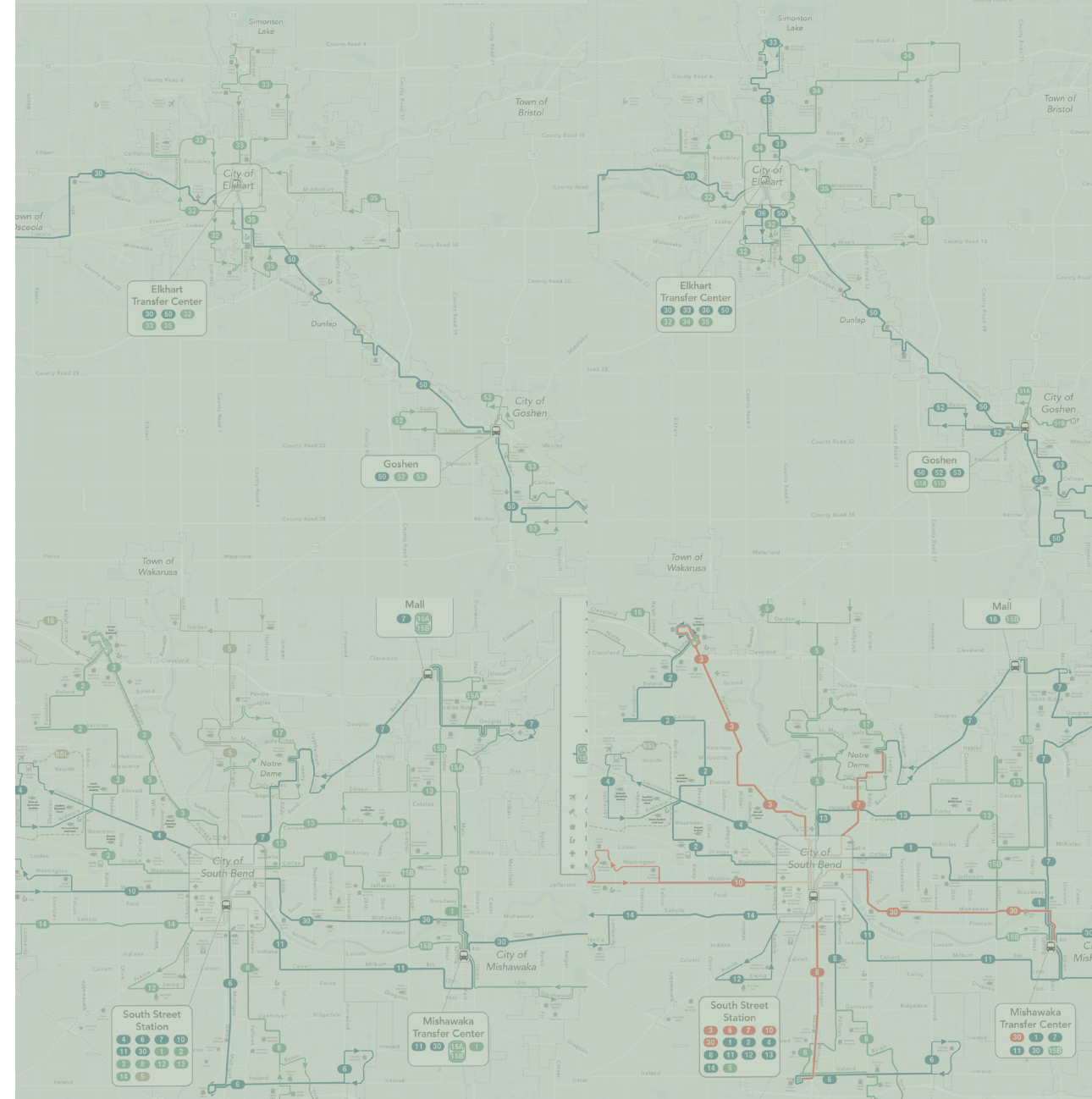




CONNECT

MOVING COMMUNITIES TOGETHER

Draft Recommendations Report



CONNECT Transit Plan: Draft Recommendations Report

DECEMBER 2022



Michiana Area Council of Governments
227 W. Jefferson Blvd.
11th Floor County-City Bldg.
South Bend, IN 46601
www.macog.com



South Bend Public Transportation Corporation (Transpo)
1401 South Lafayette Boulevard
South Bend, IN 46613
www.sbtranspo.com

Report prepared by



KARNERBLUE





TABLE OF CONTENTS

- 1 Introduction..... 1**
 - What is CONNECT? 2
 - What is in this Report? 3
- 2 How Did We Get Here? 4**
 - Steps to Developing the CONNECT Transit Plan 5
 - Key Choices 6
 - Engagement on Key Choices 7
 - Ridership and Coverage Concepts in South Bend & Mishawaka 8
 - Growth and Vision Concepts in South Bend & Mishawaka 9
 - Ridership and Coverage Concepts in Elkhart & Goshen 10
 - Growth and Vision Concepts in Elkhart & Goshen 11
- 3 Draft Recommended Networks South Bend and Mishawaka 12**
 - Existing Transpo Network 13
 - Short-Term Transpo Network 14
 - South Bend and Mishawaka Short-Term Network Changes 15
 - Downtown South Bend Short-Term Network 16
 - Existing Network Span of Service 17
 - Short-Term Network Span of Service 18
 - Additional Funding Transpo Network 19
 - Downtown South Bend Additional Funding Network 20
 - Additional Funding Network Span of Service 21
- 4 South Bend and Mishawaka Outcomes 22**
 - Comparing Outcomes 23
 - Proximity to Transit: South Bend and Mishawaka Residents and Jobs 24
 - Proximity to Transit: South Bend and Mishawaka Populations of Concern 25
 - Freedom, Access, Usefulness 26
 - Change in Access: Short-Term in South Bend and Mishawaka 29

- Change in Access: Additional Funding Network in South Bend and Mishawaka 30
- Access Change: South Bend and Mishawaka 31
- 5 Draft Recommended Networks Elkhart and Goshen 32**
 - Existing Interurban Trolley Network 33
 - Short-Term Interurban Trolley Network 34
 - Downtown Elkhart Short-Term Network 35
 - One-Way Loop: Route 35 Orange Line 36
 - Existing Networks Span of Service 37
 - Short-Term Network Span of Service 38
 - Additional Funding Interurban Trolley Network 39
 - Downtown Elkhart Additional Funding Network 40
 - Additional Funding Network Span of Service 41
- 6 Elkhart and Goshen Outcomes 42**
 - Proximity to Transit: Elkhart and Goshen Residents and Jobs 43
 - Proximity for Elkhart and Goshen Populations of Concern 44
 - Access from Downtown Elkhart 45
 - Change in Access: Short-Term Concept in Elkhart and Goshen 48
 - Change in Access: Additional Funding Concept in Elkhart and Goshen 49
 - Access Change for Different Populations: Elkhart and Goshen 50
- 7 Additional Recommendations and Next Steps 51**
 - Create a Regional Vanpool Program 52
 - Excel Center Area Improvements 53
 - Oaklawn Area Improvements 54
 - Goshen Hospital and Goshen College Area Improvements 55
 - Funding Additional Service for Transpo 56
 - Funding Additional Service for Interurban Trolley 57
 - Next Steps 58

1 Introduction

What is CONNECT?

A Regional Transit Plan

CONNECT: Moving Communities Together is a collaborative regional transit planning initiative to

- evaluate the existing fixed-route transit systems in the region, specifically the Interurban Trolley and Transpo networks;
- consider a range of mobility options to design an improved transit network;
- engage the public, stakeholders, and elected officials in a conversation around trade-offs between different goals and priorities for transit to guide the process; and
- develop a 10-year plan for improvements to the transit network guided by the engagement process and data analysis.

This regional transit plan is **a collaborative effort to decide where bus service should go, when it should run, and how frequently it should operate**. This project is a collaboration between the Michiana Area Council of Governments (MACOG), which administers the Interurban Trolley primarily within Elkhart County, and the South Bend Public Transportation Corporation (Transpo) which operates primarily within South Bend and Mishawaka. This process will engage riders, the general public, and key stakeholders in conversation about how the region’s transit network should serve its residents, businesses, and visitors.

Today’s bus network is the result of decades of cumulative small changes and adjustments. The resulting network may not be meeting the goals and priorities of today’s residents, employers, and institutions. Redesigning the Transpo or Interurban Trolley networks is an opportunity to review existing and potential transit demand and need, and to design a network that meets those demands and needs most effectively. It is also

a key opportunity to carefully think through and weigh competing goals for transit, and whether the level of investment in transit is sufficient to meet the community’s overall goals and priorities.

Redesign does not mean changing every bus route and stop. The key point is that thinking is not constrained by the existing network. Where the analysis suggests that existing service patterns make sense, those elements would be retained. Ultimately, the goal is a network designed for the region of today and tomorrow, not one that’s based solely on the past.

Where have we been?

Transpo and MACOG have completed the first two steps of the plan. In February 2022, a Choices Report was released. It analyzed the existing transit service and raised key choices about trade-offs that must be considered when designing a transit network. The information in the Choices Report was used for public meetings, surveys, and outreach for the “Choices Phase” of the CONNECT Transit Plan.

Based on the responses from the “Choices Phase” the study team developed four Conceptual Alternatives and released the Concepts Report in June 2022. The four concepts showed how different goals and different investment levels led to different outcomes.

The four concepts were the focus of the “Concepts Phase” of engagement in the Summer of 2022. Based on the feedback provided by the public the Transpo and MACOG Board provided policy direction to guide this Draft Recommendations Report.

What is the Purpose of This Report?

This Draft Recommendations Report is the third step in **CONNECT** and it describes the Short-Term and Additional Funding Networks for the four communities in the region, as well as associated recommendations to accompany those networks.

This report serves as a basis of information for public meetings, surveys, and outreach for what we call the **“Draft Plan Phase”** of the **CONNECT** Transit Plan.

Technical and Design Work

Questions to the Public



Figure 1: The process of technical work and public engagement that will guide CONNECT.

What is in this Report?

How to Use This Report

This Draft Recommendations Report shows two recommended networks for the four communities in the region:

- Short-Term Network that shows how to spend the existing budget for transit in each community; and
- Additional Funding Network that shows how a higher level of investment in transit could drastically improve service and help the region meet key goals such as improving access to jobs by transit, encourage higher transit ridership, and support dense and walkable development, among other goals.

We suggest that you take the following steps in reading this report:

- If you haven't already, read and consider the goals for transit described in the Choices Report or Concepts Report.
- **Look at the detailed network maps of each network. Find the places you care about, and notice which routes go by there.** Note the colors of the routes, which represent their frequencies and their spans of service each day and each week. Note where else those routes go.
- **Note that the bus route numbers in these networks may be very different from the existing numbering!** Do not simply look for your route by its current number, or you risk overlooking an improved route near you, with a different number.
- The frequencies and spans of every route in each network are shown in the tables. This is where you can see if the route(s) you would care about run at the times of day, and on the days of the week, when you would want them to, and at what frequencies.

- Remember, do not simply look for your route number—start by looking at the maps to find routes near you, and then reference these tables.
- **If you care about proximity to transit**, there are charts in Chapters 4 and 6 that show how many people and jobs are near any transit service, and near frequent service.
- **For a more vivid demonstration of how the Concepts would affect travel times**, look at the “isochrones” (access areas) for people in Chapters 4 and 6.

Chapters

In Chapter 2 we describe the input received during the Concepts Phase and the policy direction that resulted from the public and stakeholder feedback.

In Chapter 3 we describe the recommended networks for South Bend and Mishawaka.

In Chapter 4 we describe the outcomes for the networks in South Bend and Mishawaka.

In Chapter 5 we describe the recommended networks for Elkhart and Goshen.

In Chapter 6 we describe the outcomes for the networks in Elkhart and Goshen.

In Chapter 7 we describe the next steps for the CONNECT Transit Plan process.

Next Steps

This Draft Recommendations Report represents the third step in a three phase process of thinking about balancing goals and priorities for the region's transit network. This report is the basis for public meetings, surveys, and outreach for the “Draft Plan Phase” of the **CONNECT** Transit Plan.

As of the date this report was released, the following events are planned for public engagement:

- **Virtual Public Meeting**
Monday, December 12, 2022
6:30 PM - 8:00 PM
Via Zoom
<https://us02web.zoom.us/j/84895766637>
+1 646 876 9923
Webinar ID: 848 9576 6637
- **Mishawaka Open House**
Mishawaka-Penn-Harris Public Library
Eisen Room
209 Lincolnway E Highway, Mishawaka
Monday, January 9, 2023
3:30 PM - 5:30 PM
- **South Bend Open House**
St. Joe County Public Library,
Community Learning Center, Ballroom A&B
305 S. Michigan St. South Bend
Tuesday, January 10, 2023
4:00 PM - 6:00 PM

- **Elkhart Open House**
Elkhart Public Library
300 S. Second St. Elkhart
Wednesday, January 11, 2023
4:00 PM - 6:00 PM
- **Goshen Open House**
Goshen Public Library, Auditorium
601 South 5th Street Goshen
Thursday, January 12, 2023
4:00 PM - 6:00 PM

Details on the latest event and the online surveys will be available at

connecttransitplan.com

Figure 2: The timeline of engagement and technical activities for CONNECT.



2 How Did We Get Here?

Steps to Developing the CONNECT Transit Plan

Designing the Draft Recommendations has been a collaborative effort between MACOG, Transpo, the consultant team, riders, the general public, and key stakeholders. Developing a new transit plan for the region must fuse knowledge with values. Knowledge includes data about the community and the expertise of transit professionals. Values come only from the community.

The CONNECT Transit Plan team has been engaging with and surveying the community and decision-makers about the values and goals that transit should prioritize. This engagement has been organized into three rounds: Choices, Concepts, and now Draft Recommendations. These are the steps we have taken to reach the draft plan and to finalize the plan.

Step 1. Analyze the Existing Network

We assessed the performance of existing routes and the network as a whole. By looking at ridership and land use patterns in the region, we learned about how the network is used today and where there is potential for improvement.

Step 2. Engagement on Key Choices

There are different ways to design a transit network based on the community's goals and priorities. In particular, we can concentrate along dense corridors to provide frequent service and achieve high ridership, or we can provide coverage to large areas with low frequency service. We asked the public about these Key Choices in Round 1 of public engagement.

Step 3. Develop Concepts

To illustrate the trade-off between ridership and coverage, we developed two contrasting conceptual networks. These are the opposite ends of a spectrum for what the network could be. We also developed two additional network concepts

that showed what different levels of new funding could achieve for transit in the region. These concepts were the basis of Round 2 of Engagement.

Step 4. Engagement on Concepts

We had an extensive phase of engagement with riders, the general public, and key stakeholders about the key goals of transit. We asked their preference between the conceptual networks to understand what the public wants for the future of Transpo and the Interurban Trolley.

Step 5. Develop the Draft Recommendations

Based on the public feedback, the MACOG and Transpo Boards provided direction on key policy choices, like the balance between ridership and coverage goals. The study team then developed the draft recommended networks in this report based on that guidance. These draft recommendations are now the basis of Round 3 Engagement.

Step 6. Engagement on Draft Recommendations (We Are Here)

Now that we have a draft proposal to review, it is again time to review and discuss with the public and stakeholders. The purpose of this round of engagement is to help people understand how and why previous decisions were made and to gather feedback on specific network and route recommendations.

Step 7: Final Plan

Based on the feedback gathered during Round 3 of Engagement the Transpo and MACOG Boards or local staff may recommend specific changes to the Final Plan. The network recommendations will be adjusted and finalized, and a Final Plan is expected to be adopted by both boards in March 2023.

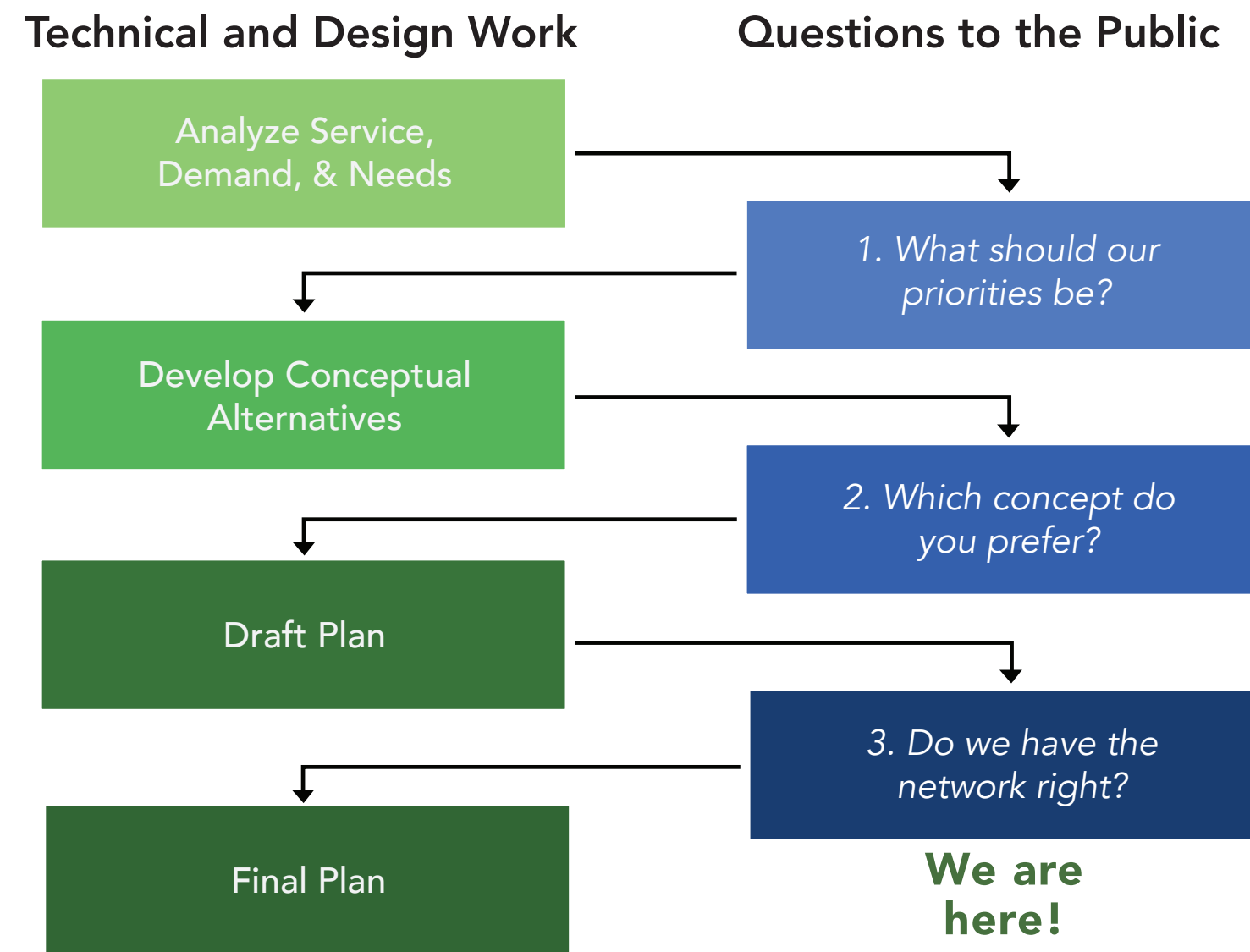


Figure 3: The process of technical work and public engagement that will guide CONNECT.

