federal tax-exempt Private Activity Bonds, which can be used to fund highway infrastructure and freight transfer facilities.²¹

Investing in Highways

The development implications of investing in the proposed expansion of TH 212 to a continuous four-lane route from east to west can be difficult to pinpoint based on prior research, as the analysis of transportation investment is mixed. Studies looking at land values or firm productivity find significant positive benefits to highway expansion. However, studies analyzing job or income growth often find little to no net benefit. What this research does not reveal, are the impacts of neglecting to maintain the existing transportation infrastructure.

For local governments, property values are a critical economic and fiscal concern. Recent research on transportation investment by Minnesota counties finds positive impacts in county-level investments in the trunk highway system.²² An additional dollar of trunk highway

¹⁹ Zhao, Zhirong Jerry, Emily Saunoi-Sandgren, and Avital Barnea. "Advancing public interest in public-private partnership of state highway development." (2011).

²⁰ http://www.tsacarriers.org/fs_alameda.html

²¹ https://www.fhwa.dot.gov/ipd/finance/tools_programs/federal_debt_financing/private_activity_bonds/

²² Zhao, Zhirong Jerry. "Transportation Investment and Economic Development in Minnesota Counties." (2015).

investment will result in \$0.87 worth of growth in estimated market value within that county, which is growth that would have otherwise not occurred. However, given that trunk highways have broad regional impacts, the growth in value regionally per dollar of investment is \$2.88. This suggests that not only do local investments in transportation result in increased land values, but trunk highway investments have large regional spillover effects beyond the county where the investment took place. This finding is consistent with the view of trunk highways as regional corridors with interrelated economic effects.

Research on the impact transportation spending has on job or income growth typically reveal little or insignificant impact. A review of the cumulative impact of the incremental expansion of a 30-mile stretch of TH 371 between Little Falls and Brainerd, MN; completion of a four-lane bypass along US 71 around Willmar, MN; and the expansion of US of Virginia, MN found no change in economic growth.²³ Analysis of highway capacity expansions also found insignificant short-term and long-term economic performance.²⁴ Research measuring the overall economic impact new highways have on the economic performance of rural counties also found no significant impact.²⁵ However, this analysis did reveal that new interstates can increase earnings in the manufacturing industry from two to ten percent.

The finding that manufacturing earnings increase is important for considering how to measure the impacts of highway investment in Carver County, as the firm-level effects reveal a slightly more significant result. National data from 1950-1989 shows that a one dollar investment in non-local roads results in 24 cents of productivity savings for firms.²⁶ The analysis of higher trucking speeds, a presumed benefit of highway capacity, has been shown to translate to significant savings for trucking companies, although that savings is offset to some degree by increased maintenance and other related costs.²⁷

While these results offer a framework for weighing the costs and benefits of making TH 212 a continuous four-lane highway through Carver County, they cannot be directly applied. The effects of any transportation investment are tied into the unique conditions of where that investment is being made. The TH 212 expansion is also a transportation project unique from the analysis above, which focuses either on spending broadly or something as dramatic as a

²³ Chandra, Amitabh, and Eric Thompson. "Does public infrastructure affect economic activity?: Evidence from the rural interstate highway system." *Regional Science and Urban Economics* 30.4 (2000): 457-490.

²⁴ Jiwattanakulpaisarn, Piyapong, Robert B. Noland, and Daniel J. Graham. "Marginal productivity of expanding highway capacity." *Journal of Transport Economics and Policy* (2012): 333-347.

²⁵ Chandra, Amitabh, and Eric Thompson. "Does public infrastructure affect economic activity?: Evidence from the rural interstate highway system." *Regional Science and Urban Economics* 30.4 (2000): 457-490.

²⁶ U.S. Department of Transportation. "Productivity and the Highway Network: A Look at the Economic Benefits to Industry from Investment in the Highway Network." (1996).

²⁷ Keeler, Theodore E.. "Public Policy and Productivity in the Trucking Industry: Some Evidence on the Effects of Highway Investments, Deregulation, and the 55 MPH Speed". *The American Economic Review* 76.2 (1986): 153-158.

new interstate. Finally, none of this research provides a framework for considering or estimating the implications of not completing the TH 212 project.

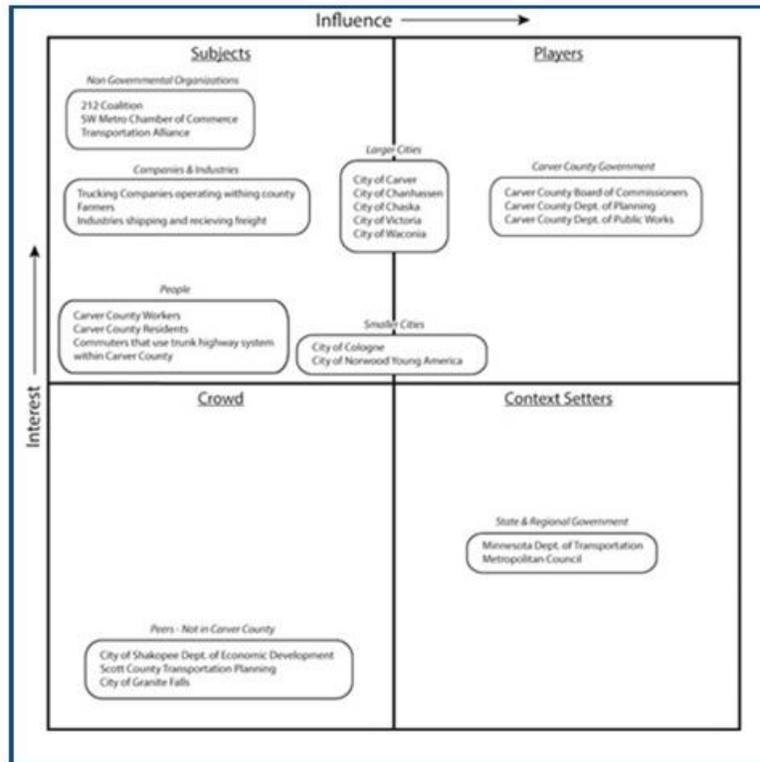
Stakeholder Analysis

In addition to the research and analysis included in this report, stakeholder input provides further context to Carver County's existing conditions. A series of interviews were conducted with various county stakeholders on the topic of transportation and economic development in Carver County. The information contained below lays out a broad view of stakeholders through SWOT analysis and summarizes the results of those discussions. Included in Appendix I is more detailed information on who was interviewed, what questions were asked, and additional details on the responses.

