



How to use the bonding bill to get the most Minnesota jobs for the dollar



East Metro
STRONG

Fresh  Energy

 *Faith in Democracy*
ISAIAH

move
MINNESOTA


SAINT PAUL AREA CHAMBER OF COMMERCE

 **SIERRA CLUB**
NORTH STAR CHAPTER

May 13, 2020

Contents

1	Introduction:	
	How to use the bonding bill to get the most Minnesota jobs for the dollar	1
2	What kinds of infrastructure investments produce more jobs? What the data tell us.	2
3	Of these jobs, would more come to Minnesota?	3
3.1	Manufacturing	3
3.2	Construction.....	4
4	Investing to set Minnesota up to succeed now and in the future	5
4.1	Transit gets essential workers to work	6
4.2	Minnesotans want more and better transit	7
4.3	Transit workers and users receive real economic benefits from an efficient system.....	7
5	Conclusion: Invest in projects that produce what we need	8

Cover photos courtesy of:
New Flyer, top
Waldoch, bottom

1 Introduction:

How to use the bonding bill to get the most Minnesota jobs for the dollar

More Minnesotans are out of work than at any time in recent memory. How can we put Minnesotans to work now, and connect them to work as the state recovers?

It would be surprising if all infrastructure investment were ‘created equal’, and the only question was how many projects to fund. In fact, some projects employ more people than others; no one would argue otherwise. And, some projects employ more people here in Minnesota than others.

The bonding bill now being debated by the state legislature will invest hundreds of millions of dollars.

Is there a sound basis on which to select projects which will

1. Employ the most people, quickly?
2. Position Minnesota and its people to succeed in the future?

This report:

- Examines how many jobs per dollar previous investments have produced, focusing on transportation investments, and
- Uses the results to make bonding recommendations.

2 What kinds of infrastructure investments produce more jobs? What the data tell us.

The most detailed broad evaluation of the economic impact of public infrastructure investment, including energy, transportation, school buildings, and water, is by Heintz, Pollin, and Garrett-Peltier.¹ They found:

- For each \$1 billion in infrastructure investment, direct and indirect employment effects range from 9,932 to 17,784 jobs/billion, with transit producing the highest number.
- Within “transportation infrastructure,” transit, and repair of roads and bridges, generate the largest number of jobs.
- Transit generates 5,377 or 31 percent more jobs than new construction of roads and bridges per \$1 billion spent.

Roads and bridge repair generates 2,845 or 16 percent more jobs than new bridge and road construction.

In sum, broad national data tells us that some kinds of infrastructure produce more jobs than others; and which kinds.

We can also draw on the results from the last time the country invested in infrastructure with the explicit goal economic recovery.

The American Reinvestment and Recovery Act (ARRA) gave states \$26 billion in flexible dollars to spend on surface transportation. States were required to report how they spent that money, and how many jobs they created with it. These data created a remarkably detailed answer to the question we are asking here.

The detailed ARRA data tell the same story as the broader data, but with even clearer differences:

- An ARRA dollar spent on public transit produced 70 percent more job hours than an ARRA dollar spent on highways.
- Each mode showed clear differences in jobs produced per dollar:
 - Transit preventive maintenance had by far the highest direct job-per-dollar result, followed by rail car purchase and rehabilitation, operating assistance, infrastructure, and bus purchase and rehabilitation.
 - Road repair produces 16 percent more jobs per dollar than new road construction.

Both sets of results make intuitive sense. Building transit requires a wide variety of jobs, from the heaviest construction to the finest electrical work. It concentrates that work on a small real estate footprint. In contrast, new roadways and expansions almost always require buying right-of-way, which creates very few jobs—and no construction jobs. Road repair falls in between.

¹ Heintz, J., Pollin, R. and Garrett-Peltier, H. (2009). How Infrastructure Investments Support the U.S. Economy: Employment, Productivity and Growth. University of Massachusetts at Amherst.