Key Choices

Transit can serve many different goals. But different people and communities value these goals in different ways. It is not usually possible to serve all of them well all of the time.

Some of these goals are served by high transit ridership. For example, the environmental benefits of transit only arise from many people riding the bus rather than driving. The subsidy per rider

is lower when ridership is maximized. We call such goals Ridership goals because they are achieved in part through high ridership.

Other goals are served by the mere presence of transit. A bus route through a neighborhood provides residents insurance against isolation, even if the route is infrequent, not very useful, and few people ride it. A route may fulfill political or social obligations, for example by getting service close to every taxpayer or into every political district. We call these types of goals Coverage goals because they are achieved in part by covering geographic areas with service, regardless of ridership.

Transpo and Interurban Trolley receive many different comments requesting changes to the service in order to pursue these goals, but it has a limited budget, so doing more of one thing can mean doing less of another. That's why we need to hear what your priorities are.

Transit's Ridership and Coverage Goals Are in Conflict

Ridership and coverage goals conflict. Within a fixed budget, if a transit agency wants to do more of one, it must do less of the other.

Consider the fictional town in Figure 5. The little dots indicate dwellings and commercial buildings and other land uses. The lines indicate roads. As in many towns, most activity is concentrated around a few roads.

A transit agency pursuing only ridership would run all its service on the main streets because many people are nearby, and buses can run direct routes. A high ridership network allocates frequent service to areas with favorable urban development patterns, forming a connected network. This would result in a network like the one on the left.

If the transit agency were pursuing only coverage, it would spread out so that every street had some service, as in the network on the right. All routes would then be infrequent, even on the main roads.

These two scenarios require the same number of buses and cost the same amount to operate but deliver very different outcomes. To run buses at higher frequency on the main roads, neighborhood streets will receive less coverage, and vice versa.

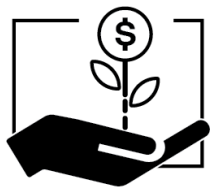
An agency can pursue ridership and provide coverage within the same budget, but not with the same dollar. The more it does of one, the less it does of the other.

These illustrations also show a relationship between coverage and complexity. Networks offering high levels of coverage—a bus running down every street—are naturally more complex.

The choice between maximizing ridership and maximizing coverage is not binary. All transit agencies spend some portion of their budget pursuing each type of goal. A particularly clear way for cities and transit agencies to set a policy balancing ridership and coverage goals is to decide what percentage of their service budget should be spent in pursuit of each.

The "right" balance of ridership and coverage goals is different in every community. It can also change over time as the values and ambitions of a community change.

Figure 4: Possible Goals for Transit



Economic Opportunity

Transit can give businesses access to more workers; workers access to more jobs and supportive services like childcare; and students more access to education and training.



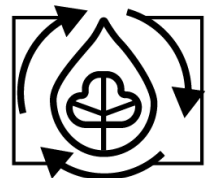
Support Essential Needs

Transit can help meet the needs of people who are economically insecure, with access to essential services and jobs.



Congestion Mitigation

Because buses carry more people than cars, transit use can mitigate traffic congestion by reducing Vehicle Miles Traveled (VMT).



Climate & Environmental Benefits

By reducing VMT, transit use can reduce air pollution and greenhouse gas emissions. Frequent transit can also support compact development and help conserve land.



Health

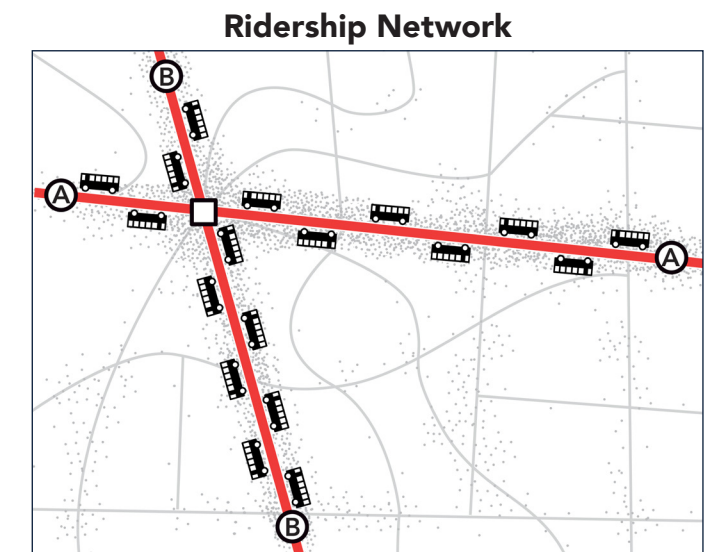
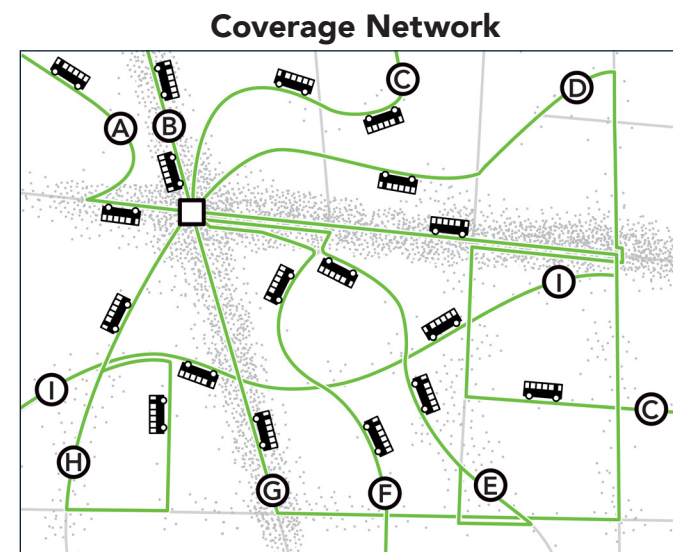
Transit can support physical activity, partly because most riders walk to their bus stop, but also because riders tend to walk more in between their transit trips.



Personal Liberty

By providing people the ability to reach more places than they otherwise would, transit can empower people to make choices and fulfill their individual goals.

Figure 5: The network on the left is prioritizing coverage goals, while the network on the right is prioritizing ridership goals.



Engagement on Key Choices

In the Choices Phase of engagement, the study team asked the public and stakeholders to respond to a couple of key trade-offs in how transit could be designed for the region described in the Choices Report:

- Walking versus Waiting,
- Ridership versus Coverage, and
- How much to invest in transit.

During this first of three phases of engagement, the study team held:

- a stakeholder workshop;
- briefings to the Transpo and MACOG Boards;
- extensive social media outreach through Transpo and MACOG channels;
- digital outreach by email via Transpo and MACOG and via the project website;
- four in-person public meetings;
- a virtual public meeting held via Zoom; and
- in-person surveying by MACOG staff at key transit centers in the region.

A Choices Survey was available online and on paper in both English and Spanish. A total of 556 responses were received to the Choices Survey.

Approximately 57% of respondents preferred or strongly preferred the trip with less waiting, even if it meant more walking. This preference aligns with ridership networks, in which routes would run more frequently on major corridors and walks might be longer.

About 55% preferred or strongly-preferred the high-coverage scenario, while 45% preferred or strongly-preferred the high-ridership scenario. Preferences were weak in this survey, as few respondents indicated they strongly preferred

one scenario over the other.

The overwhelming majority of respondents (87%) said yes to supporting additional funding for more transit service, with 59% stating they would “definitely” support and 28% stating they would “probably” support. 8% of respondents did not support increased funding. Respondents said that the region should prioritize higher-frequency service on weekdays, with providing service to areas not currently served as the second highest priority for new investment in service.

Based on this feedback, the study team developed four concepts to guide the second round of public engagement. These concepts helped show more clearly how the networks in the region would differ based on different levels of emphasis for Ridership or Coverage goals and for different levels of investment.

Figure 6: During the Choices Phase of engagement people from across the region participated in conversations around the Key Choices through the Stakeholder Workshop (top), public meetings (such as in Mishawaka bottom left), and the Community Kickoff Luncheon (bottom right).



Ridership and Coverage Concepts in South Bend & Mishawaka

In Round 2, we released the [Concepts Report](#). This report included four concepts to help the public, stakeholders, and elected officials understand the outcomes of different choices. For each part of the region (South Bend & Mishawaka and Elkhart & Goshen) the Concepts Report presented two cost neutral concepts (Ridership and Coverage) and two higher investment concepts (Growth and Vision).

Ridership or Coverage in South Bend & Mishawaka

The maps in Figure 7 show the Ridership and Coverage Concepts for South Bend & Mishawaka. These maps and the outcomes of each network were presented to the public and a survey gathered feedback on how residents, riders, and stakeholders responded to them.

Figure 8 shows the response to these two concepts from the 290 survey respondents who answered this question. In general, the public slightly preferred the Coverage Concept, with 52% preferring that concept to 48% preferring the Ridership Concept. Preference was stronger, however, for the Coverage Concept, as more than 30% of respondents said they “strongly prefer” the Coverage Concept, compared to just 20% who “strongly prefer” the Ridership Concept.

The Coverage Concept represented a balance of about 50% Ridership goals and 50% Coverage goal in the split of resources across the network. The Existing Network represents about a 60/40 split in resources and the Ridership Concept represents about an 80/20 split in resources. Based on the public feedback, **the Transpo Board in their September 19, 2022 meeting, endorsed a 60/40 split in the recommendation for the Short-Term Network for South Bend & Mishawaka.**

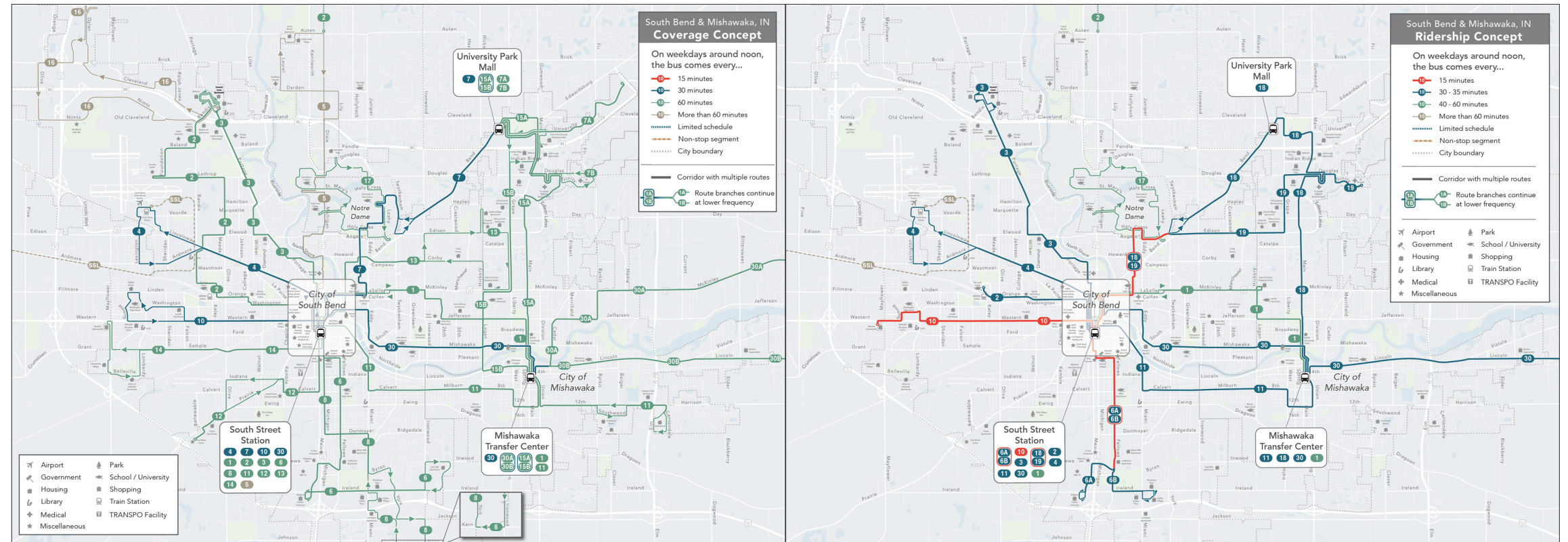


Figure 7: The Ridership and Coverage Concepts in South Bend & Mishawaka showed the contrast of different priorities.

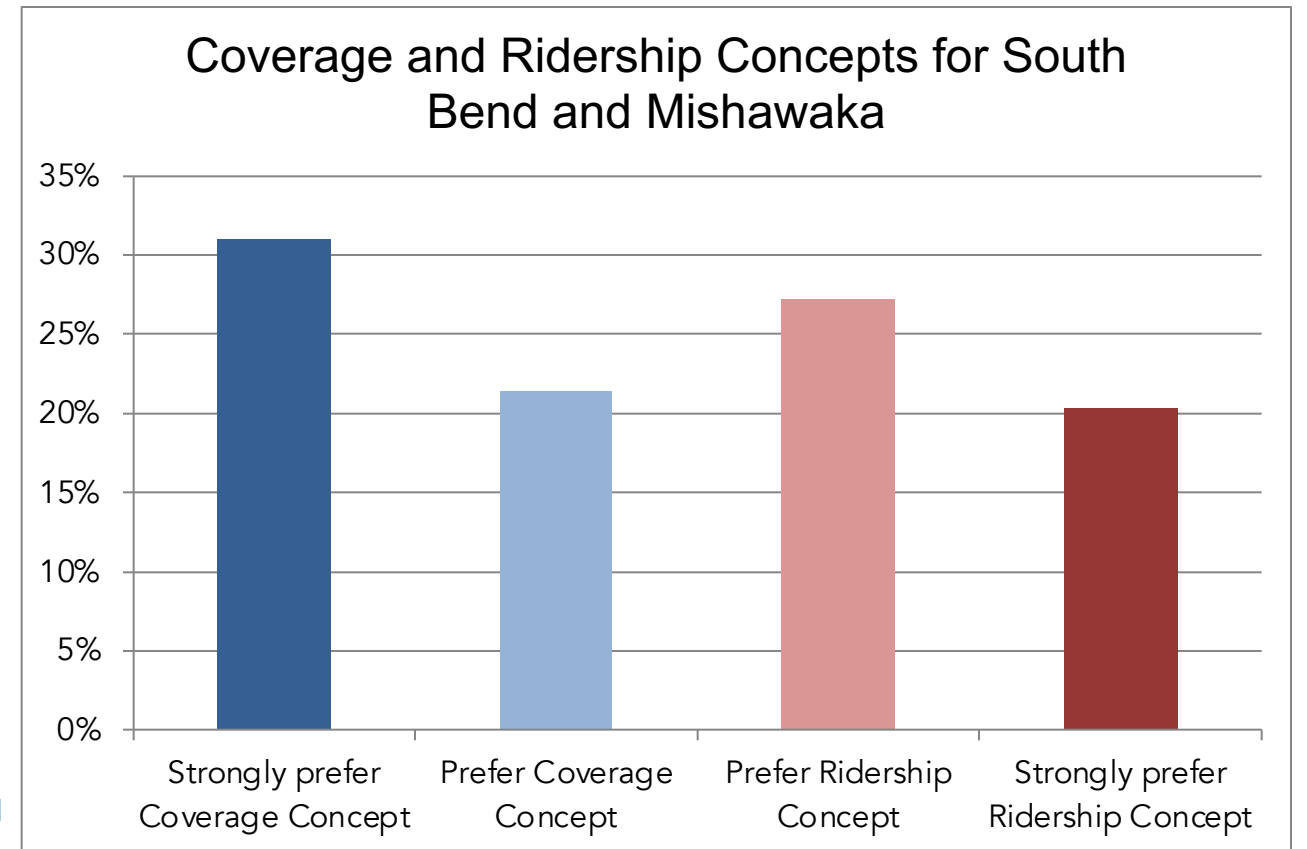


Figure 8: The public response to the two concepts showed that a small majority preferred the Coverage Concept.

Growth and Vision Concepts in South Bend & Mishawaka

The maps in Figure 9 show the Growth and Vision Concepts for South Bend & Mishawaka. These maps and the outcomes of each network were presented to the public and a survey gathered feedback on how residents, riders, and stakeholders responded to them.

The Growth Concept represented a 60% increase in service over the Existing Network and the Vision Concept included 360% more service than the Existing Network.

Figure 10 shows the response to these two concepts based on the 280 respondents who answered this question. In general, the public strongly preferred higher levels of investment in transit service. More than 80% preferred additional investment in service and almost half preferred the Vision Concept or more.

Based on the public feedback, the Transpo Board in their September 19, 2022 meeting, endorsed up to a 25% increase in service, with the top priority to add Saturday evening and Sunday service in the near future. Based on follow up conversations with Board members and discussion among staff, **the Additional Funding Concept shown in this report was drawn to have 80% additional service.**

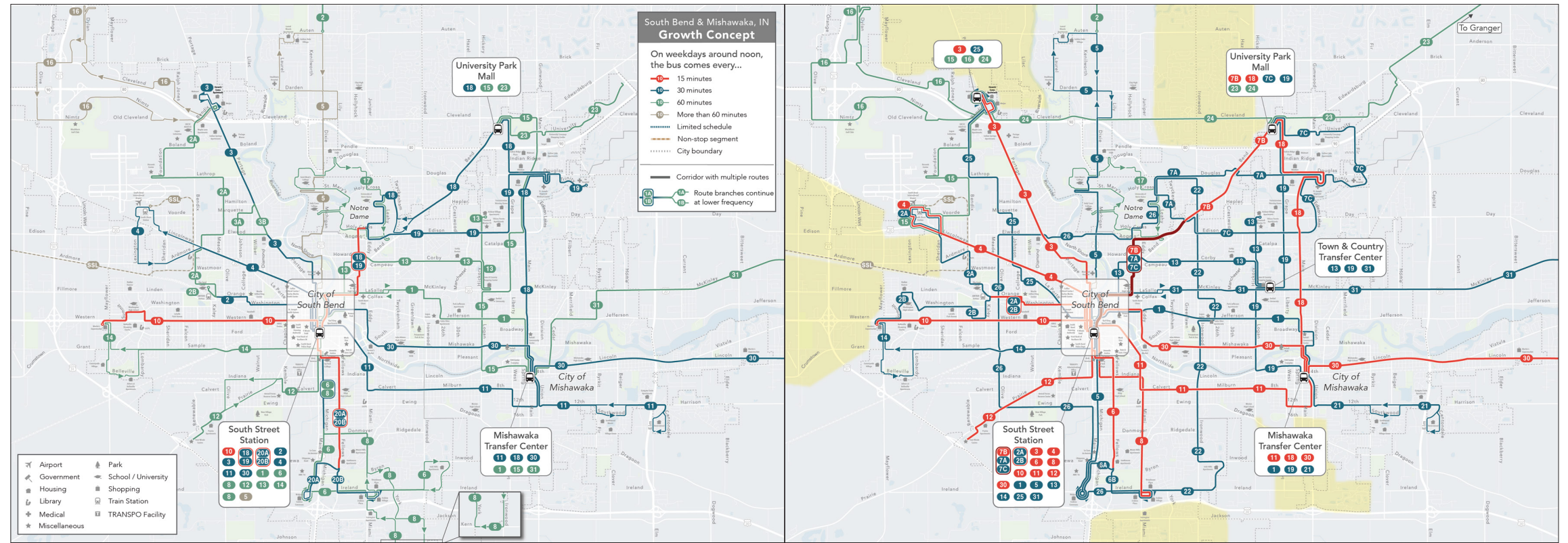


Figure 9: The Growth and Vision Concepts in South Bend & Mishawaka showed the contrast of different levels of investment.