Identification of Stakeholders

Figure 11 identifies the relative position of 24 key stakeholder groups in relation to their influence and interest in Carver County's trunk highway network. The Metropolitan Council ranks highest on the influence hierarchy by mandating the planning requirements for Carver County's future transportation system but have little interest due to the size of the Council's jurisdiction. The most influential stakeholders include Carver County's Board of Commissioners, Department of Planning, Public Works Department, and the various city governments. These governmental bodies have essential planning authority over the future of the local transportation system. Non-governmental organizations, companies & industrial enterprises, and people have high interest, but lack planning authority.

Figure 11: Carver County Stakeholders



Out of the stakeholder interviews emerged three consistent themes. While stakeholders' visions of economic development can be grouped into several categories, interviewees lacked a cohesive vision for the county. Stakeholders also voiced a desire for greater coordination between the county and city governments, and stressed the importance of improving engagement with Carver County residents.

Interviews revealed that stakeholders define economic development in terms of what it accomplishes rather than expressing a definitive meaning. Stakeholders identified economic development as an enabler and sustainer for the **movement and connections** of goods and people, **growth** of businesses, industries, and population, and the **facilitation of commerce**. Despite these broad themes, the interviews also highlighted a wide variety of views that underscore the lack of a cohesive vision for economic development in Carver County.

Stakeholder interviews revealed several different opinions suggesting Carver County has opportunities to further strengthen coordination with the cities in the county on transportation issues. Such efforts, it was suggested, could help broaden Carver's transportation focus, facilitate more efficient and intentional development, and further leverage the unique assets of the communities in Carver County. Stakeholders also seemed to share the opinion that Carver's focus on the TH 212 expansion project is well-founded.

In addition to the county's interaction with city governments, stakeholders shared a consistent message on the importance of more intentional stakeholder engagement. Stakeholders frequently cite a new found belief that stakeholder engagement was important to better understand their needs and better advise planned actions. Despite a consistent message that stakeholder engagement is critical, interviewees varied in their strategies for engagement and who they considered to be stakeholders.

These interviews not only provided further context for the analysis conducted on Carver County's current conditions, but also helped in formulating the recommendations within this report. Taken as a whole the interviews furthered the view that more intentional policy planning and development can aid Carver County greatly in confronting the challenges that lie ahead in the coming decades.

Existing Conditions Conclusion

Given all the information above, it is possible to identify the county's key strengths, weaknesses, opportunities and threats. As illustrated throughout the existing conditions, the county's key strengths include a robust industrial sector, the county's location in the seven county metropolitan region, and a strong local economy with high incomes and low unemployment. However, the county does face internal weaknesses, which include the lack of a well-defined vision for economic development, and no funding to finance future highway expansion.

These internal features of the county lead to external threats and opportunities. The threats the county must confront include finite resources, the volatility of population projections, and neighbors with employment opportunities that better match those desired of Carver County residents. All of this, however, presents a series of opportunities, which includes a growing population that can maintain the county's strong economic status. Carver also has an opportunity to leverage a regional community in Western Minnesota with a stake in the freight conditions in Carver County. .

Keeping the county from seizing the opportunities and achieving the vision detailed in the next portion of this report, is a lack of intentionality in addressing economic development, transportation funding, and freight planning issues.

Specifically, the recommendations contained at the end of this report will address the following issues that have been identified in the analysis of current conditions:

1. Carver County lacks a unified vision of economic development. Carver County's passive approach to economic development has created noticeable employment inefficiencies overtime demonstrated through the LODES analysis – the majority of residents work outside of Carver County requiring people living outside the county to fulfill the jobs within Carver County.

2. Fiscal resources hinder Carver County's progress towards increasing the capacity and safety of its primary trunk highway network as transportation financing is constrained at the federal, state, and local levels of government.
3. Long-term transportation planning visioning for Carver County is noticeably absent from the Metropolitan Council's *Thrive MSP 2040 Transportation Policy Plan*. However, freight planning is an area of emphasis within the Metropolitan Council's plan and therefore Carver County needs to focus on freight planning in light of its role as a regional gateway between South Dakota and western Minnesota and the Minneapolis – St. Paul metropolitan area.

Vision

In 2035, Carver County's transportation system will prioritize safety while efficiently transporting goods and workers into and out of Carver, while connecting residents and welcoming visitors. This transportation system will serve as the focal point for a deliberate market-driven economic development strategy that spurs development and welcomes population growth while preserving Carver's rural assets.

In December 2035

On a snowy morning in December 2035, Steven of NYA in eastern Carver County is trudging through the chilly weather to his new job as a coil winder at a local electronic parts manufacturer in Chaska. Like many jobs in Carver County, Steven's position pays more than similar positions in other locations in the Twin Cities Metro and even throughout Minnesota. Steven previously worked at a manufacturer in St. Paul where his commute along TH 212 to and from his hometown took over an hour each way. Particularly on a day like today with snow whipping about, Steven is happy to make the 20 minute commute to his new employer; avoiding the bottlenecks he once encountered and enjoying the opportunity to live, work and play in Carver County. The manufacturer he works for recently expanded and cited the safety and efficiency of TH 212 as the reason for locating in Chaska along with Carver County's already strong manufacturing base and easy freight access to regional, national and global markets.