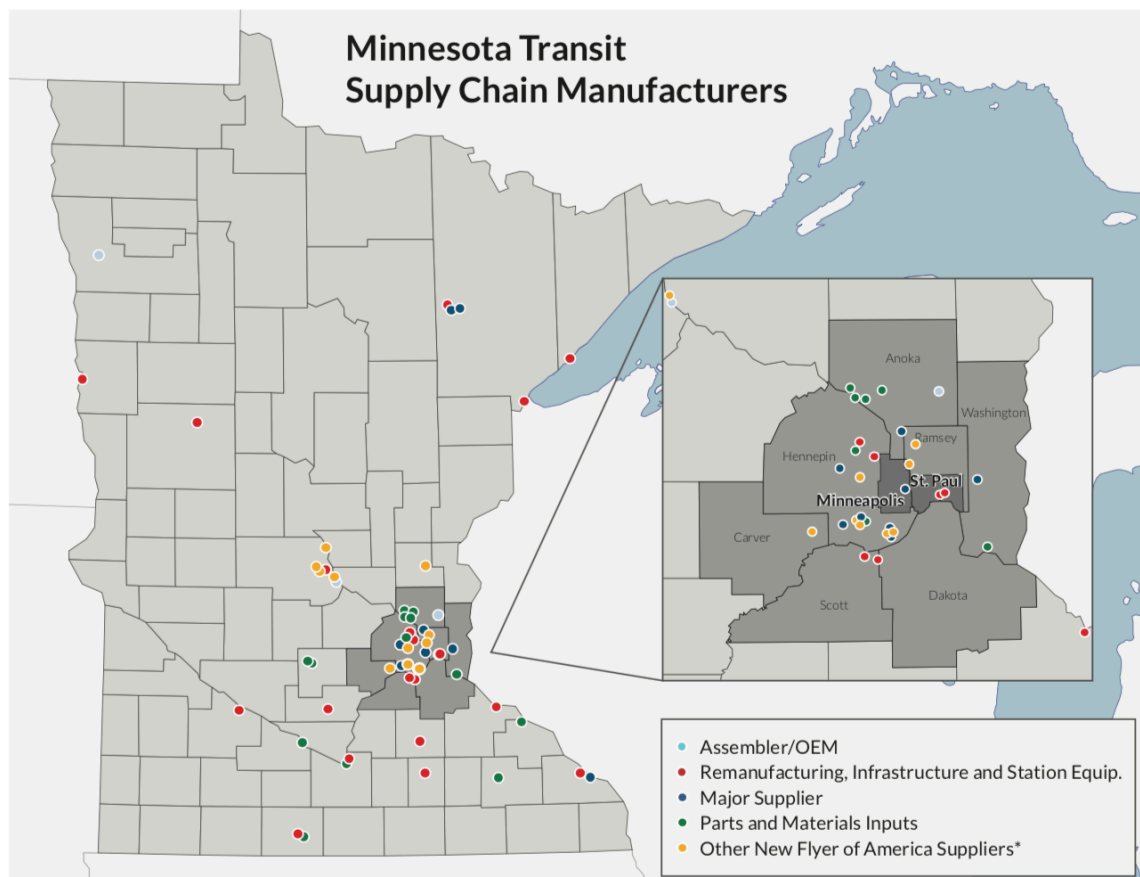
3 Of these jobs, would more come to Minnesota?

Investments create manufacturing jobs (at least in transit) and construction jobs. We have good data on how each work in Minnesota.

3.1 Manufacturing

Previous work assumed a national supply chain, and did not assign jobs to states. Because Minnesota has so many manufacturers in the transit supply chain, clearly many jobs in the “transit” category would be here in Minnesota.

More than 60 employers around Minnesota manufacture transit equipment, from the smaller transit vehicles used by agencies throughout Greater Minnesota, to the buses used by agencies in the MSP metro. This map shows where those 60 manufacturers are located. The vast majority are in Greater Minnesota.