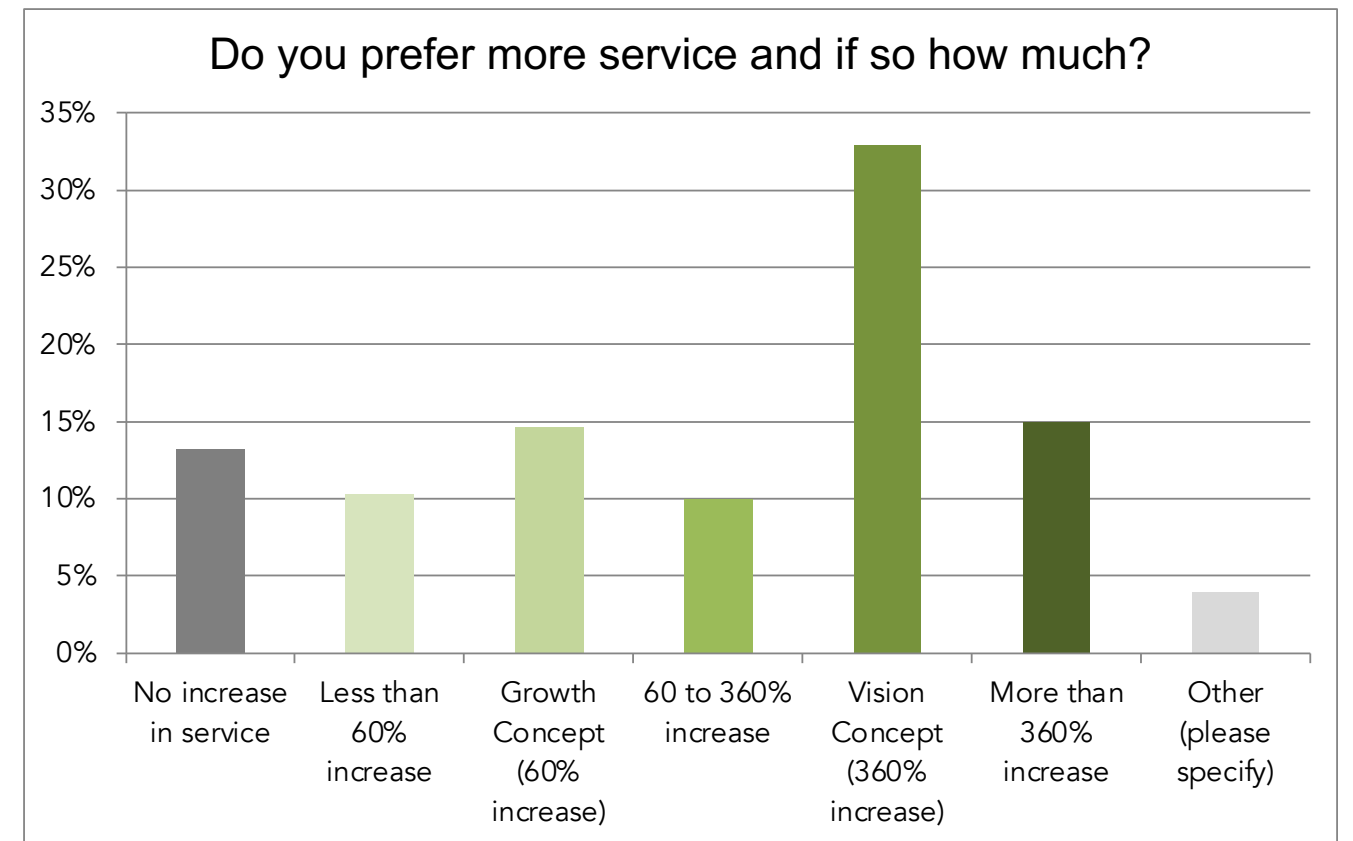


Figure 10: The public response to the two concepts, showed that many people preferred a high level of investment.

Ridership and Coverage Concepts in Elkhart & Goshen

The maps in Figure 11 show the Ridership and Coverage Concepts for Elkhart & Goshen. These maps and the outcomes of each network were presented to the public and a survey gathered feedback on how residents, riders, and stakeholders responded to them.

Figure 12 shows the response to these two concepts based on the 235 respondents who answered this question. Survey respondents preferred the Coverage Concept, with 55% preferring that concept to 45% preferring the Ridership Concept. Preference was stronger, however, for the Coverage Concept, as nearly 35% of respondents said they “strongly prefer” the Coverage Concept, compared to less than 20% who “strongly prefer” the Ridership Concept.

The Coverage Concept represented a balance of about 70% Ridership goals and 30% Coverage goal in the split of resources across the network. Based on the public feedback, **the MACOG Board in their September 14, 2022 meeting, endorsed a 70/30 split in the recommendation for the Short-Term Network for Elkhart & Goshen.**

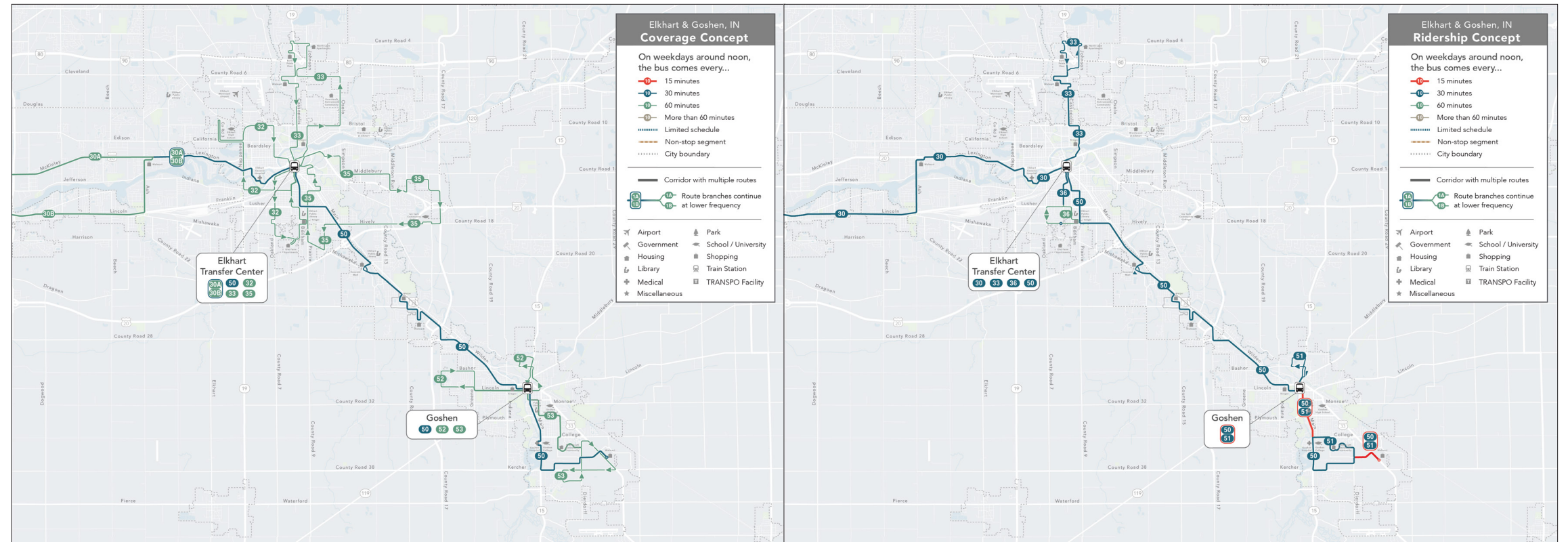


Figure 11: The Ridership and Coverage Concepts in Elkhart & Goshen showed the contrast of different priorities.

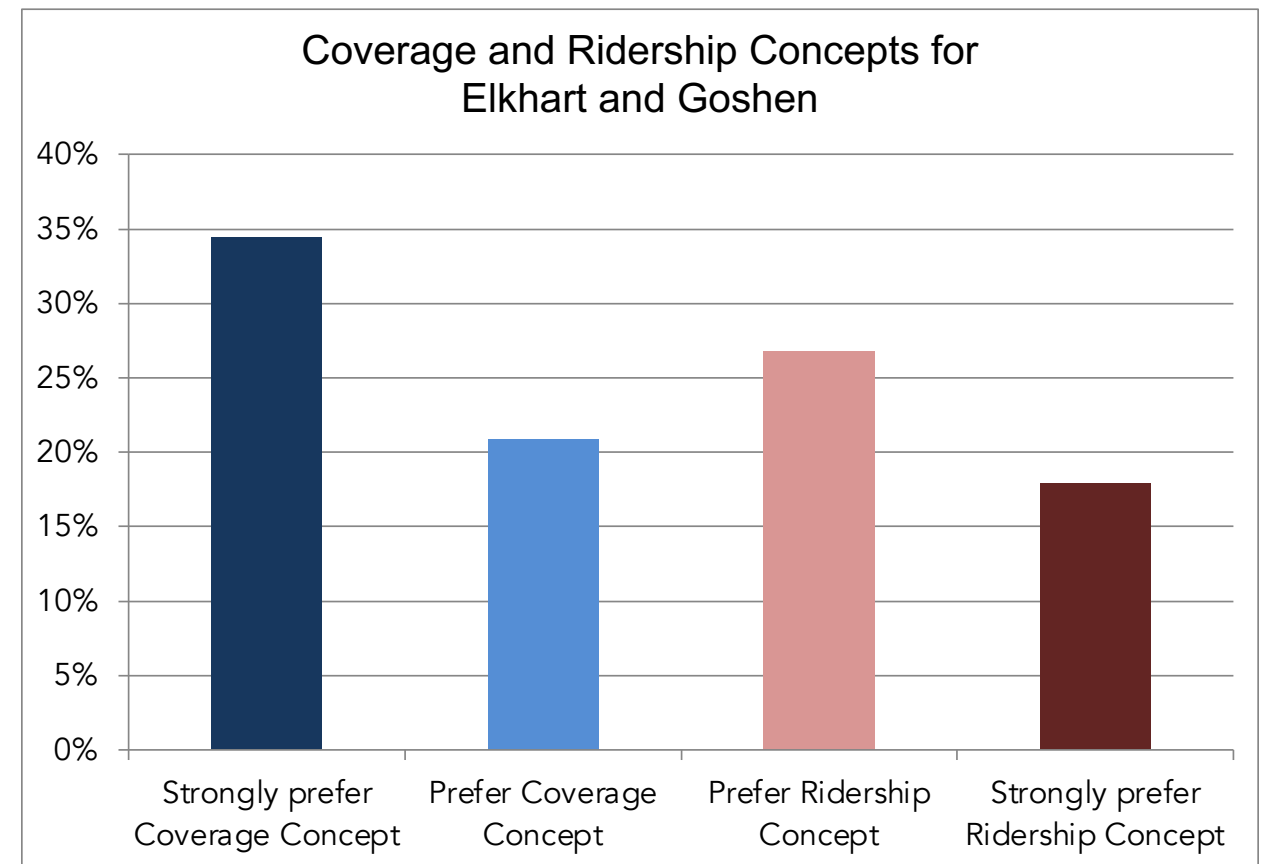


Figure 12: The public response to the two concepts showed that a small majority preferred the Coverage Concept.

Growth and Vision Concepts in Elkhart & Goshen

The maps in Figure 13 show the Growth and Vision Concepts for Elkhart & Goshen. These maps and the outcomes of each network were presented to the public and a survey gathered feedback on how residents, riders, and stakeholders responded to them.

The Growth Concept represented a 115% increase in service over the Existing Network and the Vision Concept included 970% more service than the Existing Network.

Figure 14 shows the response to these two concepts based on the 230 respondents who answered this question. One note is that in presenting these concepts in the survey and in the Concepts Report, the study team inaccurately described the Growth Concept as only a 15% increase in service. Thus, the chart in the figure shows the Growth Concept option as 15% growth.

In general, the public strongly preferred higher levels of investment in transit service. More than 80% preferred additional investment in service and almost half preferred the Vision Concept or more.

Based on the public feedback, the MACOG Board in their September 14, 2022 meeting, **endorsed up to an 80% increase in service in the near future.**

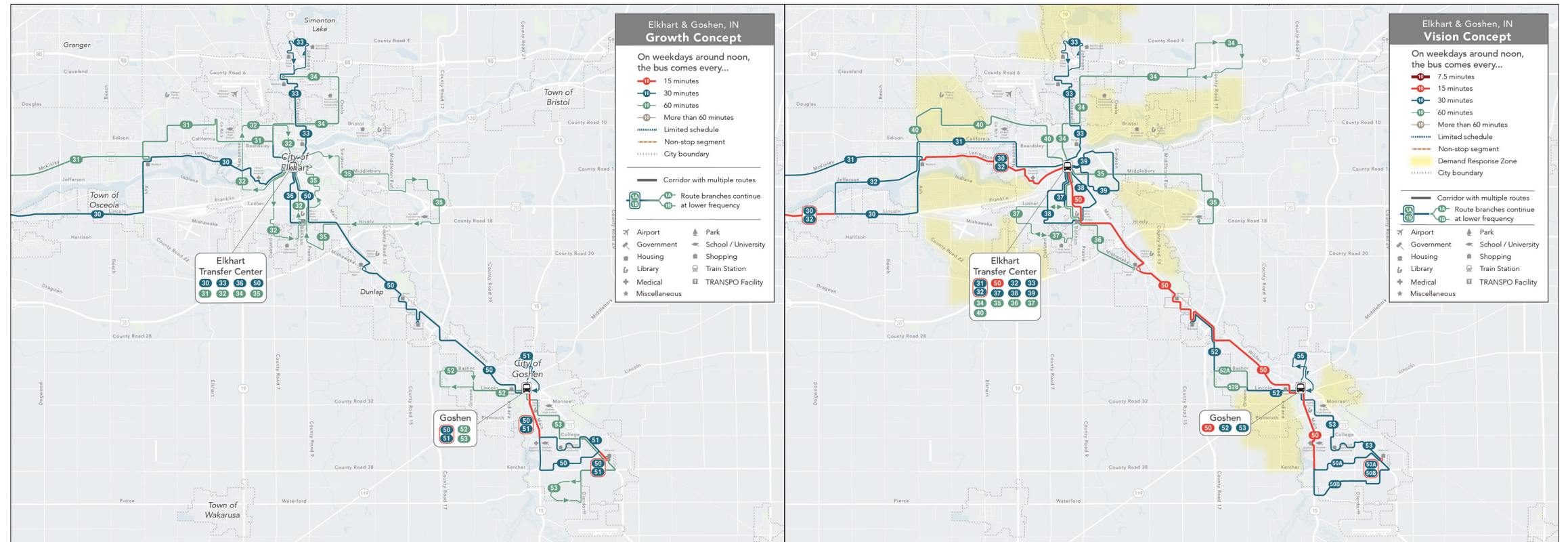


Figure 13: The Growth and Vision Concepts in Elkhart & Goshen showed the contrast of different levels of investment.

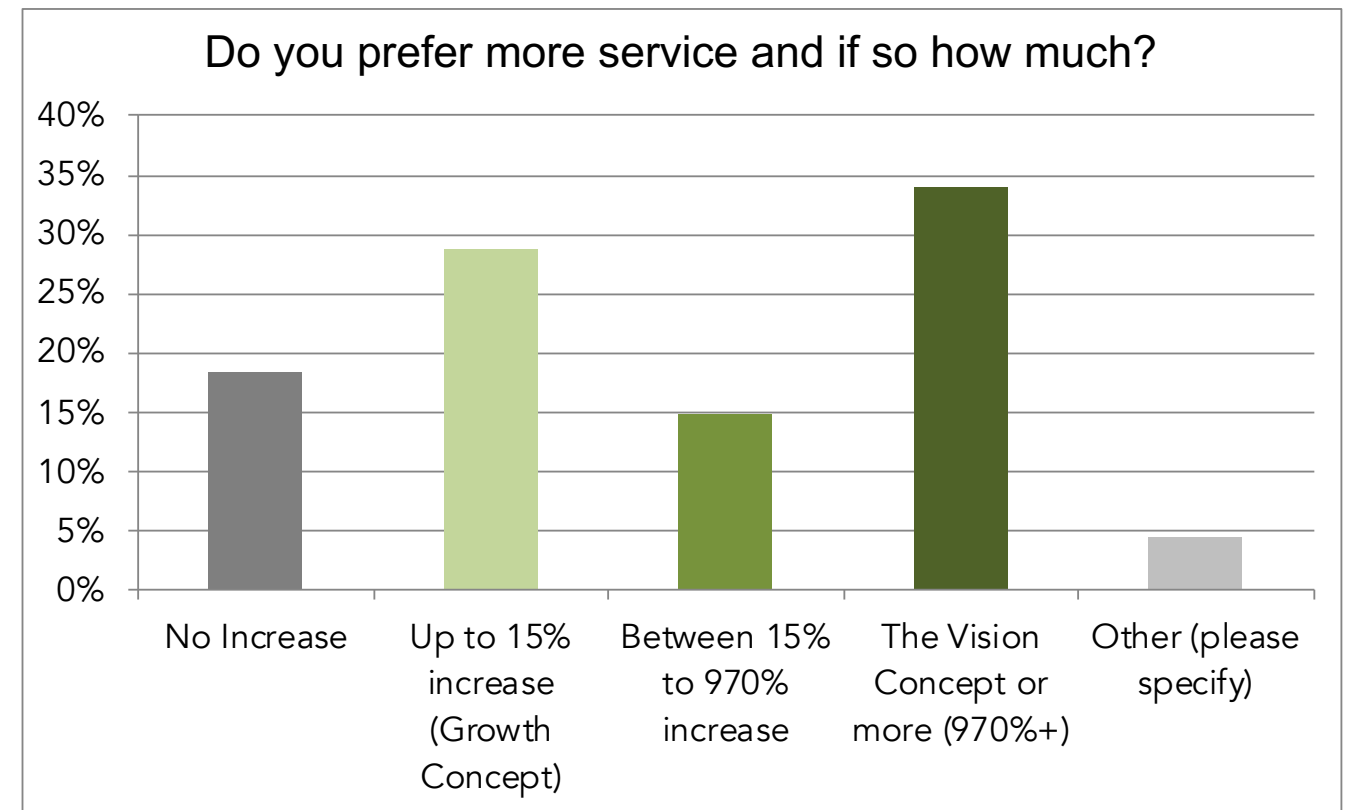


Figure 14: The public response to the two concepts showed that many people preferred a high level of investment.