Over in Chanhassen, Jordan, a trucker, is transporting a variety of agricultural goods into the Twin Cities. Jordan's route begins at the western edge of Minnesota near Granite Falls and runs along TH 212. The routes Jordan runs connects farmers all along the TH 212 corridor, from dairy farmers in Carver County to corn growers in Yellow Medicine County, and provides them access to the Twin Cities market and the metro's multimodal facilities. The majority of products Jordan transports are destined for market and the expansion of TH 212 to a continuous four-lane route has shaved precious time off his route, even on a day like today as he grips the wheel a little tighter while starting down wind and snow. Just as important, Carver County's investments in maintaining the quality of TH 212 and other key freight routes have ensured Jordan's shipments arrive in tact, increasing productivity and mitigating wasted items.

Walking out of her home in Cologne, Cheryl starts her car and begins wiping that morning's snow from her windshield. She is headed to Waconia where she is an executive at a newly located corporate campus. Cheryl and her husband both grew up in small towns in southwestern Minnesota and after beginning their careers in the Twin Cities were looking for an opportunity to return to their small-town roots. With a variety of unique main street destinations, pristine lakes, vast parks and plenty of farmland, Carver County allowed Cheryl and her husband to continue their dynamic careers while escaping to the countryside each evening. Because of Carver County's increased efforts to align residents with job opportunities in Carver County, Cheryl has been able to live and work in Carver County.

To the east, Mary, the City of Carver Administrator, is preparing a downtown space for a monthly meeting with the economic development staff at Carver County. These meetings provide Mary an opportunity to bring together community stakeholders such as city staff, businesses and residents to engage with Carver County staff on economic development issues impacting the city. These forums are providing Carver County's diverse communities an opportunity to work together in a more intentional fashion on determining the direction of economic development. Mary appreciates the regular dialogue as it connects her city to the

county in a continual and dynamic fashion, giving her city an opportunity to drive the direction of economic development throughout the county.

In 2035, Carver County will be...

1. A hub for manufacturing

While manufacturing has continued to decline across Minnesota, Carver County has stood out for serving as a leader in manufacturing and maintaining the industry's ability to offer quality employment opportunities for residents. Carver County has capitalized on the emphasis technology has placed on logistics and moving goods to market quickly and efficiently by continuing to invest in freight. This has included taking proactive steps to implement performance metrics and learn more about the businesses generating freight along the 212 corridor. Carver's efforts to invest local funds in maintaining its transportation network protected the roadways from deterioration at a time when funding from the federal government, MnDOT, and the Metropolitan Council has been significantly reduced. Expansion of TH 212 to a continuous four-lane route along with upgrades and improvements on TH 212, MH 5, and MH7 have made the TH 212 corridor a top choice for shipping commercial and agricultural products. Easy access to Port Cargill in Savage from TH 212 and MH 41 have further strengthened Carver County's standing as a point of entry to markets beyond the Twin Cities.

2. A Place to Live, Work, and Play

While improved freight access has benefited Carver County's strong manufacturing base, more intentional economic development strategies have created quality job opportunities for the thousands of Carver County residents who once traveled outside the county each morning. This has prevented additional stress on Carver's roadway network and provided for opportunities to invest in enhancing the livability of Carver County. Because Carver County and the communities within have worked together to manage its explosive growth to protect rural assets, Carver has remained a destination for people looking for small-town charm with easy access to a thriving urban region. Carver County has partnered with various communities to ensure the highway system can both transport people and goods across Carver while also allowing Carver County's downtowns to serve as key centers for small businesses such as independent retailers and restaurants that attract residents and tourists alike. The transportation network also connects residents to a variety of agri-tourism and other unique destinations such as the Chanhassen Dinner Theatre, Minnesota Landscape Arboretum, Lowry Nature Center, Chaska Curling Facility, and the 18-hole championship golf course, Deer Run. A more robust trail network connecting Carver's highways has also served as a key amenity attracting new residents.

3. An engaged community

The unique aspects of each of Carver County's communities have been preserved and leveraged in part through greater collaboration with county staff. Through dedicated economic development staff, Carver is continually engaging city staff, businesses and residents in a process of economic development goal setting that is intentional, collaborative, and empowers local communities to leverage Carver County assets to accomplish their own unique goals. This centralized, yet diffuse economic development strategy has strengthened relationships between the county and its communities and utilized Carver's transportation infrastructure, instead of traditional business incentives, to spur development, create jobs, and attract new residents. This engagement has also helped Carver County develop its own fiscal autonomy by employing sources of local government revenue to maintain and enhance the transportation network. Instead of waiting for national and statewide financial resources to increase, Carver County was proactive in developing alternative funding strategies that have been used to invest in transportation. These investments were made possible because of a comprehensive engagement campaign that allowed for robust citizen input, set clear parameters for the use of local tax revenues, and attracted regional partnerships. While other counties have had to rely on the ebb and flow of revenues from other public institutions, Carver County has assumed control of its own destiny and is a thriving, dynamic and unique region as a result.

Action Plan

The final section of this report lays out specific recommendations the county can implement to help achieve the vision that has been presented. These recommendations are presented in three categories, which include economic development, local resources, and freight planning. Each section begins with a goal statement that provides a short overview of the outcome intended by the recommendations included within. That is followed by an opportunities section which provides an overview of how the analysis from the existing conditions section lays the groundwork for the recommendation. The opportunities section is followed by a strategies and recommendation section that details specific policies.

Goal:

Create a more comprehensive approach to economic development in Carver County that establishes a shared vision among the county's diverse communities while preserving Carver's political attitudes toward economic development.

Opportunities:

Carver County has an eclectic mix of industrial centers, bedroom communities, and small rural towns and Carver's workforce includes a high concentration of high-paying occupations. The county also has tourism assets that generate hundreds of millions of dollars in economic development and is positioned as place with small town charm close to the urban amenities of the Twin Cities. These strengths give Carver County the opportunity to have a unique edge in the region.