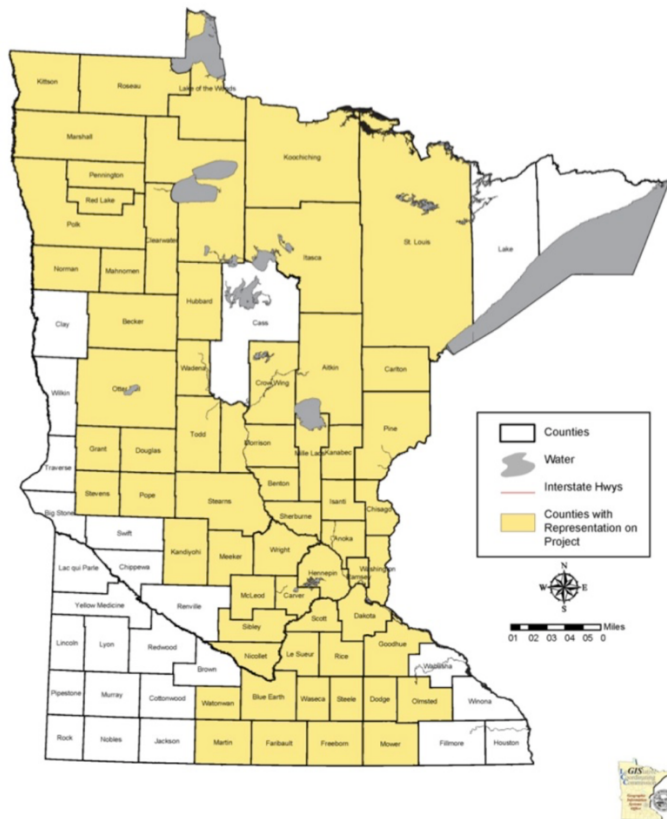
From New Flyer’s industry-leading modern bus assembly facilities in Crookston and St. Cloud that employ over 1,200 people, to smaller businesses like Waldoch’s mobility van production facility in Forest Lake, the supply chain for public transportation in Minnesota is deep and wide, touching many parts of the state and employing thousands who produce everything from HVAC systems, to fuel pumps, communications equipment, fasteners and everything else in between.²

² East Metro Strong and Minneapolis Regional Chamber, “Minnesota Transit Investments Support Minnesota Jobs”, 2019, at bit.ly/2EwspZS.

The buses for Metro Transit's BRT lines are manufactured by New Flyer, so they are buses for Minnesotans, made by Minnesotans, with materials sourced from Minnesota companies.

3.2 Construction

Minnesota's last big rail transit construction projects produced jobs from all over the state. The Green Line (Central Corridor LRT) employed Minnesotans from the following counties:



Source: East Metro Strong, using data from Metro Transit.

4 Investing to set Minnesota up to succeed now and in the future

So far we have answered the question “How can we employ the most people?” with “by investing in transit.”

Next: how can we keep Minnesota running now, and position every Minnesotan for success in the future?

The Minnesota business community has sponsored two large evaluations of the Return on Investment from transit. They both show large, statewide, returns. The most recent, in 2019, found that Minnesota would enjoy a 3-to-1 return on new transit investments.³

The analysis considered six types of direct impacts:

- Travel times and reliability
- Vehicle operating costs
- Shippers and logistics costs
- Emissions
- Safety costs
- Road pavement conditions

Savings in “vehicle operating costs” alone exceeded the cost of building and operating the additional transit lines.

Of course, Minnesota’s response to COVID has included asking people to ride transit only if they are essential workers. And while the press has emphasized the resulting substantial drops in ridership, a lot of Minnesotans continue to use transit to get to essential jobs.

So, one of the reasons we know we will still need good transit post-COVID is that we need it *now*. Metro Transit carries a lot of essential workers, including to health care facilities.