3 Draft Recommended Networks South Bend and Mishawaka

Existing Transpo Network

56% Ridership / 44% Coverage

To help the reader compare the Existing Network, the Short-Term Concept, and the Additional Funding Concept, maps of each network for the Transpo service area (South Bend and Mishawaka) are shown on the following pages.

In each network map, routes are color-coded by midday frequency. The choice of midday, rather than morning or evening rush hour, is intentional. While travel often peaks at rush hour, many people need to travel at midday. Retail and restaurant industries change shifts throughout the day, particularly in midday and later evening. Office workers may need to travel for meetings or personal appointments. College students often attend midday classes. Parents may need to pick up a sick kid from school. In the Transpo and Interurban Trolley Networks, frequency of service is consistent across most of the day, but does decrease in the evenings. Notably, there is no service at all on Sundays. The frequency charts show the pattern of frequency, starting on page 17.

- **Blue** means about every **30 minutes** in the middle of the day. Some routes in this category have headways of up to 35 minutes.
- **Green** means about every **60 minutes**
- **Tan** means this route operates **peak-only** or otherwise **limited service** (e.g., evening-only, weekend-only).

The maps in this report highlight the city-wide and region-wide differences between the Concepts. For more details on the existing network, its design and performance, see the [Choices Report](#), published in February.

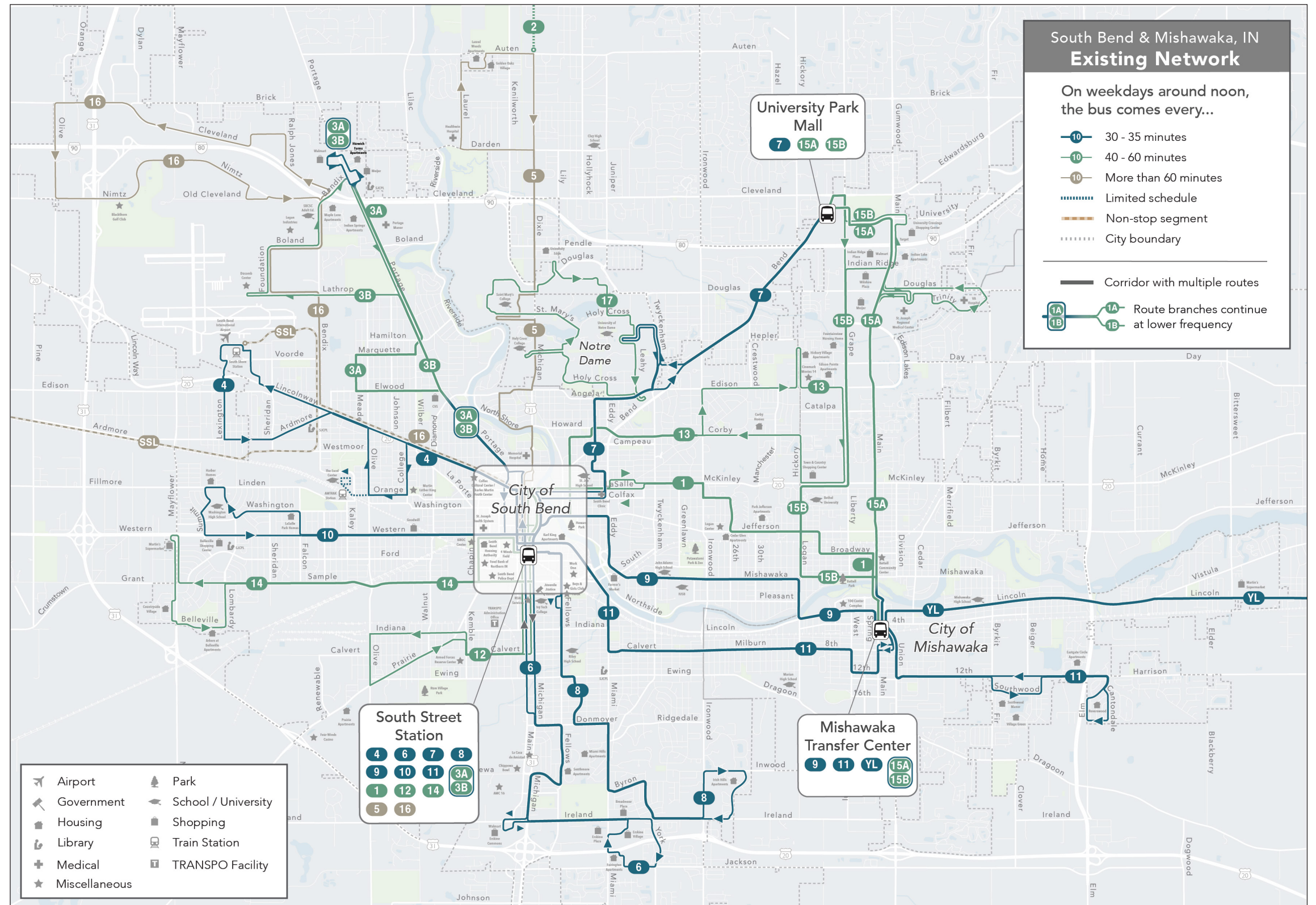


Figure 15: Transpo network of bus routes, as of 2021

Short-Term Transpo Network

60% Ridership / 40% Coverage

The Short-Term concept make a number of adjustments to improve service to major destinations within the current budget limits and the policy direction from the Transpo Board.

Key differences from today's network include:

- Route 1 is slightly simplified to operate via Colfax, Jacobs, to McKinley and it has been shifted to stay on Jefferson to Main, to avoid an at-grade rail crossing. It is also extended to Southwood and Reverewood, to take over the eastern part of existing Route 11.
- New Route 2 serves the Orange and Washington corridors, the Excel Center, and the Far Northwest, but only hourly.
- With no new funding, the addition of Route 2 means that Route 3 is now entirely hourly. It remains mostly on Portage.
- With the addition of Route 2, Route 4 is now simplified and remains on Lincolnway, instead of deviating to serve College, Orange, and Olive Streets.
- Route 5 would operate the same limited schedule. It is straightened to stay on Michigan Street instead of deviating to Iroquois. The loop at the north end has been extended to serve Clay High School.
- Routes 6 and 8 are revised in how they serve the Michigan, Fellows, and Miami corridors. Route 6 now serves Irish Hills Apartments, and continues to run every half hour, while Route 8 is reduced to every hour. Route 8 is extended farther south to Jackson Road, where Route 6 runs today.
- These changes increase walking distance and waiting time for some areas such as Erskine Park, Southmore Apartments, and Miami Hills Apartments. The trade-off is that the Short-Term Network runs consistently, and

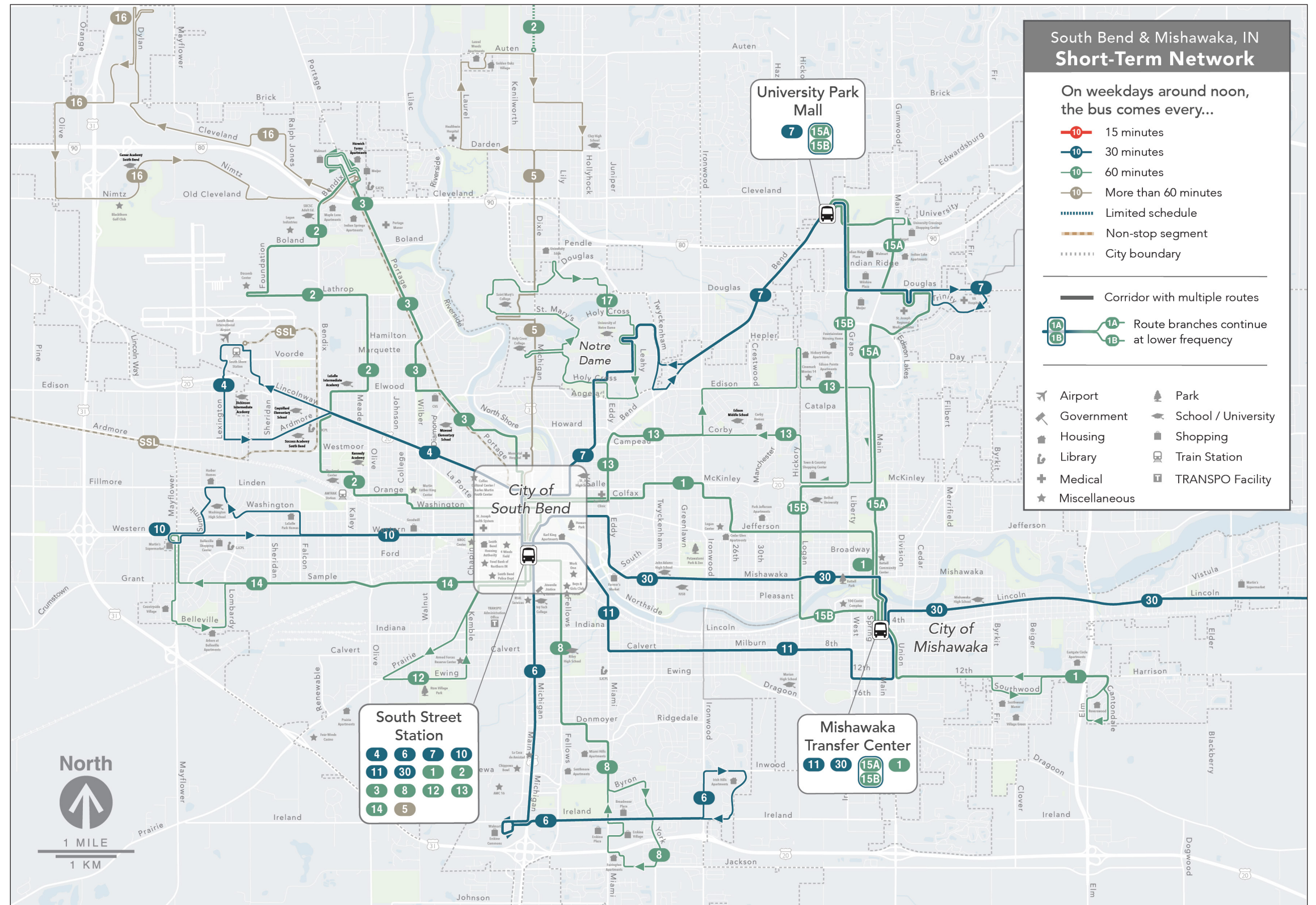


Figure 16: Transpo Short-Term Recommended Network

South Bend and Mishawaka Short-Term Network Changes

does not have one-way loop patterns in the evening. Figure 17 compares a trip from Miami and Ridgedale and in the Short-term Network, showing the significant improvement in travel time with consistent two-way service.

- Route 7 is extended to serve Walmart and other big box stores, St. Joseph Regional Medical Center and the VA, improving access to these destinations for many people. Its path through Notre Dame has also been adjusted to be simpler and faster.
- Route 9 is replaced by Route 30, which provides a one-seat ride between Downtown South Bend and Downtown Elkhart, with faster travel times of under one hour. Route 30 also remains on Mishawaka Avenue from Logan to Main before turning south to Downtown Mishawaka.
- Route 10 has been extended farther west to serve Martin's at Western and Mayflower.
- Route 11 would be mostly similar to today except that the eastern portion serving Southwood Manor and Reverewood would now be part of Route 1 and be served once per hour.
- Route 12 has been shortened and simplified and makes a smaller loop on Prairie Avenue, Kemble Avenue, and Ewing Avenue, back to Prairie Avenue. This change was made so that the route would be able to get to and from downtown in 30 minutes, making it easier to time connections with more routes.
 - This change would mean longer walking distances to reach transit for those who live along or near where Route 12 currently runs on Calvert Street, Indiana Avenue and Olive Street. A trade-off, though, is that Route 12 would run consistently, and no longer be part of a large one-way loop with Route 14 on Saturdays.

- Route 13 has been extended to Main Street to make a direct connection to Route 15A. It has also been adjusted near downtown (see page 16)
- Route 15A no longer serves the VA, since Route 7 does. It has also been adjusted to operate via Douglas Road, Holy Cross Parkway, and Edison Lakes Road to serve St. Joseph Hospital. It also makes a deviation to serve the Target shopping center at Main and University, but only in the northbound direction.
- Route 15B would be changed to travel in both directions on Grape from University Mall to McKinley. It now follows Logan to Lincoln to Downtown Mishawaka.
- Route 16 has been revised to operate via Portage from Downtown to Bendix and Cleveland, since Route 2 now provides all-day, two-way service to the industrial areas north of the airport. Route 16 has been extended north along Dylan Drive to serve new destinations, like FedEx and Amazon.

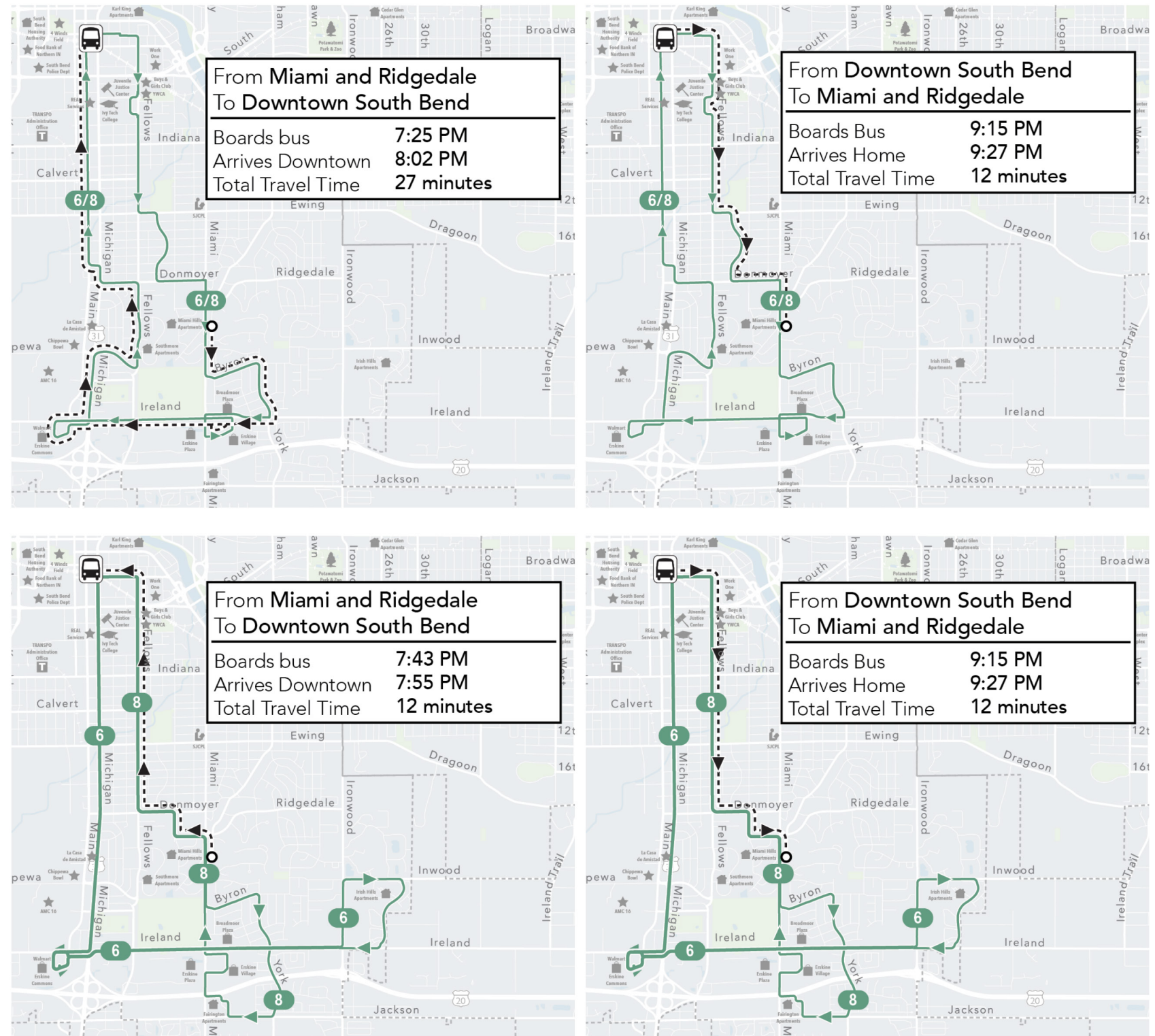


Figure 17: Comparison of a trip from Miami and Ridgedale in the evening in the Existing and Short-Term Networks.

Downtown South Bend Short-Term Network

The Short-Term Network also makes a number of changes to routing within the Downtown South Bend area. Overall, routing is simplified, with routes consolidated to operate two-way on fewer streets. This provides benefits to riders, as it is easier to remember which street to use. It also means that improved stop amenities serve more riders, as more people will be using fewer stops within downtown.

- Most routes from the north and west use Main Street through downtown. Routes 3, 4, 5, 7, and 10 all use Main to and from South Street Station before turning off to their respective corridors.
- Routes 2, 11, and 30 use Dr. Martin Luther King, Jr. Blvd to and from South Street Station.
- Route 3 has been consolidated onto Main Street and provides service to St. Joseph Hospital by following Marion to Lafayette to Riverside to California to Portage.
- Route 7 has been simplified east of the river to provide a faster trip to Notre Dame and allow the route to be extended to the VA Clinic. It now follows Colfax Avenue to Hill Street to South Bend Avenue to Notre Dame Avenue.
- Since Route 7 is shifted over to Hill Street, Route 13 has been simplified to follow Corby Street to Eddy Street to Colfax Avenue. Since this path is shorter and faster, it is possible to extend Route 13 to Main Street at its east end.
- With the above changes to Route 7, most people on Corby and Hill now have more frequent service with Route 7, though it may be a longer walk to reach service.
- Route 1 has been adjusted to follow Colfax Avenue in both directions, then use Jacob Street to McKinley Avenue.