From stakeholder interviews and discussions with Carver County staff, it is clear Carver County and its various cities lack a cohesive vision for what economic development should be. Some of this is the natural tension of a county with a diverse range of cities. The needs and wants of residents in Chanhassen will look very different from those in Victoria. Despite this, many stakeholders voiced a desire for a more collaborative approach from their county government. This presents Carver an opportunity to bring communities together in crafting a vision for economic development and taking a leadership role in implementing that vision.

Strategy/Recommendation:

Carver County should create a position(s) within the administration of the Public works department which can be dedicated to overseeing Economic Development efforts as it relates to the Carver County transportation system. The mission of this office or individual would be to:

- 1. Work with residents, city governments, and other stakeholders throughout the county to establish a shared vision for economic development in the county.*

Through the solicitation of input from all of Carver County's stakeholders, those responsible for maintaining and planning the future of the transportation network will be able to leverage the input of a number of voices. By soliciting a larger number of voices Carver County will be able to achieve an in-depth understanding of effects on all aspects of Carver County life, from Chanhassen to NYA. In order to achieve this better insight, Carver County staff must utilize a multi-phased engagement plan that meets stakeholders where they are. In an effort to better meet stakeholders where they are Carver County can introduce a number of techniques to collect and compare input from across its' stakeholders.

Given both the depth and breadth of Carver County's stakeholders, the county may want to consider creating a task force which can be comprised of representatives from across stakeholder groups, which can amplify the reach of dedicated staff time by individually attending meetings across the region. Additionally, this task force can meet directly with individual stakeholders, holding informal happy hours, and a *road show* of public meetings to collect input and disseminate data. Paired with an active participation on social media, this task force can leverage the proliferation of smart phone and internet usage of underrepresented classes of the population, such as youth and minorities.

The initial engagement through this plan should introduce stakeholders to outcomes of previous planning processes while also introducing stakeholders to diagnostic information on Carver County to provide context for current planning and develop a better understanding of the socio-economic and environmental conditions within Carver. (A significant part of this initial engagement process should include the asset mapping process further described in Economic Development Strategy 2.) Through this enhanced engagement process Carver County will be able to develop a unified vision (which may or may not be similar to the vision proposed by our team.) It is imperative that this vision empowers all Carver County stakeholders to ensure a unified understanding and definition of economic development. This will create a symbiotic relationship among stakeholders ensuring their actions are meant to complement each other, as opposed to the current dynamic where various stakeholders are pursuing varying visions; sometimes at the expense of others.

2. Integrate city officials in Carver County into everyday decision-making about economic development.

In addition to the regional effects of Carver County's transportation network there exists a significant impact on the jurisdictions within Carver, such as the cities and townships. In order to operate more effectively, Carver County staff must also work in partnership with local jurisdictions to ensure an explicit coordination of visioning with local planning processes while also ensuring city/town buy-in on County initiatives. This partnership may require a more dedicated effort to create a unified and comprehensive vision for Carver County's transportation network which will result in a more sustainable initiative (earning back the extra time allotted for visioning.)²⁸ In addition to the advantage of planning with local governments, Carver County and regional stakeholders will be able to gain a better understanding of the current assets that exist throughout the county through the insights of the leaders closest to the ground. This better understanding of assets helps stakeholders identify Carver County's strategic advantages.

To begin the process of community asset mapping, stakeholders must be asked to list the positive attributes of Carver; followed by a list of information they would provide to new visitors about Carver County. To better understand the processes enabling development to

²⁸ Choo 2014, Defining Problems Fast and Slow

continue stakeholders should be asked how they know what Carver has to add to a project followed by what actions they take to ensure that a project can leverage others already underway (avoid starting from scratch.) Finally, Stakeholders should be asked to identify lists of Carver County assets by one of the following categories:

- *Financial Assets*
- *Human Assets*
- *Environmental Assets*
- *Social Assets*
- *Cultural Assets*
- *Innovation Assets*

At the end of this process the stakeholders and Carver County Staff responsible for developing the transportation plan will be well equipped to develop appropriate goals and objectives for the future sustainable growth of Carver County.²⁹

3. Establish an inclusive definition of Economic Development.

In order to successfully implement the vision, stakeholders must define robust and proactive goals/objectives that meet the needs identified by prior conversations with all stakeholders. These goals/objectives may include items such as:

- *Increasing job opportunities for Carver County residents working outside the county.*
- *Increasing the safety of Carver County roads*
- *Minimize negative impacts by the transportation system on businesses*
- *Increasing factors of livability throughout Carver County*

In addition to creation of goals/objectives to serve as the basis for improvement of Carver County's Transportation network; these defined goals must include trackable metrics which can be monitored by all members of the community. These metrics can then be reported back through an online dashboard similar to the one created by Greater MSP for tracking regional economic development indicators³⁰ as well as during regular public meetings. This trackability will ensure the public participation and planning processes are sustainable over the long term by ensuring the promotion of processes and allowing for documentation, evaluation, and celebration by all parties involved.

²⁹ Kretzmann, J. & McKnight, J. (1993). Building communities from the inside out : a path toward finding and mobilizing a community's assets. Evanston, Ill. Chicago, IL: The Asset-Based Community Development Institute, Institute for Policy Research, Northwestern University Distributed by ACTA Publications.

³⁰ GreaterMSP's metrix tracking can be found at: <http://www.greatersp.org/regional-indicators/regional-indicators-dashboard/>

Through the promotion of the processes, Carver County staff will increase the level of community buy-in and therefore engagement with the plan created, increasing the likelihood of implementation of group generated goals and objectives. This process also provides for an evaluation of the progress in implementing the plan. This evaluation will allow stakeholders to hold Carver accountable to the vision, while also encouraging them to assist in making the goals of that vision a reality. Once goals are accomplished all parties will be further enticed to tout Carver County's successes, and ensure more attention and regional support while building a foundation for the next round of planning and visioning.

4. Create an Economic Development Plan that considers not only the needs of Carver County, but looks for regional opportunities.