Most of the transit projects proposed for bonding investments would produce higher frequencies and more reliable arrival times. These have always produced better transportation for Minnesotans, and they now produce another benefit: they help minimize the number of people waiting and riding together, allowing the physical distancing that we will need for some time.

³ <https://www.mplschamber.com/roi/>

4.1 Transit gets essential workers to work

During the coronavirus pandemic, states have established a new category of employee: “essential” or “critical” workers.⁴ These workers are generally lower paid, often people of color, and workers in the health and services industries.^{5,6} These essential workers comprise a substantial percentage of transit riders across the country on an average pre-pandemic day. They also face longer journey-to-work times.⁷

Estimates are that:

- 36%, or 2.8 million, of transit riders from around the United States are now classified as “essential workers.”⁸
- 40.3 percent of Minnesota transit riders are essential workers.⁹

Current transit ridership on metro-area transit lines is down significantly thanks to the coronavirus. This sharp ridership decline is in part the result of state stay-at-home orders that have eliminated commutes, in part due to increased unemployment that has reduced or eliminated commutes, and in part due to Metro Transit’s policy of limiting rides to essential rides.

Yet despite ridership declines of about 65%,¹⁰ there are still around 40,000 daily riders on metro area local lines.¹¹ With non-essential workers staying home, these riders are essential workers. These are the workers who have been unable to social distance as quickly as their wealthier non-essential counterparts during this crisis.¹²

It is also likely that many or most of these current riders have no realistic alternative to taking transit: in pre-pandemic times, a full 47% of transit riders did not have viable access to an automobile.¹³ These workers—grocery store workers, healthcare workers, sanitation workers, pharmacy workers, and other essential workers—go to their jobs to, in the words of a Brookings study on essential worker economics, “ensure the rest of the country can maintain some semblance of a typical life during this health crisis.”¹⁴

⁴ See e.g. in Minnesota https://mn.gov/deed/assets/critical-worker-definitions-ACC_tcm1045-425195.pdf.

⁵ Cf. <https://www.ppic.org/blog/essential-workers-and-covid-19/>

⁶ “[Health Commissioner Jan] Malcolm said people of color comprise a significant share of essential workers.” minnesotareformer.com/briefs/minnesota-officials-highlight-disproportionate-impact-of-covid-19-on-people-of-color/

⁷ “It’s About Time: The Transit Time Penalty and Its Racial Implications”, https://d3n8a8pro7vhmx.cloudfront.net/mnnoc/pages/649/attachments/original/1431439958/MN-transit-report_final_web.pdf

⁸ <https://transitcenter.org/2-8-million-u-s-essential-workers-ride-transit-to-their-jobs/>

⁹ Analysis completed by Transit Center for Move Minnesota, March 2020.

¹⁰ <https://www.metrotransit.org/health>

¹¹ There were approximately 115,000 daily riders on local buses in 2019. <https://metro council.org/Council-Meetings/Committees/Transportation-Committee/2020/March-9,-2020/Info-1-2019-4th-Quarter-Ridership-Report-Final.aspx>

¹² See e.g. <https://www.brookings.edu/research/how-to-protect-essential-workers-during-covid-19/> (“many [essential workers] were already at an economic disadvantage... before the crisis hit.”). And: <https://www.nytimes.com/interactive/2020/04/03/us/coronavirus-stay-home-rich-poor.html>.

¹³ <https://www.metrotransit.org/equity-stats>.

¹⁴ <https://www.brookings.edu/research/how-to-protect-essential-workers-during-covid-19/>

4.2 Minnesotans want more and better transit

Minnesotans from both parties and from around the state consistently say they want more and better transportation choices, including transit; and they want their roads to be repaired.