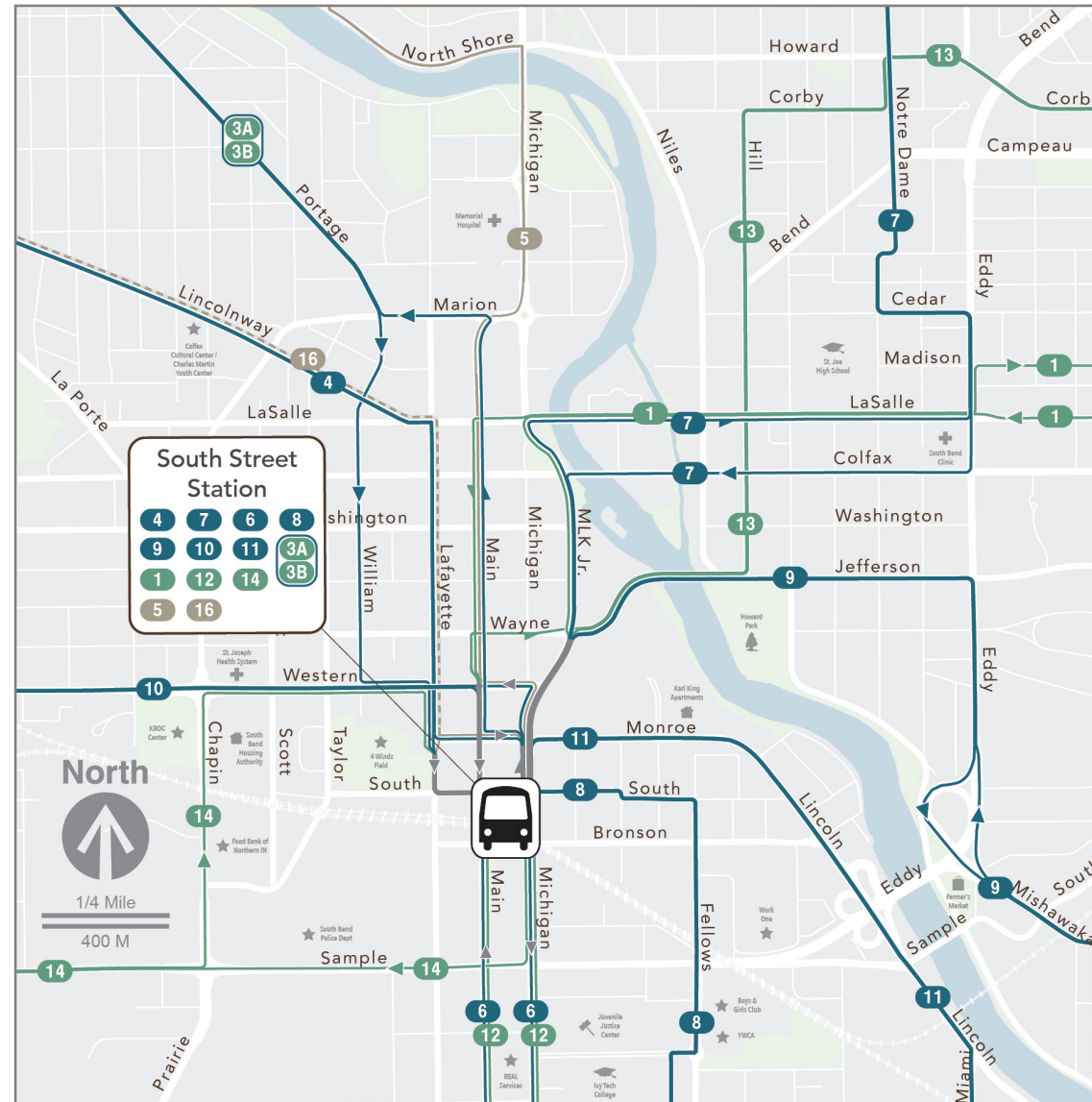


Figure 19: Existing Transpo Network in Downtown South Bend



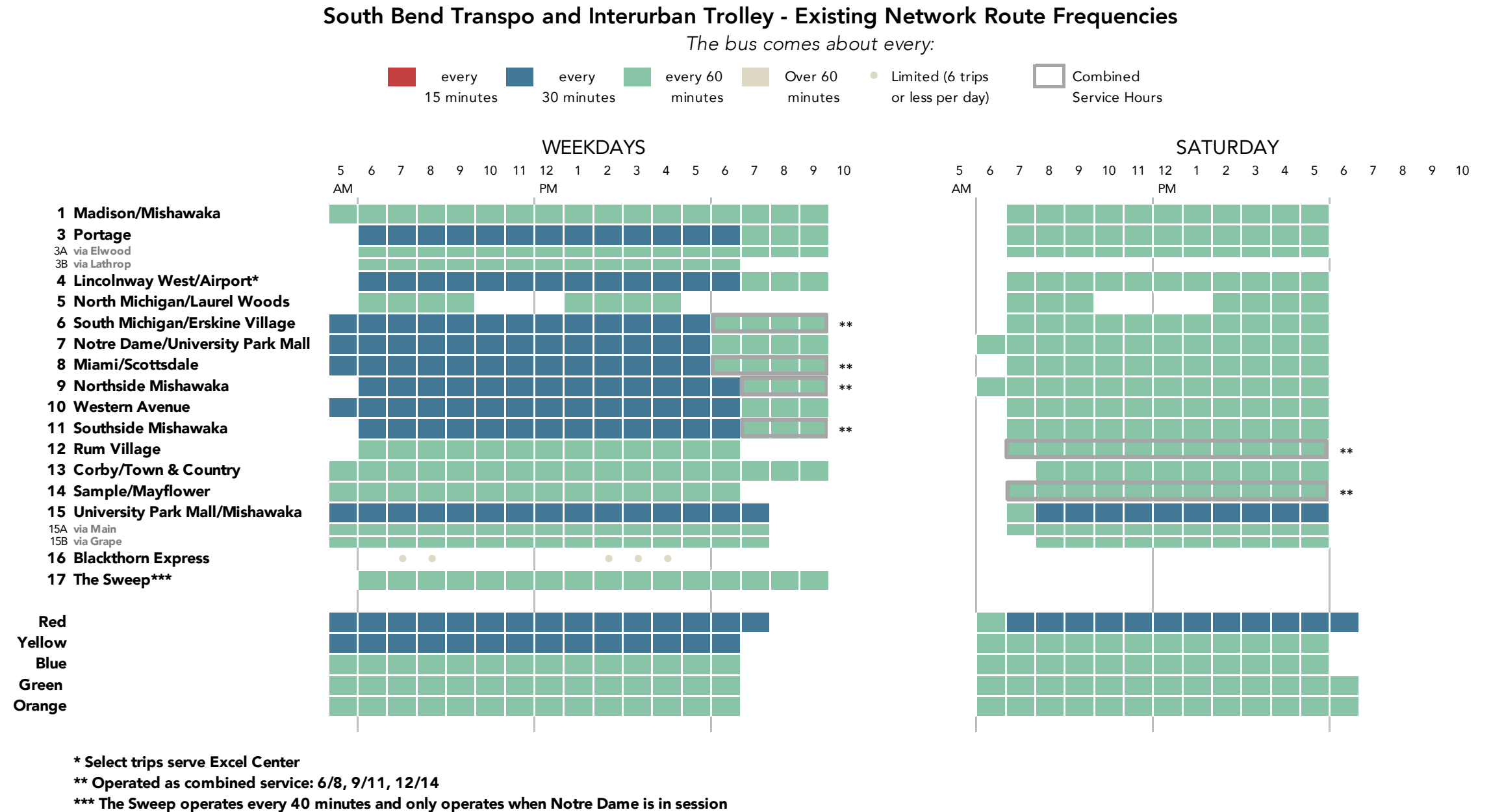
Figure 18: Short-Term Network in Downtown South Bend

- Routes 12 and 14 are both two-way on Sample to Main/Michigan to reach South Street Station. Route 14 no longer has the large one-way loop on Chapin and Route 12 uses Sample to reach Prairie Avenue.
- Route 6 is two-way on Michigan, except for the small loop north of Sample to turn in and out of South Street Station properly.

Existing Network Span of Service

The chart in Figure 20 summarizes each route's frequency and span for the existing Transpo and Interurban Trolley networks. This graphic illustrates how much less service is available during evenings and on weekends.

As discussed in the Choices Report, the Existing Network has a few unusual patterns that make travel in the evening or Saturday difficult for some riders. Routes 6 and 8 as well as 9 and 11 become large one-way loop in the evening. Similarly, Routes 12 and 14 combine into a large one-way loop on Saturdays. These large one-way loops force long, out-of-direction travel for many trips.



Low frequencies on Saturdays and Weekday Evenings, along with the lack of service Sundays make it less likely for transit to be useful for many retail and service workers.

Figure 20: This chart shows approximately how often the bus runs throughout the day, on weekdays and weekends, on each Transpo and Interurban Trolley route. Most Transpo routes with service every 30 minutes go to every 60 minutes after 7 PM and on Saturdays. There is no service on Sundays.

Short-Term Network Span of Service

The chart in Figure 21 summarizes each route's frequency and span for the Short-Term Transpo and Interurban Trolley networks. In general, routes still operate similar spans and days of the week. With no additional budget for service, it would be impossible to add significant new hours of service, or Sunday service, without major cuts to coverage or frequency of service.

As discussed on the previous page, the Existing Network has a few unusual one-way patterns in the evening and on Saturday. In the Short-Term Network, these one-way patterns are removed, and all routes operate the same pattern all day and evening and Saturday. So, for example, Routes 6 and 8 operate as two-way services all day. One cost of this investment in additional service is that some routes, like Route 6, have lower frequency all day.

In the Short-Term Network, frequency of all-day service is lower for some routes so that all routes can run consistent patterns in the evening and on Saturday.

South Bend Transpo and Interurban Trolley - Short-Term Network Route Frequencies

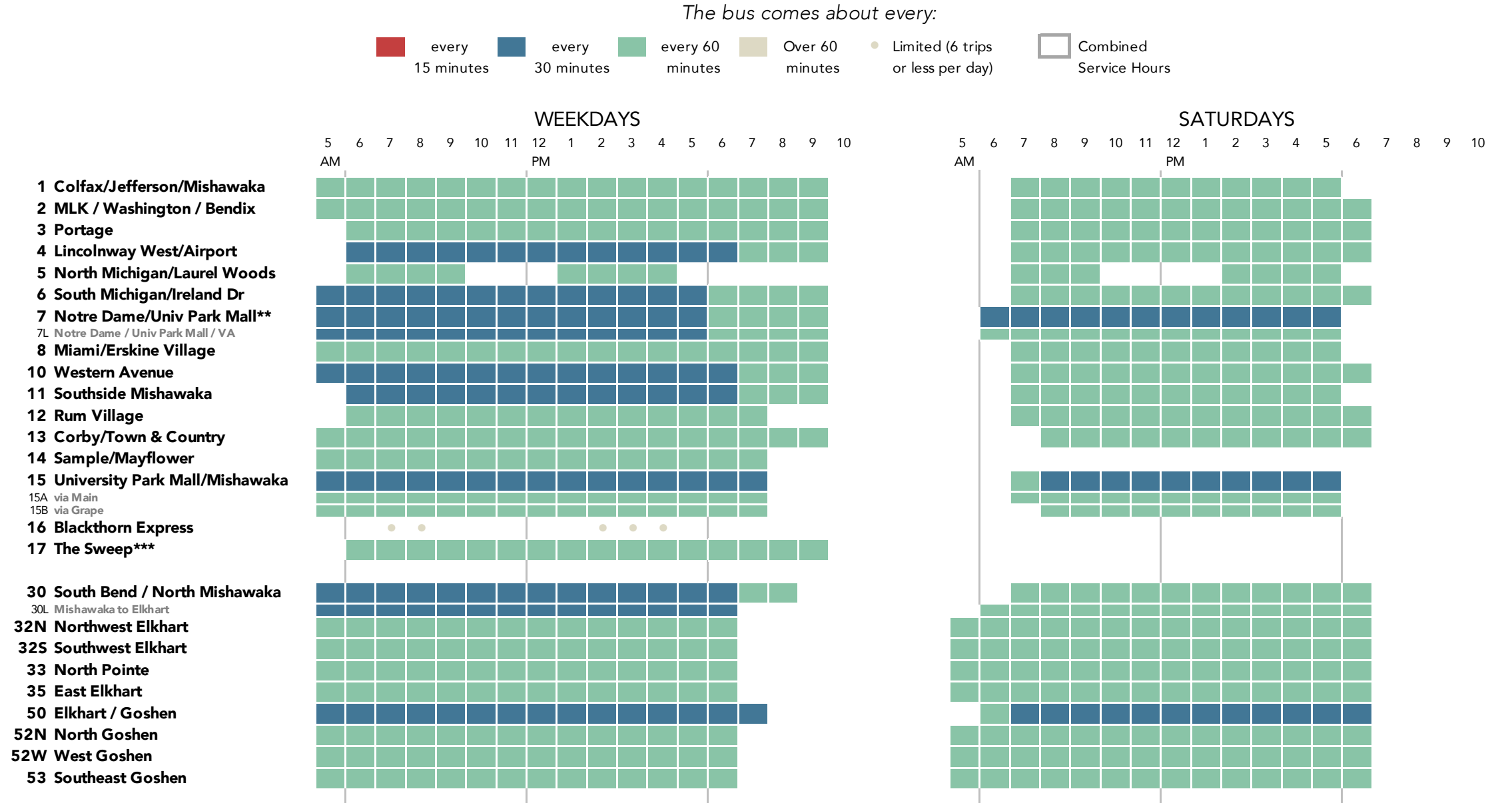


Figure 21: The spans of service on routes in the Short-Term Network are very similar to today's network, with limited evening service and no Sunday service. Some routes have improved service because evening and weekend one-way loops have been removed.

Additional Funding Transpo Network

+80% Service

The Additional Funding Concept assumes about an 80% increase from the existing service availability. With this increased investment, it is possible to drastically improve service and usefulness to many destinations. This improved network focuses on improved service to areas already served by Transpo, as opposed to expanding service to new areas so as to keep within the limits of the taxing district that funds Transpo.

Key differences from today's network include:

- Frequent (15-minute service) on Western Avenue (Route 10), Mishawaka (Route 30), Portage (Route 3), Michigan (Route 6) and part of South Bend Avenue (Route 7)
- Revised Route 7 with frequent service between Downtown South Bend and Notre Dame.
- A further extension of Route 7 to take over Route 15A, providing 30-minute service along Main Street to Downtown Mishawaka.
- Route 8 is improved to every 30 minutes on Fellows to Donmoyer where it then becomes two hourly services to Walmart and to Erskine Village. The southern end of Route 8 is a bi-directional loop.
- Route 13 now has a bi-directional loop.
- Routes 1, 2, 12, and 14 are improved to every 30 minutes.
- Routes 5 and 16 are improved to all-day services with hourly service.

As a reminder:

- **Red** means about every **15 minutes** or better in the middle of the day.
- **Blue** means about every **30 minutes** or better in the middle of the day.
- **Green** means about every **60 minutes**.

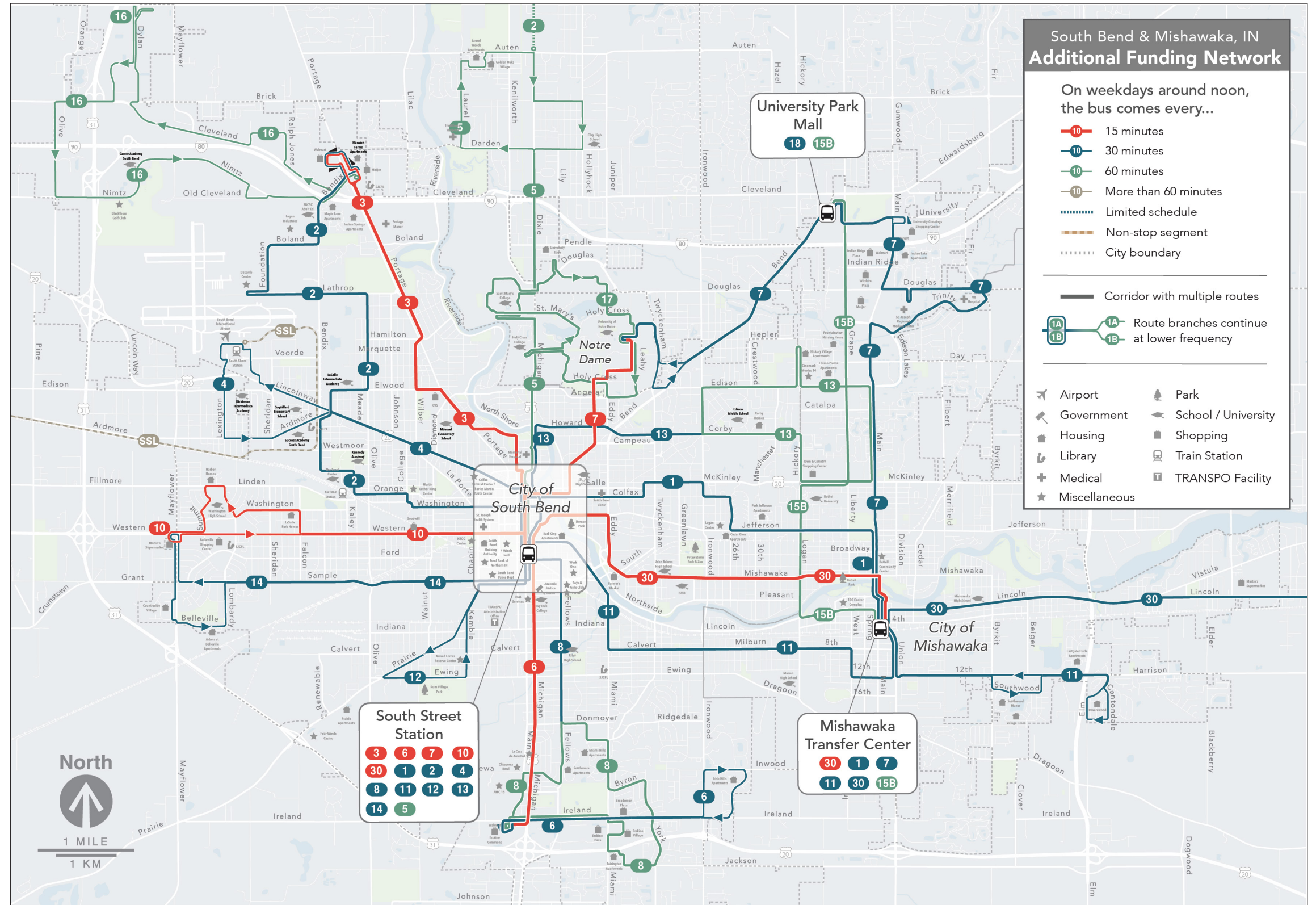


Figure 22: Transpo Additional Funding Network

Downtown South Bend Additional Funding Network

The map in Figure 23 shows the Additional Funding Network within Downtown South Bend. The Additional Funding Network has the same design as the Short-Term Network, with service concentrated on Main Street and Martin Luther King, Jr. Blvd.