The Carver County transportation network is utilized by residents, governments, and businesses both within and outside of Carver's borders. It is also important to remember that this network is only a part of larger regional, statewide, and national networks. Additionally, the actions of other groups outside of Carver County's borders heavily affect the success and failure of Carver County goals. As such, it is important that the future of Carver County's transportation network planning process includes the engagement of a representative group of organizations and partners including regional players to ensure a coordinated effort with Carver County's neighbors.

To this end, staff must extend their engagement plan to include increased participation and engagement of regional organizations such as MnDOT, DEED, the US EDA³¹, Greater MSP, and the Transportation Alliance among many others. Beyond the engagement of regional stakeholders Carver County may also partner with its neighboring counties and cities to ensure buy-in and support of the vision through this process. By integrating regional and neighboring partners, Carver County will develop goals that are not positioned to create a competitive relationship with its peers, but will better identify its unique assets to create the strongest and most sustainable vision possible.

5. Serve as a resource for Carver County employers and those looking to locate in the county.

Stakeholders reinforced the lack of appetite Carver County residents and elected officials have for traditional business incentives. However, even without direct investment the county has room to take a much more intentional approach to supporting private investments. By creating a more business supportive atmosphere Carver County can better leverage its transportation network to increase the level of investment, number of jobs, and general goodwill entering Carver. These initiatives should include closer working

³¹ It is important to note that the U.S. Economic Development Administration provides seed funding directly to counties for economic planning processes such as the one proposed by this report. More information on how to apply for this funding can be located at <https://www.eda.gov/how-to-apply/>

relationships with organizations such as the Carver County Community Development Agency and the Southwest Initiative Foundation to guide their business assistance programs. Such an *Open for Business* initiative can also explore how other regions have implemented innovative economic development strategies that can be replicated in Carver County.

One of the first regions Carver County should look to is New York City (NYC). Although NYC is very different from Carver, as the home of the *Open for Business* philosophy, the county can look to the experiences of former Mayor Michael Bloomberg's administration to re-identify its organizational purpose as serving its customers. The effort in NYC included development of a 311 call center which provided a simple and central point of contact for all interaction with the City government. Although the public works department does not need to create a 311 line they should take the lesson of the importance of lowering the barriers for businesses and local units of government to easily understand the ways in which Carver can support them. This will lower the level of duplicate work performed by cities and ensure Carver County is maximizing its roles as a partner in the success of its cities and will encourage private investment through the reduction in time and energy dedicated to bureaucratic endeavors.

A Minnesota-based example includes the Minnesota Business First Stop Initiative, which works to streamline the development process for complex business startups, expansions or relocations.³² If such a development includes financing, licensing, permitting, and regulatory issues that overlap multiple state agencies, a business can seek out the services of this initiative, which puts the business or prospective business in touch with all the relevant agencies at once. This provides the business an opportunity to quickly interact with the necessary state agencies, but also requires the relevant agencies to collaborate up-front.

Minnesota Business First Stop streamlines the development process for complex business startups, expansions or relocations that involve financing, licensing, permitting, and regulatory issues that overlap multiple state agencies.

Goal:

Explore opportunities to utilize local revenue that can be used for completing the four-lane expansion of TH 212 and other improvements along the corridor.

Opportunities:

Carver County is the only county in the metro that has not adopted a local option sales tax, giving it room to remain competitive even with an increase. Furthermore, unlike heavier reliance on the property tax, portions of the sales tax can be exported to consumers outside

³² <http://mn.gov/deed/business/help/first-stop/>

Carver County, whether the nearly 20,000 individuals that travel into Carver for work each day or the tourists already generating over \$155 million in sales tax revenue each year. Furthermore, whether TH 212 or any other road throughout the county, more state and federal transportation funding is requiring local matches. With this in mind, when it comes to TH 212, Carver County has a unique opportunity to work across an entire corridor to generate the resources necessary to make key improvements along the route a reality.

Strategy/Recommendations:

Carver County should consider adopting a local option sales tax and formalizing the Southwest Corridor Transportation Coalitions' Highway 212 Coalition through use of a joint powers agreement.

1. Local Options Sales Tax

Under the Greater Minnesota transportation sales and use tax authority, Carver County can choose to implement up to a half-percent sales tax.³³ In order to implement the local option sales tax the county has to take several steps:³⁴

- 1. The county must pass a resolution proposing the tax and stating the proposed rate, the intended use of the estimated revenues, and the sunset date for the tax.*
- 2. Voters in the county must then approve the proposed tax at the following general election.*
- 3. If voters approve the tax, special legislation must be passed by the Minnesota Legislature authorizing the local tax in the county.*
- 4. Then Carver County must formally approve an ordinance implementing the new sales tax.*

Implementing a sales tax of a half-percent would generate \$3.46 million annually by adding 50 cents to a \$100 purchase. Not surprisingly, 61% of that revenue would be generated by retail, accommodation, and food service activity within Carver County. Furthermore, while Carver residents might justifiably have concerns about imposition of a new tax, despite the sales tax being a regressive tax, it is much less regressive than further reliance on local property taxes.³⁵ Local option sales taxes have also proven to be reliable sources of revenue for Minnesota counties as data from the Minnesota Department of Revenue show steady growth in most jurisdictions that have adopted the charge. However, Carver County should consider using the regional economic impacts of TH 212 to develop a Joint Powers Agreement that can leverage the assets of the entire corridor.

³³ Minn. Stat. 297A.993

³⁴ House Research Publication on Local Option Sales Taxes

³⁵ Minnesota Department of Revenue 2016 Tax Incidence Report.

2. Joint Powers Agreement

Research shows that investment in highways has greater benefit to the region served by that highway than any individual county making an investment in the highway. The expansion of TH 212 to a continuous four-lane route throughout Carver County will have benefits to communities throughout the entire corridor. As a result, in conjunction with adopting a local option sales tax, Carver County should pursue using Minnesota's joint powers authority to create a TH 212 corridor financing district that could provide funding for the four-lane expansion in Carver County as well as other improvements throughout the corridor. This new entity could also serve functions beyond being a fiscal agent, by establishing a more formal authority to the current 212 Coalition.