A 2018 statewide poll of Minnesota voters found:

- Nearly three-quarters, 74 percent, of all respondents said they would support the State of Minnesota making additional investments in transit, including buses, trains and light rail. A majority of self-identified voters across parties said they back more spending on transit, including 54 percent of Republicans, 72 percent of independents and 92 percent of Democrats.
- More than three-quarters want to see more choices in Greater Minnesota; 78 percent agreed with the statement that

“We need to expand transportation choices in rural Minnesota to ensure that seniors, workers, and the physically handicapped can get to where they need to go.”
- Seventy-three percent agreed that a good system of public transit would benefit the state’s economy and 70 percent agree that it would benefit their community’s economy.¹⁵

These numbers mirror national support for transit. A March 2020 report found that 77% of Americans believe the United States would benefit from improved public transportation, including 65% support for better transit from Republicans.¹⁶

4.3 Transit workers and users receive real economic benefits from an efficient system

Transit systems do not just employ people and provide economic benefits during construction. Our nation’s transit systems employ just as many people as the airline industry¹⁷ and carry many times the number of daily passengers: to illustrate, the 35 largest city bus systems—no light rail or subways included—carry about three times the passengers of the entire airline industry every day.¹⁸ In Minnesota, Metro Transit employs over 3,000 workers.¹⁹

Our transit systems support household and family stability for thousands of Minnesotans. Transportation is one of the largest household expenses, and is a particular burden for low income Americans.²⁰ This stems from high automobile-related expenses, which average over \$9,000 per year per household.²¹ Transit is a far less expensive mode of transportation than car travel and ownership—an annual unlimited pass for transit can cost from under \$500 to just over \$1,000.

Lowering household expenses by maintaining and improving our transit system provides breathing room for Minnesota families seeking to get back on their feet and will leave money in Minnesotans’ pockets that can support local businesses all over the state that are devastated by this crisis.

¹⁵ business.mplschamber.com/news/details/poll-shows-strong-support-for-transit-investments-majority-would-like-to-use-transit-more

¹⁶ “Voters Want a Better Transit System for America,” Data for Progress, March 2020
filesforprogress.org/memos/gnd-for-transit-polling.pdf

¹⁷ www.bts.gov/transportation-economic-trends/tet-2018-chapter-4-employment

¹⁸ www.apta.com/wp-content/uploads/2019-Q3-Ridership-APTA.pdf; www.faa.gov/air_traffic/by_the_numbers/.

¹⁹ www.metrotransit.org/Data/Sites/1/media/about/facts/2016/2016_factbook_up.pdf

²⁰ www.pewtrusts.org/en/research-and-analysis/issue-briefs/2016/03/household-expenditures-and-income

²¹ newsroom.aaa.com/auto/your-driving-costs/

5 Conclusion: Invest in projects that produce what we need

The current economic downturn has placed an extra emphasis on the economic purposes of bonding investments. In the face of unprecedented unemployment, we should invest in the types of projects that:

1. put as many people to work as quickly as possible, and
2. make the investments that best position the state for long term prosperity.

All the data tell us that doing so means investing public transit.

A variety of other proposed bonding investments fulfill the same criteria as transit. While we don't have the same level of employment data on these types of projects, projects that are labor-intensive and would contribute to local jobs while improving transportation choices for Minnesotans include constructing electric vehicle charging stations and Safe Routes to School projects.

As with transit manufacturing, investing in electric vehicle charging stations yields direct economic benefits of job creation from construction and operation, as well indirect benefits from enabling broader EV purchase and use, which in turn will save more Minnesotan drivers money from both cheaper electricity fuel costs and lower maintenance expenses. Investing in more electric vehicle charging infrastructure would also support the electrification of fleets such as HOURCAR, a local nonprofit carshare, and rideshare companies, and enable drivers of both save money on fuel while providing cleaner rides to those without a personal vehicle.

The following current bonding proposals fulfill these criteria and would both put Minnesotans to work immediately, and position Minnesota for long-term recovery and prosperity.

Transportation and Jobs Package

Bus Rapid Transit	\$75M
Intercity Rail	\$40M
Safe Routes to Schools (SRTS)	\$10M
EV Infrastructure	\$14M
Greater MN Transit	\$10M
TOTAL:	\$149M for Transportation and Jobs