The improved frequency of service and its concentration on Main Street would provide a very useful service north-south through downtown for residents, workers, and visitors to downtown.

As a reminder:

- **Red** means about every **15 minutes** or better in the middle of the day.
- **Blue** means about every **30 minutes** or better in the middle of the day.
- **Green** means about every **60 minutes**.

See page 56 for more details about phased implementation and funding options for the Additional Funding Network.



Figure 23: Downtown South Bend Service in the Additional Funding Network.

Additional Funding Network Span of Service

The chart in Figure 24 shows the frequency of service by time of day and day of week for the Additional Funding Network. The frequency of service is greatly improved for most routes. In addition, most routes would operate until 10pm on weekdays and 9pm on Saturdays. Also, all routes would operate on Sundays, for the first time, with service from 6am to 9pm, the same as on Saturday.

The frequency of service provided goes down at 7pm on weekdays, so that 15-minute routes become every 30 minutes and 30-minute routes become hourly from 7 to 10pm on weekdays. The frequency of service on Saturday and Sunday is similar to the evening service provided on most routes.

The Additional Funding Network includes more service in the evening and on Sundays, in addition to improved frequency of service.

South Bend Transpo and Interurban Trolley - Additional Funding Network Route Frequencies

The bus comes about every:

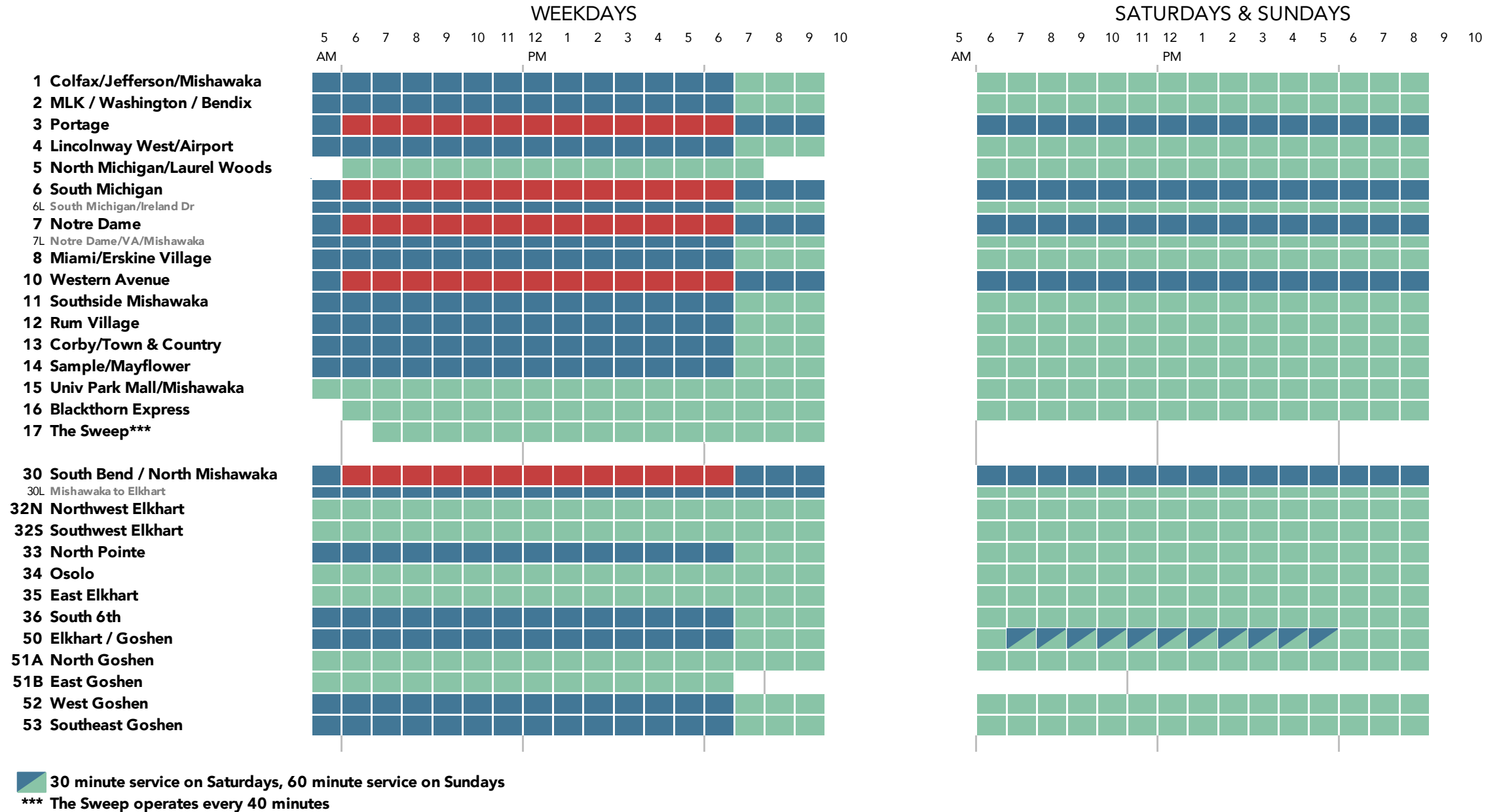
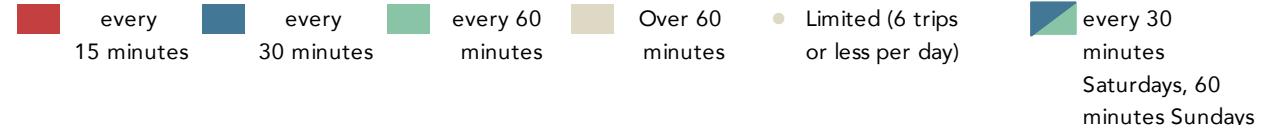


Figure 24: The frequency of service in the Additional Funding Network is significantly better on most routes, and all routes run into the evening and on Sundays.

4

South Bend and Mishawaka Outcomes

Comparing Outcomes

This chapter reports on three different ways of measuring the potential outcomes of the Short-Term and Additional Funding Networks. These measurements are not forecasts. They do not make assumptions about how culture, technology, prices or other factors will change in the next few years. These are simple arithmetic measures that combine existing distance, time and population information to show the potential of each Network and how they each differ from the existing network.

Proximity

The first measure reported on the next page, is very simple: How many residents and jobs are near transit?

Proximity does not tell us how useful people will find transit service, only that it is nearby to them. We also report on proximity to frequent transit service, to provide a little more information about how many people are near service that they are more likely to use.

Wall Around Your Life

To understand the benefits of a network change, consider this simple question: Where could I get to, in a given amount of time, from where I am?

This question refers to the physical dimension of liberty and opportunity. If you can get to more places in a given amount of time, you will be freer and have more opportunities outside your neighborhood.

Isochrones provide a visual explanation of how a transit network changes peoples' freedom to travel, on foot and by transit, to or from a place of interest. A few examples are included in this report beginning on page 26.

Access

Isochrones display the change in access that a person would experience traveling to a particular place. By summing up the isochrones for every single part of South Bend, Mishawaka, Elkhart, and Goshen, we can describe how access to jobs would change for all residents of the service area.

This is a good proxy for a ridership forecast, because it describes the part of ridership forecasting that is basic math and highly predictable: Could more people access more jobs (and other opportunities) by transit, in less time? If the answer is "Yes," that implies higher ridership potential.

Summary of Outcomes

The Short-Term and Additional Funding Networks would likely have these effects on transit outcomes:

- **Ridership potential** would be slightly higher in the Short-Term Concept compared to the Existing Network and would increase a great deal in the Additional Funding Concept.
 - In the Short-Term Network, there is only a small increase in the opportunities that people can reach in a given amount of time. Therefore, ridership potential increases slightly.
 - In the Additional Funding Network, more people can reach many more opportunities in a given amount of time. This is even more the case for low-income people.
 - Other factors would affect whether or not people choose to ride, such as fares, parking pricing, gas prices, employment levels, etc. Holding all of these other factors constant, however, when more people can make more of their trips faster, by transit, more people will choose to ride.

- The Short-Term and Additional Funding Networks would slightly increase the number of jobs and residents near any all-day service in South Bend and Mishawaka, though only by about 1%.
- In today's network there are no routes that provide frequent service (every 15 minutes or better service). The Additional Funding Network would add five routes that provide this level of service, covering 32% of people and 40% of jobs in South Bend and Mishawaka. Frequency correlates strongly with high ridership, especially when multiple frequent services are combined into a connected network.
- The Short-Term Network would increase the number of jobs that the average person could reach in 60 minutes by walking and transit, and would therefore be more useful, on average, than the Existing Network. This is the basis of the estimate of ridership potential.
 - **In South Bend and Mishawaka, the average person could reach 7% more jobs in 60 minutes under the Short-Term Network.**
- The Short-Term Network is somewhat simpler than the Existing Network, for example by removing one-way loops, deviations, and unusual evening and Saturday service patterns. Simplicity is important to attract spontaneous and new riders. Simpler, more direct routes mean a network is easier to remember.
- **With the Additional Funding Network**, more frequent lines with more consistent spans make trip-planning easier. Spans of service throughout the days of the week get simpler and more consistent across the entire network. This would make it much easier to rely on transit for more trips and for spontaneous travel.

- **In South Bend and Mishawaka, the average person could reach 41% more jobs in 60 minutes under the Additional Funding Network.**
- **With the Additional Funding Network**, the number of places where cities could justify encouraging transit-oriented development, including affordable housing, is higher. Dense developments and neighborhoods around them benefit from frequent transit service, and some cities have policies allowing more density, less parking, and greater affordability around frequent bus lines.

With the Short-Term Network, the average resident could reach 3,600 more jobs in 60 minutes by transit. With the Additional Funding Network, the average person could reach 19,100 more jobs.

Proximity to Transit: South Bend and Mishawaka Residents and Jobs

The number of people and jobs within a certain distance from transit is the simplest measure of transit outcomes. In this report we call this measure “proximity to transit”. Many people have varying levels of willingness to walk to transit, but most research shows that most people are willing to walk up to ¼ to ½ mile to reach a transit stop. In general, the higher the frequency of service, the more likely someone is willing to walk farther to reach transit.

The bar charts in Figure 25 show how many residents and jobs would be “close enough” to frequent (15-minute), 30-minute, or 60-minute transit service for the Existing Network and the Short-Term and Additional Funding Networks within South Bend and Mishawaka. These charts assume that someone is near transit service if they are within ½ mile of a bus stop as the crow flies. Walking ½ mile over flat ground takes the average person about 10 minutes.

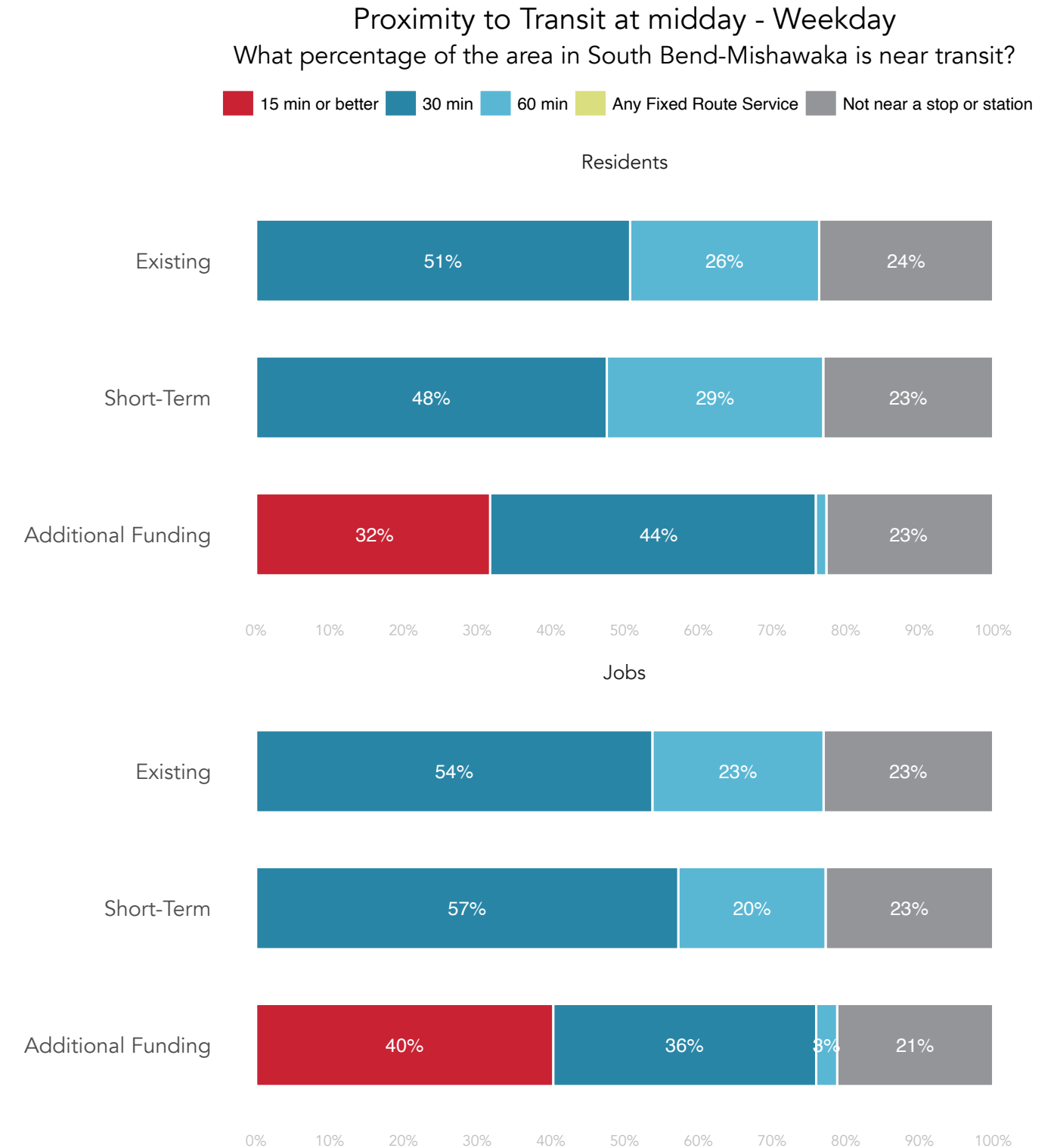
Compared to Existing, the Short-Term Network would

- increase the number of residents near any transit service from 76% to 77%,
- decrease the percent of residents near 30-minute or better service from 51% to 48%
- maintain the same level of jobs near any service at 77%.
- increase the percent of jobs near 30-minute or better service from 54% to 57%

Compared to Existing, the Additional Funding Network Concept

- increase the percent of residents near frequent service from 0% to 32%,
- increase the percent of residents near 30-minute or better service from 51% to 76%
- increase the percent of residents near any service from 76% to 77%.
- increase the number of jobs near frequent service from 0% to 40%,
- increase the percent of jobs near 30-minute or better service from 57% to 76%
- increase the percent of jobs near any service from 77% to 79%.

Figure 25: Percent of residents and jobs in South Bend and Mishawaka near transit in the Existing, Short-Term and Additional Funding Networks



Note: Proximity is measured as being located within 1/2 mile of a bus or rail stop.

Proximity to Transit: South Bend and Mishawaka Populations of Concern

The charts in Figure 26 show the differences in proximity to service for residents of color, residents in poverty, and seniors in South Bend and Mishawaka. As discussed in the Choices Report, looking at proximity to transit for these groups is helpful for assessing whether transit is meeting coverage goals for populations of special concern. This analysis also assists in understanding if the recommended network improvements would pass a Title VI Service Equity assessment.

Compared to Existing, the Short-Term Network would

- keep the percent of people of color near any transit service the same at 83% while reducing the percent of people of color near 30-minute service from 58% to 54%.
- keep the percent of people in poverty near any transit service the same at 83% and reduce the percent near 30-minute service from 58% to 55%.
- increase the percent of seniors near any service from 70% to 71% and reduce the percent near 30-minute service from 44% to 40%.

The shifts in the population percentages near any service are very small, 1% or less and the change in the percentage of all people near service increases by only 1%. For populations near 30-minute service, all three groups see a decrease of similar magnitude as the population overall. Therefore, these shifts do not appear to result in disproportionate burdens or benefits to any particular group.

Compared to Existing, the Additional Funding Network would

- increase the percent of people of color near frequent transit from 0% to 41% and increase the percent near 30-minute or better service from 58% to 83%. The percent of people of color near any service would also increase from 83% to 84%
- increase the percent of people in poverty near frequent transit from 0% to 41% and increase the percent near 30-minute or better service from 41% to 49%. The percent of people in poverty near any service would remain unchanged at 83%
- increase the percent of seniors near frequent transit from 0% to 24% and increase the percent near 30-minute or better service from 44% to 69%. The percent of seniors near any service would also increase from 70% to 72%.

Figure 26: Percent of people of color, people in poverty, and senior residents in South Bend and Mishawaka near transit in the Existing, Short-Term and Additional Funding Networks.



Freedom, Access, Usefulness

Where can I go in 60 minutes?

People ride transit if they find it useful. High transit ridership results when transit is useful to large numbers of people. A helpful way to illustrate the usefulness of a network is to visualize where a person could go using public transit and walking, from a certain location, in a certain amount of time.

The maps in Figure 27 show someone's access to and from South Street Station in Downtown South Bend in 60 minutes, at noon on a weekday in the Short-Term and Additional Funding Networks. Each concept is compared to the Existing Network. The technical term for this illustration is isochrone. A more useful transit network is one in which these isochrones are larger, so that each person is likely to find the network useful for more trips.

The **dark blue** represents areas that are reachable today and in the corresponding network. Areas that are newly reachable are shown in **light blue**, and areas that would no longer be reachable are shown in **gray**. The maps show that the Short-Term Network has a few small gray areas, for example off Lathrop Road, meaning those areas can no longer be reached in 60 minutes or less. In the Additional Funding Network there are many areas in light blue, such as Southwood, the northern edges of Portage Road, and portions of Main Street south of University Mall.

Not Just the Area – Also What is Inside the Area

The real measure of usefulness is not just how much geographic area we can reach, but how many useful destinations are in that area. These maps and analysis also show the quantity of people and jobs reachable from each location

mapped. The tables below each map show that for trips beginning at South Street Station, the Additional Funding Concept would increase access to residents and jobs over the existing network by about 14%. The Short-Term network, would bring a smaller increase in access to residents and jobs (by 3% and 4% respectively).