The new entity would encompass the following counties that are along the corridor as it moves across Western Minnesota:

- *Carver County*
- *McLeod County*
- *Sibley County*
- *Renville County*
- *Chippewa County*
- *Yellow Medicine County*
- *Lac Qui Parle County*

Joint powers agreements provide local units of government wide latitude to create an agreement that works best for them. There are basic elements that must be followed, beginning with the creation of a joint powers entity to perform services on behalf of the members and a joint board with representation from each unit of local government that is part of the agreement.³⁶ Those members could include not only the counties, but also individual cities. Communities such as Chanhassen, NYA, and Granite Falls might be interested in having a formal role in shaping decisions regarding the corridor. The agreement also must spell out who has to contribute to the entity's shared resources, have a defined purpose, and create methods it will use to accomplish that purpose. In this example those methods could include pooling resources from the Greater Minnesota Local Option Sales Tax to fund TH 212 transportation projects.

Such agreements have been used for various transit projects around the metro region including Southwest LRT Community Works, the Counties Transit Improvement Board, the Gateway Corridor Commission (Gold Line BRT), and the Red Rock Corridor Commission (BRT). These entities acknowledge the regional nature of transit projects, which is the same view that must be taken when thinking about a highway project, particularly TH 212. These entities provide examples of how a new TH 212 Coalition could be structured, but their variation reveals the ability to heavily customize to meet local needs.

³⁶ Minn. Stat. 471.59

None of the other TH 212 counties have implemented a local option sales tax, leaving open the possibility that a new regional entity could collect the revenue generated by each county levying a local option sales tax. Table 9 uses 2014 data to provide a snapshot of what certain tax rates would generate among the seven counties. These estimates assume Carver County would implement the maximum half-percent sales tax rate and act as the lead for the joint powers entity. The scenarios in the table below assume it would not be reasonable to ask the other counties to enact the full half-percent tax, but all of that should be up for discussion. The option would also exist for each county to have a slightly different rate if that was desired.

Table 9: TH 212 Joint Powers Entity Projected Sales Tax Revenues

<i>County</i>	<i>1/20% Tax</i>	<i>1/10% Tax</i>	<i>2/10% Tax</i>
<i>Carver*</i>	\$3,460,903		
<i>McLeod</i>	\$167,878	\$335,756	\$671,512
<i>Sibley</i>	\$26,670	\$53,340	\$106,681
<i>Renville</i>	\$36,337	\$72,674	\$145,349
<i>Chippewa</i>	\$55,279	\$110,558	\$221,117
<i>Yellow Medicine</i>	\$23,615	\$47,230	\$94,459
<i>Lac Qui Parle</i>	\$14,541	\$29,083	\$58,166
TOTAL	\$3,785,223	\$4,109,544	\$4,758,187

*Assumes Local option ½% sales tax implemented in all scenarios

Source: Authors Projections using 2014 Minnesota Department of Revenue sales tax data

A local sales tax would also not have to be required of each county. If the corridor establishes a level of funding to generate, it could then just assign each county a portion of that amount and leave it to the county to find the best way to meet that obligation. How much a county pays could be based for example on how much freight traffic it generates or other indicators of the stress it places on TH 212.

The joint powers entity envisioned here would not only further formalize this regional view beyond the existing Highway 212 Coalition, but would put direction in the hands of Carver County while providing additional resources to further leverage Carver’s investment. A regional strategy that brings together both urban and rural communities in a formalized way might also prove uniquely competitive when applying for state and federal funding.

A joint powers agreement might also allow the coalition to organize in a fashion similar to the Highway 14 Partnership in southern Minnesota.³⁷ While the Partnership is not a joint powers agreement, it is a highly organized non-profit entity with a board and sponsors of various levels (e.g. Platinum, Gold, and Silver) representing local governments, elected

³⁷ <http://ushighway14.com/>

officials, nonprofit organizations and private businesses. The Partnership is active in lobbying state legislators as it has organized a “Fix It” lobby day at the Capitol and retains the services of Flaherty-Hood, P.A., a well-known public affairs firm in St. Paul that represents the Greater Minnesota Partnership among other organizations.

While all of this would involve a great deal of coordination and some time as each county moved through the process of adopting the local sales tax, it is an option that might be more likely than outside sources of revenue (federal or state) becoming available for the TH 212 project.

3. *Engaging the Community*

Any discussion about taxes will be fraught with political sensitivity and will require a concerted outreach effort on Carver County’s part. Valuable lessons can be learned from Scott County’s implementation of a Local Options Sales Tax. Measure R in Los Angeles County in California also offers examples of what a robust outreach campaign might look like in Carver County.

In 2015 Scott County implemented a half-percent local option sales tax for transportation investment. Despite having started conversation nearly a year before, a planned vote by the county board to authorize the tax in April 2015 was delayed over resident frustration and confusion.³⁸ The county spent the time following that meeting to reach out to residents and make tweaks to the original plan. The most significant of these changes was to sunset the increase to December 31, 2022 or whenever projects have been completed.

Scott County also laid out a variety of details on how the additional dollars would be spent. This included money for road projects and transit projects. For each of these categories the County laid out technical criteria for selecting projects such as “grade separations that have been identified in accepted corridor studies.”³⁹

In Los Angeles County, a sales tax for transit projects took effect in July 2009 after being approved by voters. The half-percent tax, known as Measure R, includes a webpage with an extensive amount of information on how revenues will be used.⁴⁰ This includes an interactive project tracker where a user can see what projects are being funded, where those projects are located and what phase the project is in. The County also commissioned a retail study that helps illustrate who is impacted by the tax and what sectors will drive revenue collection. The study resembles the retail impact analyses the University of

³⁸ Nelson, Emma. “Scott County Sales Tax Vote Delayed amid Resident Confusion.” *Star Tribune*. Star Tribune Company, 28 Apr. 2015. Web. 17 Apr. 2016.

³⁹ Scott County Transportation Tax Implementation Plan.

⁴⁰ <https://www.metro.net/projects/measurer/>

Minnesota-Extension offers for rural counties and could potentially be requested by the new corridor entity.⁴¹

Goal:

Align the Transportation Chapter of the Carver County 2040 Comprehensive Plan with the *Thrive MSP 2040 Transportation Policy Plan*.

Opportunities:

The passing of MAP-21 in 2012 created new emphasis on freight movement planning. Freight planning is becoming increasingly important due to trucks and heavy commercial vehicles carrying approximately 70% of the United States' freight tonnage according to the Federal Highway Administration. Consumer and manufactured goods are transported to, from, and through every community and it is evident that planning for the movement of goods is important for the future as population and resulting demand for goods increases. Other variables influencing transit time price are the type of product and the amount of delay. Fewer delays creating efficient goods movement reduces the costs for businesses and increases their responsiveness to changes in markets and consumer demand.⁴²

The Metropolitan Council acknowledges in the *Thrive MSP 2040 Transportation Policy Plan* that trucks are the primary methods of shipping goods throughout the Twin Cities, greater Minnesota, and the entire nation. The *Thrive MSP 2040 Transportation Policy Plan* also indicates that plans for expanding TH 212 between Norwood Young America and Carver are not immediately scheduled between 2014 and 2024 under the Metropolitan Council's two revenue scenarios. However, highway improvement projects after 2024 are undetermined. Carver County, stakeholders, and corridor studies have continually expressed and supported the need to increase the capacity of TH 212 from two to four lanes.

The signing of the FAST Act (Fixing America's Surface Transportation Act) in 2015 created a source of grants for the funding of highway improvement projects that improve freight movement. U.S. Highway 212 is eligible for funding if sufficient evidence is provided for its improvement. In order to enhance the justification of TH 212 improvements, Carver County and the TH 212 corridor need to use and increase the base of local empirical evidence.

Strategy/Recommendations:

1. *Track freight movements over the existing trunk highway system using freight performance metrics*

⁴¹ <http://www.extension.umn.edu/community/retail/>

⁴² Federal Highway Administration: Measuring Travel Time in Significant Corridors

Federal policy recommends that states analyze and manage their transportation systems by implementing performance-based metrics which include *Annual Hours of Truck Delay* and the *Truck Reliability Index*. Targets/goals or measures for these metrics have not formally been adopted according to officials at the Metropolitan Council and state departments of transportation are currently waiting for official targets as a result. However, the lack of definitive targets allows Carver County space to set its own performance goals. Carver County should consider being proactive concerning its freight planning through finding suitable freight performance metrics to assess its trunk highway network. Possible data sources are as follows:

Data Source: National Highway System – Travel Time Data Set. The following metrics are outlined in chapter 12 (12.17) of the *Thrive MSP 2040 Transportation Policy Plan*:

Metric: Annual Hours of Truck Delay

Definition: "Travel times above the congestion threshold in units of vehicle-hours for trucks on the Interstate Highway System."

Metric: Truck Reliability Index

Definition: "The ratio of the total truck travel time needed to ensure on-time arrival to the agency-determined threshold travel time (e.g., observed travel time or preferred travel time)."

Data Source: Texas A&M Transportation Institute⁴³

Possible Metrics & Studies:

- Safety studies
- Freeway analysis
- Trade and transportation facilitation
- Multi-modal transport and freight operations

Data Source: CPCS Transcom Ltd.⁴⁴

Possible Metrics & Studies:

- Infrastructure capacity
- Freight traffic analysis and forecasting
- Cost-benefit analysis

⁴³ Texas A&M Transportation Institute. (2015). *Research & Implementation: Freeway Truck Operations*. Retrieved April 18, 2016, from Texas A&M Transportation Institute: <http://tti.tamu.edu/group/randi/groups/houston/>

⁴⁴ CPCS Transcom Limited. (2016). *Integrated Transport Master Planning*. Retrieved April 18, 2016, from CPCS: <http://www.cpcs.ca/en/services/transport/transport-planning/>

- “Assessment of economic impact of transportation infrastructure investment”

Data Source: American Transportation Research Institute (ATRI)⁴⁵

Possible Metrics & Studies:

- Freight congestion
- Trucking safety
- “Origin-destination truck trip models and tables”
- Truck route and highway facility demand
- Reliability of truck movements
- Average speeds
- Travel time

2. Leverage the authority of a Joint Powers Agreement for the TH 212 corridor in order to create a database of freight generators

Trunk highway 212’s regional importance signifies that each county within the TH 212 corridor shares a common responsibility for gathering identical freight generation data in order to further strengthen the justification for improving the two two-lane segments between Norwood Young America and Carver. After the creation of a Joint Powers Agreement for the TH 212 corridor (outlined in the previous strategy titled *Joint Powers Agreement*), the TH 212 joint powers entity may survey the businesses and enterprises that ship and/or receive freight via truck/heavy commercial vehicles in order to create a database of freight generators within the counties and municipal units of government within the corridor.

Data obtained from each freight generator may include:

Location: Address of the business/enterprise shipping and receiving freight via truck. This information allows the county to map the locations of freight generators throughout the corridor.

Frequency: Average truck shipments per day shipped and received. This informs the magnitude of freight origination and termination.

Routing: Record of trunk highways typically used to ship and receive freight in order to understand freight traffic volumes on trunk highways within the corridor.

⁴⁵ American Transportation Research Institute. (2012). *Freight Performance Metrics*. Retrieved April 18, 2016, from ATRI: American Transportation Research Institute: <http://atri-online.org/2012/02/28/freight-performance-measures/>

3. Perform an annual census of freight generators

The freight generator database needs to be updated at regular intervals in order to track the corridor's freight volume performance. Information gathered on an annual basis allows the TH 212 joint powers entity to track freight trends over time. During this process, the TH 212 joint powers entity should actively engage and collect data for all remaining businesses and new businesses that enter the corridor if they are a freight generator.