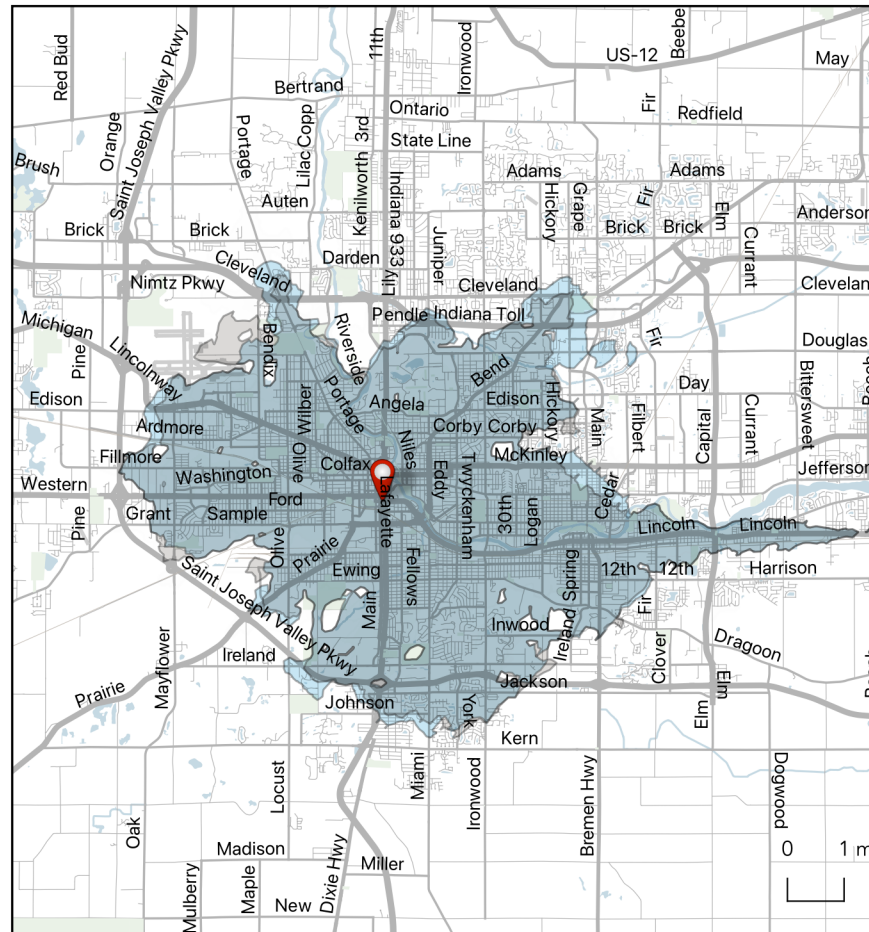
Higher ridership arises from service being useful, for more people, to get to more busy places. That's why predictive models of ridership do this very same analysis behind-the-scenes.

When reviewing these maps remember that waiting time counts, and in most cases, a longer walk to a high-frequency route can get people farther and faster, than a shorter walk to an infrequent route. Also, remember that some of the access shown in these maps isn't reached on a single route, but requires a transfer.

Figure 27: Isochrone map of access to and from South Street Station in South Bend.

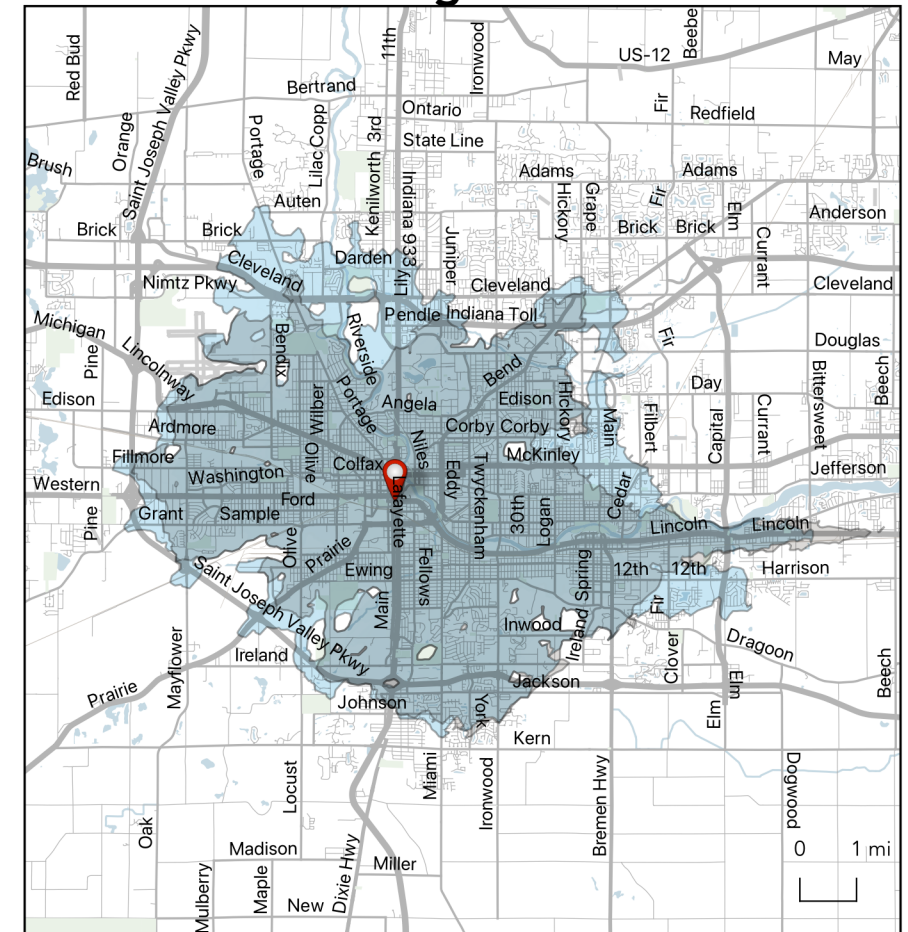
How far can I travel in **60 minutes** from South Street Station on weekdays at noon using:

Short-Term Network?



	Change	% Change
Residents Accessible	+4,000	+3.0%
Jobs Accessible	+4,000	+4.0%

Additional Funding Network?

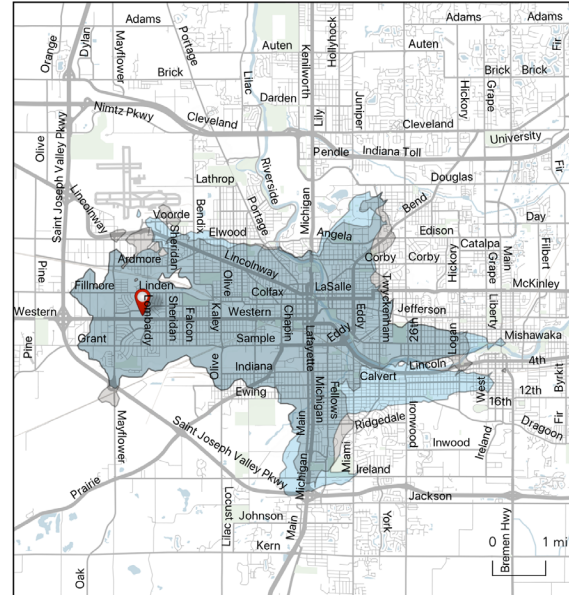


	Change	% Change
Residents Accessible	+17,800	+13.5%
Jobs Accessible	+13,600	+13.5%



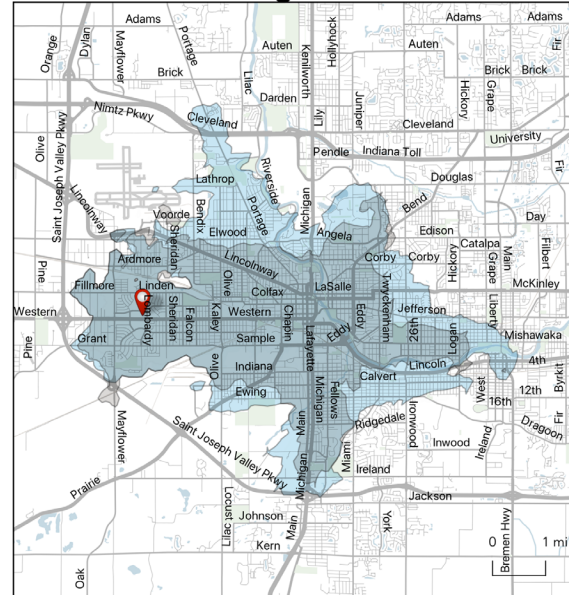
How far can I travel in **60 minutes** from
Western Ave and Lombardy
on weekdays at noon using:

Short-Term Network?



	Change	% Change
Residents Accessible	+8,500	+14.5%
Jobs Accessible	+5,600	+10.5%

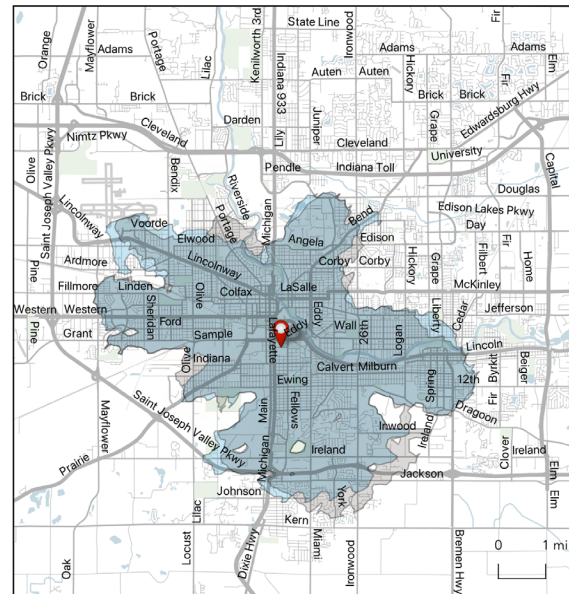
Additional Funding Network?



	Change	% Change
Residents Accessible	+28,700	+49.5%
Jobs Accessible	+14,400	+49.5%

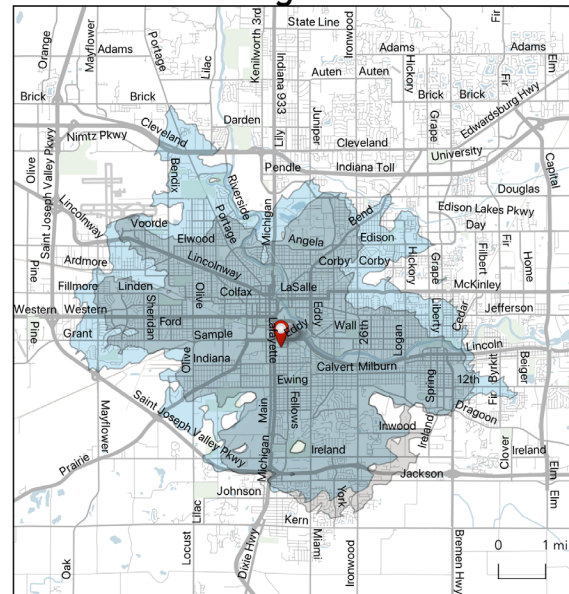
How far can I travel in **60 minutes** from
Ivy Tech South Bend
on weekdays at noon using:

Short-Term Network?



	Change	% Change
Residents Accessible	+600	+0.5%
Jobs Accessible	+2,200	+3.0%

Additional Funding Network?

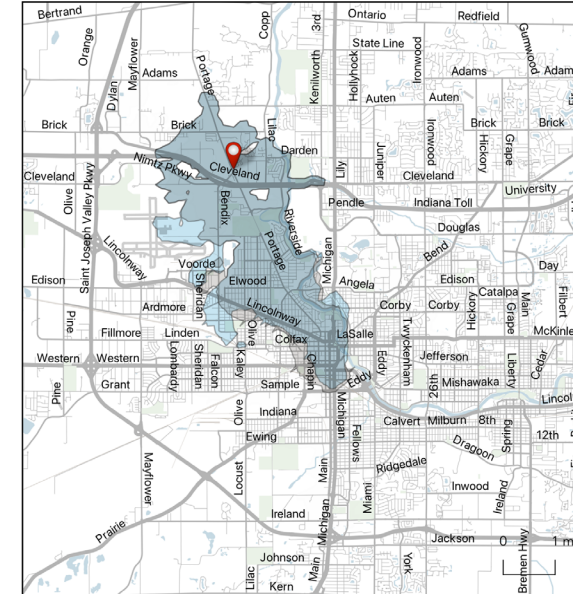


	Change	% Change
Residents Accessible	+26,000	+28.0%
Jobs Accessible	+14,800	+28.0%

For most people and places in South Bend, the Short-Term Network increases access at least a little. The Additional Funding Network increases access dramatically.

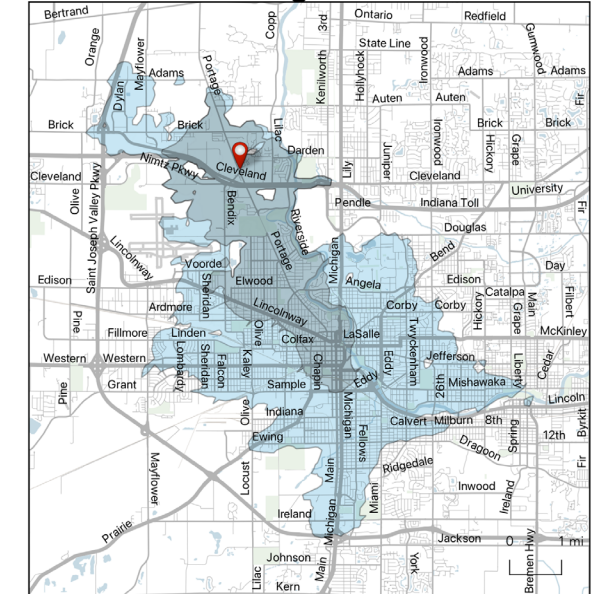
How far can I travel in **60 minutes** from
Portage at Bendix
on weekdays at noon using:

Short-Term Network?



	Change	% Change
Residents Accessible	-700	-3.0%
Jobs Accessible	+2,000	+7.5%

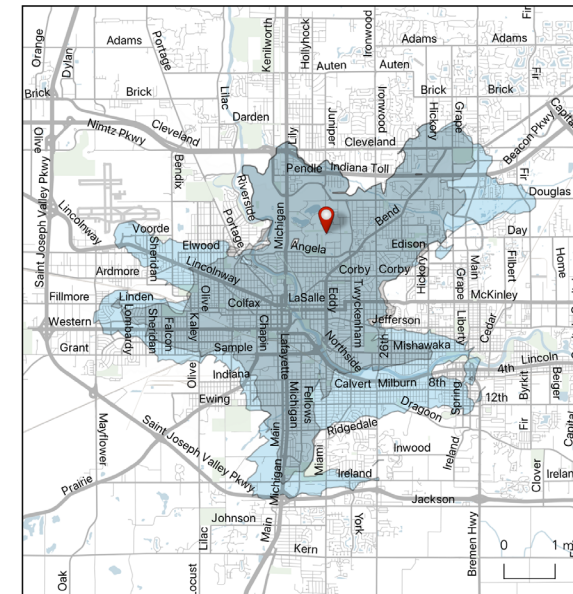
Additional Funding Network?



	Change	% Change
Residents Accessible	+58,400	+257.0%
Jobs Accessible	+44,100	+257.0%

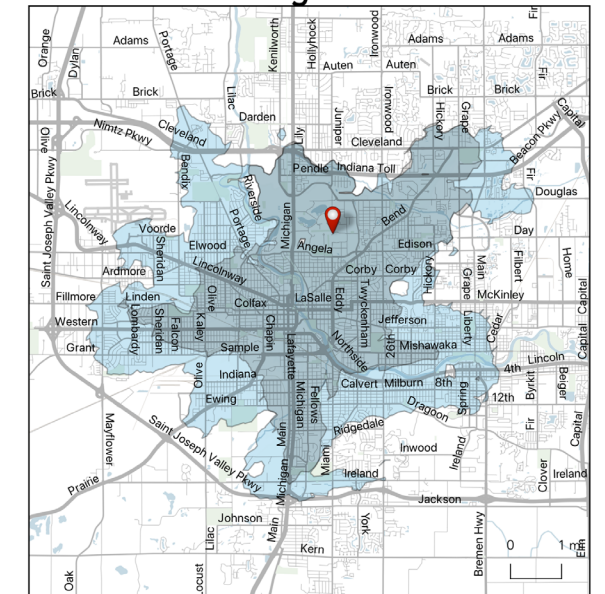
How far can I travel in **60 minutes** from
Duncan Student Center & Notre Dame Stadium
on weekdays at noon using:

Short-Term Network?



	Change	% Change
Residents Accessible	+27,500	+44.5%
Jobs Accessible	+16,700	+25.5%

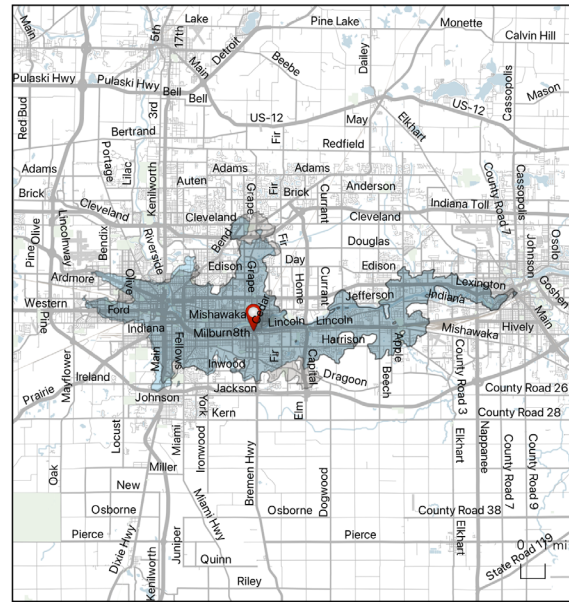
Additional Funding Network?



	Change	% Change
Residents Accessible	+52,100	+84.0%
Jobs Accessible	+28,100	+84.0%

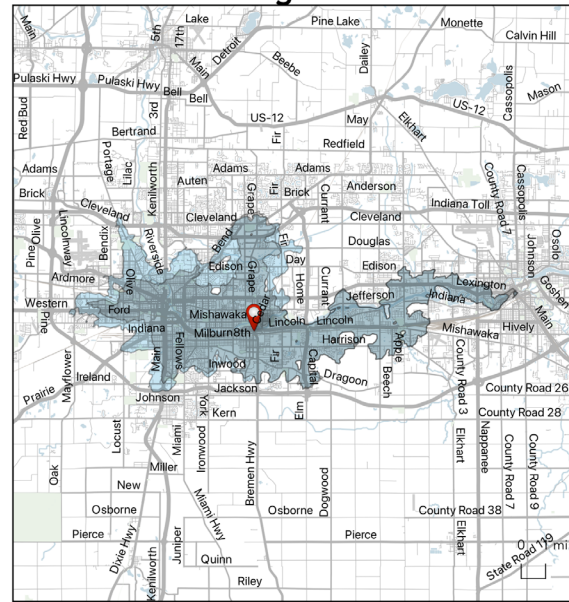
How far can I travel in **60 minutes** from
Mishawaka Transfer Center
on weekdays at noon using:

Short-Term Network?