4. Input data from freight generator database/census into Geographic Information Systems (GIS)

The data obtained for the freight generator database serves a greater function when entered into geographic information system software and displayed through maps. Many counties and municipalities currently possess its GIS capabilities. For example, Carver County has a GIS division as a part of its greater Information Technology department and may host the GIS work carried out by the TH 212 joint powers entity. Thematic maps and other visual materials created in Geographic Information System software can possibly support the justification for improving TH 212 in the two sections between Norwood Young America and Carver by visualizing the direction and volume of trucks and heavy commercial vehicles throughout the corridor. Additionally, these visual materials can support the traffic count data from the Minnesota Department of Transportation that TH 212 experiences high volumes of heavy commercial vehicles relative to general traffic.

Conclusion

Analysis performed through this study suggests that Carver County needs to be more intentional in addressing its economic development, transportation funding, and freight planning issues. Intentionality in the context of Carver County means that future planning is carried out through creating visions and setting obtainable goals for solving problems. Carver County has the ability to address the problems at hand by turning them into opportunities.

Carver County needs to create a cohesive definition of economic development by collaborating with communities and stakeholders and determine a direction for the future. Interviews with various stakeholders within Carver County revealed that Carver County takes a passive approach to economic development despite possessing a large, educated population of residents which needs to go outside of Carver County's borders in order to find suitable employment opportunities. As a result, residents are traveling primarily via personal vehicle on currently uncongested highways in Carver County into the congested trunk highway system in the Twin Cities' core creating an inefficient flow of workers in and out of the county. A stronger economic development initiative will likely attract employers to sites within Carver County and retain workers that would otherwise travel elsewhere.

Thrive MSP 2040 and officials from Carver County, the Metropolitan Council, and MnDOT confirm a lack of transportation funding for the future expansion of trunk highways. Available funds will be used towards the maintenance and preservation of the current system as well as alternative transportation methods to mitigate increased congestion, but not expansion projects. Carver County is especially motivated to complete the two remaining two-lane sections of TH 212 and will need to develop its own funding source through a transparent local option sales tax in conjunction with a joint powers agreement with the counties throughout the TH 212 corridor.

Freight movement over Carver County's trunk highway network, especially TH 212, is vital to freight generators within Carver County, western Minnesota, and South Dakota. Despite the lack of envisioning for Carver County's transportation system, Carver County can be proactive about freight planning by increasing its base of empirical evidence through freight performance metrics. Various sources of data exist such as the National Highway System – Travel Time Data Set, Texas A&M Transportation Institute, CPCS Transcom, and the American Transportation Research Institute. Additionally, the authority of a joint powers agreement can be leveraged to create an internal database of freight generator information which can be expressed visually through maps created in Geographic Information Systems. The resulting body of information can enhance the justification for improving TH 212.

Appendix

Introduction to the Interview Process

In an effort to obtain unbiased input from our stakeholders our team always had, at least two representatives at every interview with one primarily acting as a facilitator and the other as a note taker. In every interview the facilitator asked a pre-determined list of 8 questions that were used for all interviewed stakeholders and which were designed to provide our team with an understanding of the stakeholder's perspective on Economic Development, the Carver County Transportation System (both current and planned), and the current interactions between other stakeholders and various levels of governmental organization; a list of these questions are in Figure 12. Over the course of 11 days our team was able to interview 14 organizations ranging in scope from governmental to non-profit with geographic focuses ranging from the city level to statewide (both within and outside of Carver County's borders); Table 10 provides a schedule of all 15 interviews as well our team's primary contact who worked with our team to schedule the interviews.

Figure 12: Stakeholder Interview Question

1. What is economic development as it relates to transportation?
2. Do you know of any instances where businesses were affected by the transportation system in your community or throughout Carver County? (Positive or Negative)
3. Is traffic an issue for your city/township/jurisdiction?
 - a. Are there any specific highways corridors or locations specifically?
4. Do you see a need to expand or improve the highway system in Carver County?
 - a. If so, which particular trunk highways and why?
 - b. For enhanced freight movement?
5. How important is freight movement to your city/township/jurisdiction and what roles does U.S. Highway 212 play in that movement?
6. What do you see as the biggest challenges and opportunities as your community adjusts its long-term planning to the Met Council's Thrive 2040 and Transportation Policy Plan?
7. What are your community's top assets?
8. Anything else on economic development or Thrive 2040 and the TPP that we should know about?

Table 10: Interviewed Stakeholders

<i>Organization</i>	<i>Primary Point of Contact</i>
<i>City of Shakopee Economic Development</i>	Samantha DiMaggio, Economic Development Coordinator
<i>City of Cologne</i>	Jesse Dickson, City Administrator
<i>SW Metro Chamber of Commerce</i>	Lori Anderson, Executive Director
<i>City of Carver</i>	Brent Mareck, City Administrator
<i>Transportation Alliance and 212 Coalition</i>	Margaret Donahoe, Executive Director
<i>Metropolitan Council</i>	Connie Kozlak, Transportation Planning Manager
<i>City of Norwood Young America</i>	Steve Helget, City Administrator
<i>City of Waconia</i>	Susan Arntz, City Administrator
<i>City of Victoria</i>	Laurie Hokkanen, City Administrator
<i>City of Chanhassen</i>	Kate Aanenson, Community Development Director
<i>City of Chaska</i>	Jeff Dahl, Assistant City Administrator
<i>City of Granite Falls</i>	Mayor Dave Smiglewski
<i>MnDOT</i>	Scott McBride, Engineer, Metro District
<i>Carver County</i>	Randy Maluchnik, Commissioner
<i>Carver County</i>	Dave Hemze, County Administrator