	Change	% Change
Residents Accessible	+1,300	+1.0%
Jobs Accessible	+200	+0.5%

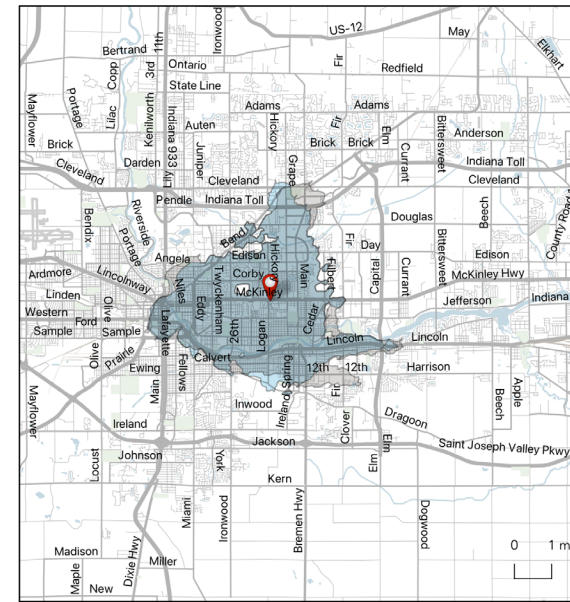
Additional Funding Network?



	Change	% Change
Residents Accessible	+33,600	+30.5%
Jobs Accessible	+19,100	+30.5%

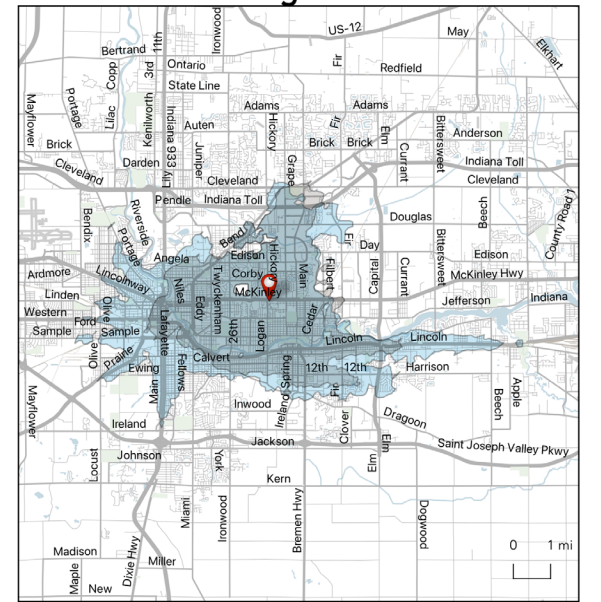
How far can I travel in **60 minutes** from
Bethel College
on weekdays at noon using:

Short-Term Network?



	Change	% Change
Residents Accessible	-3,500	-6.0%
Jobs Accessible	-2,800	-4.5%

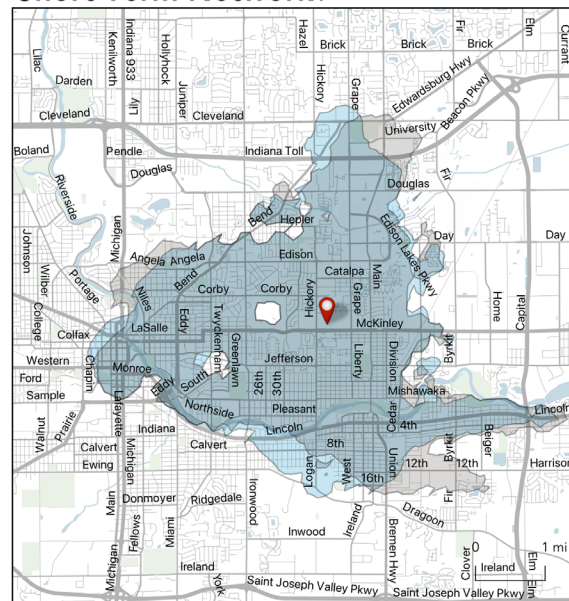
Additional Funding Network?



	Change	% Change
Residents Accessible	+32,800	+54.0%
Jobs Accessible	+22,700	+54.0%

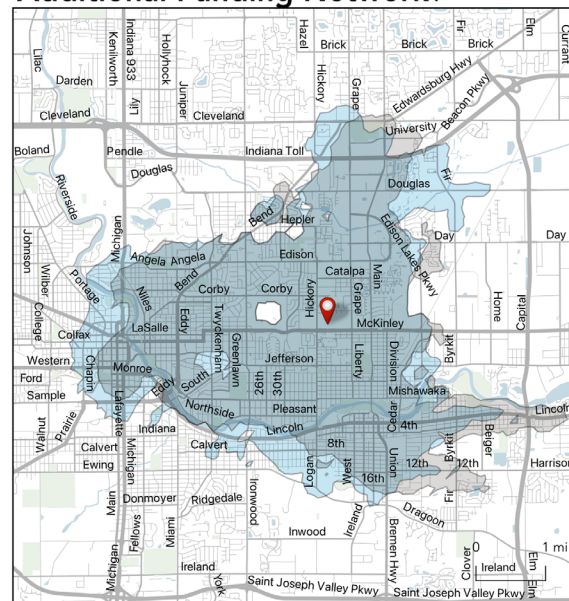
How far can I travel in **60 minutes** from
Town and Country Shopping Center
on weekdays at noon using:

Short-Term Network?



	Change	% Change
Residents Accessible	-200	-0.5%
Jobs Accessible	+1,300	+2.0%

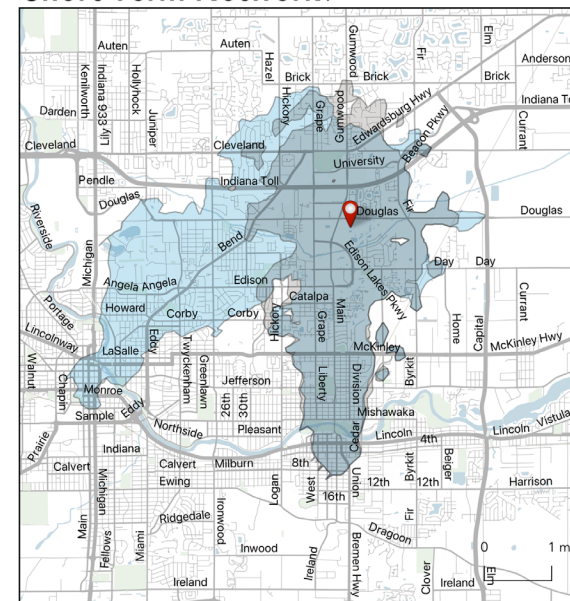
Additional Funding Network?



	Change	% Change
Residents Accessible	+7,900	+14.0%
Jobs Accessible	+10,400	+14.0%

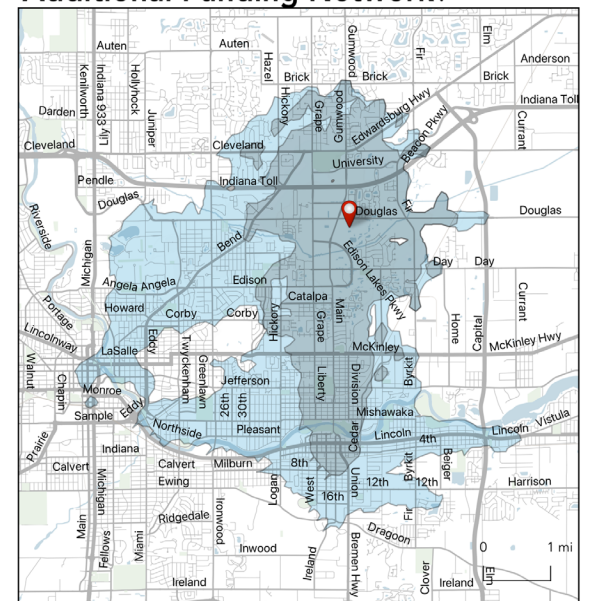
How far can I travel in **60 minutes** from
St. Joseph Regional Medical Center
on weekdays at noon using:

Short-Term Network?



	Change	% Change
Residents Accessible	+17,400	+77.5%
Jobs Accessible	+28,600	+112.5%

Additional Funding Network?



	Change	% Change
Residents Accessible	+43,000	+191.0%
Jobs Accessible	+36,200	+191.0%

For most people and places in Mishawaka, the Short-Term Network increases access at least a little. The Additional Funding Network increases access dramatically.

Change in Access: Short-Term in South Bend and Mishawaka

The previous maps show how the networks changes where people could go in a given time, from particular places. Access to other opportunities, like education or shopping would likely change in a similar way. We can run the same analysis on a grid of locations throughout the region to estimate the access impacts of the recommended networks on jobs access for different areas of the city.

The map in Figure 28 shows that heat map analysis comparing the Short-Term Network to the Existing Network. Since the Short-Term Network uses the same resources as the Existing Network, it naturally has positive and negative areas as any service additions require a cut somewhere else.

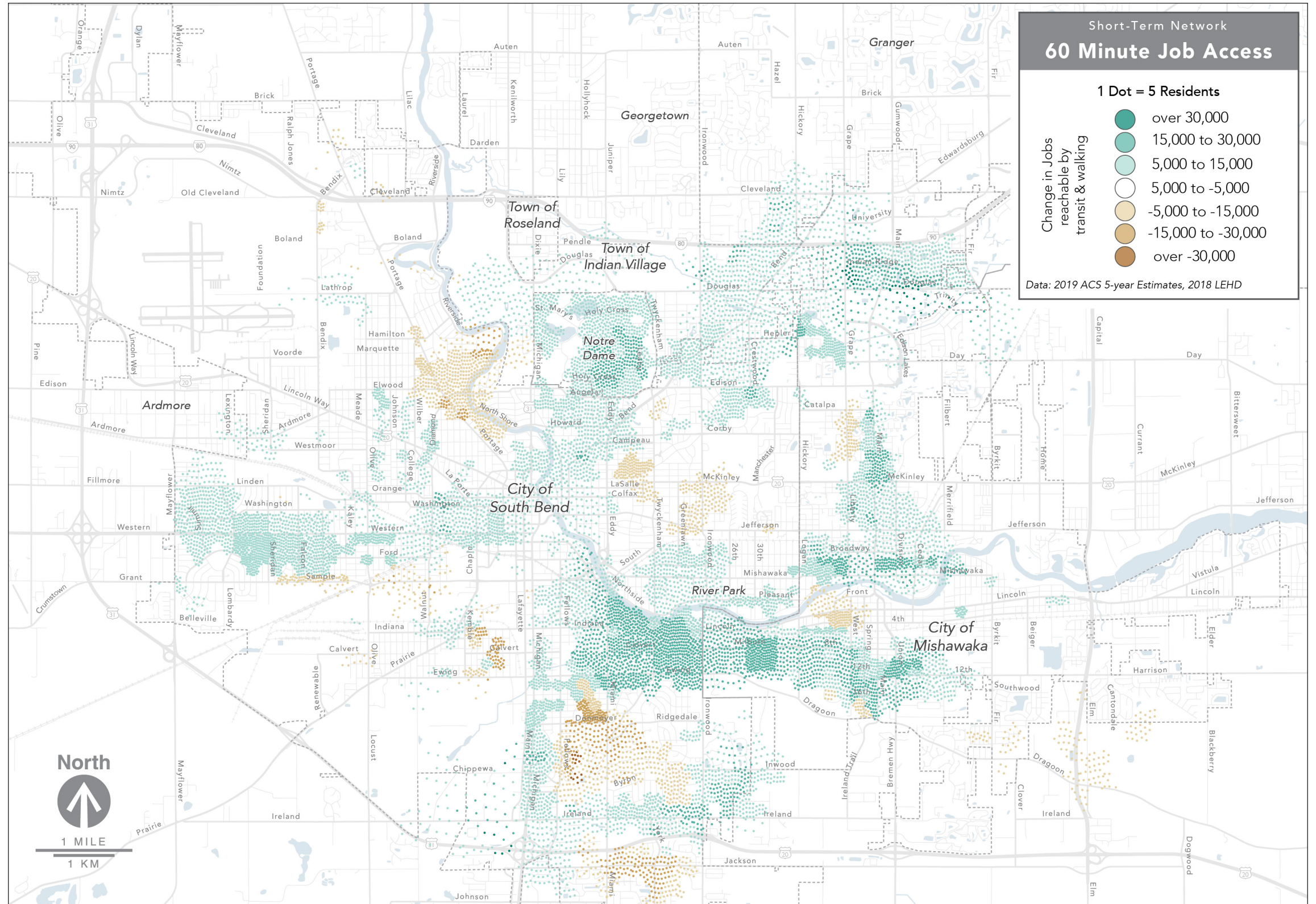
Areas where job access improves include:

- Portions of inner Washington and Western where revised downtown routing make it easier to reach lots of jobs.
- Notre Dame and portions of South Bend Avenue where changes for Route 7 provide better access to many areas near the revised route.
- Along Michigan and Main from Ewing to Ireland where the revised Route 6 provides better service.
- Along portions of Miami and Calvert served by Route 11, where improved connections downtown mean more jobs are reachable in 60 minutes.

Areas where job access declines include:

- Areas around Portage and Elwood, as Route 3 is now every 60 minutes, instead of having every 30-minute service.
- Around Donmoyer, Fellows, and Byron in southside, due to the decrease in frequency and other changes to Route 8.

Figure 28: Change in jobs reachable in 60 minutes in South Bend and Mishawaka under the Short-Term Network



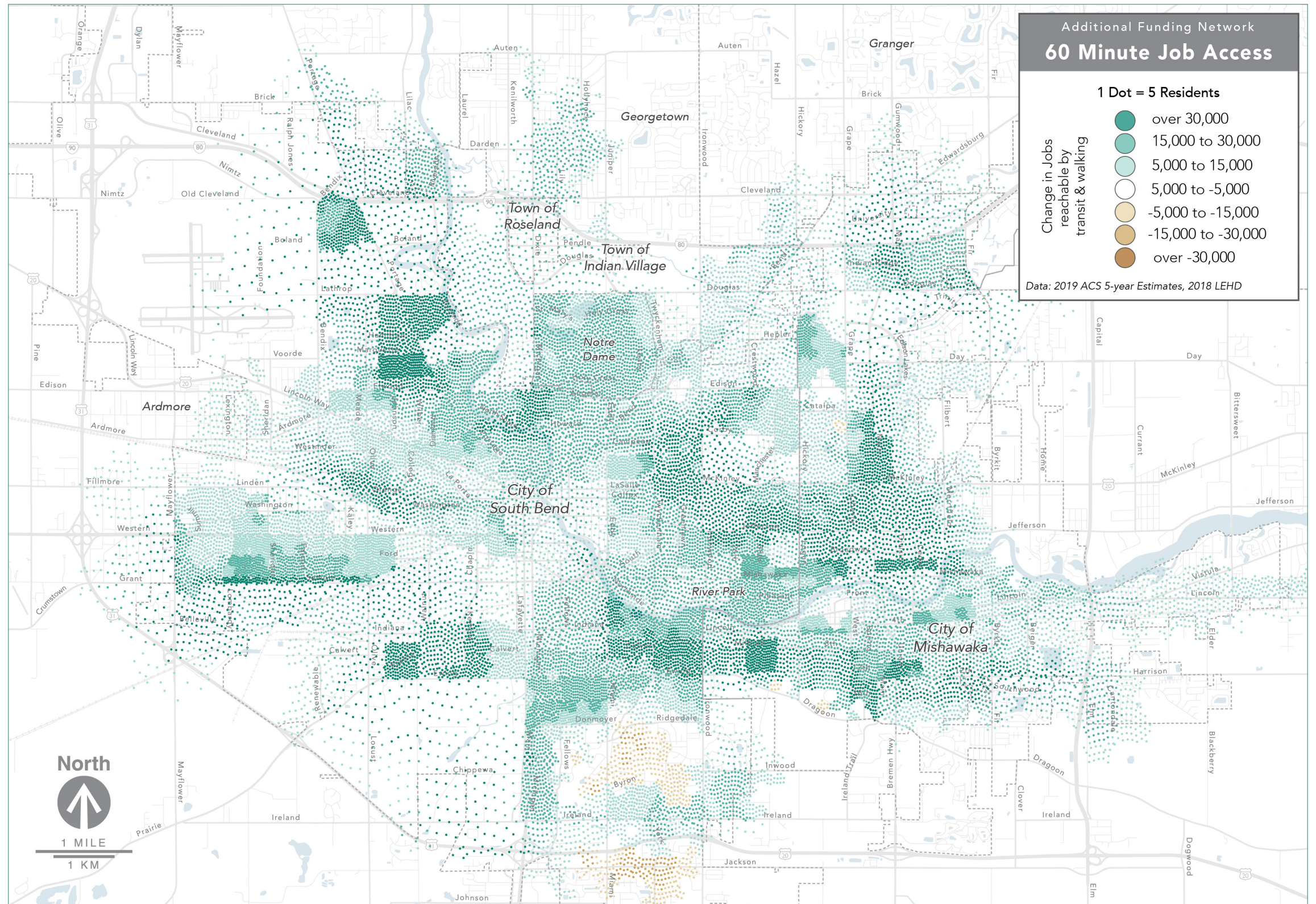
Change in Access: Additional Funding Network in South Bend and Mishawaka

Figure 29: Change in jobs reachable in 60 minutes in South Bend and Mishawaka under the Additional Funding Network

- Along Lincolnway in Mishawaka from Logan to Downtown due to switching this corridor to Route 15B with 60-minute service instead of today's 30-minute service.
- Along and around Cedar Street near Eddy Street to the east due to shifts in Route 7. This area is now a longer walk from service that is every 60 minutes, instead of every 30 minutes.
- Around Calvert Street, near Taylor Street, due to Route 12 being shifted to Prairie Avenue and these areas being more than ¼ mile from service.
- Areas near the Excel Center, where the Route 2 replacement is not quite as good at providing access to jobs as the current Route 4 service.
- Southwood and Reverewood areas, where the reduced frequency of service reduces access to jobs by transit.

The map in Figure 29 shows the same job access heat map outcome for the Additional Funding Network compared to the Existing Network. Nearly all parts of South Bend and Mishawaka see a large improvement in access to jobs. Only two areas stand out as having reduced access:

- Areas along Miami Street south of Donmoyer still show reduced access since they are only served by an hourly route.
- A small area of Lincolnway just east of Logan still shows a small decrease in access due to being served primarily by hourly service.



Access Change: South Bend and Mishawaka

The maps on the previous two pages show how much access increases or decreases across different parts of South Bend and Mishawaka. By adding up all the jobs reachable by anyone and dividing it by the total population, we can get an average of jobs reachable across the entire service area.

The chart in Figure 30 shows that how many jobs the average person, average person of color, and average person in poverty could reach in the Existing, Short-Term Network, and Additional Funding Networks.

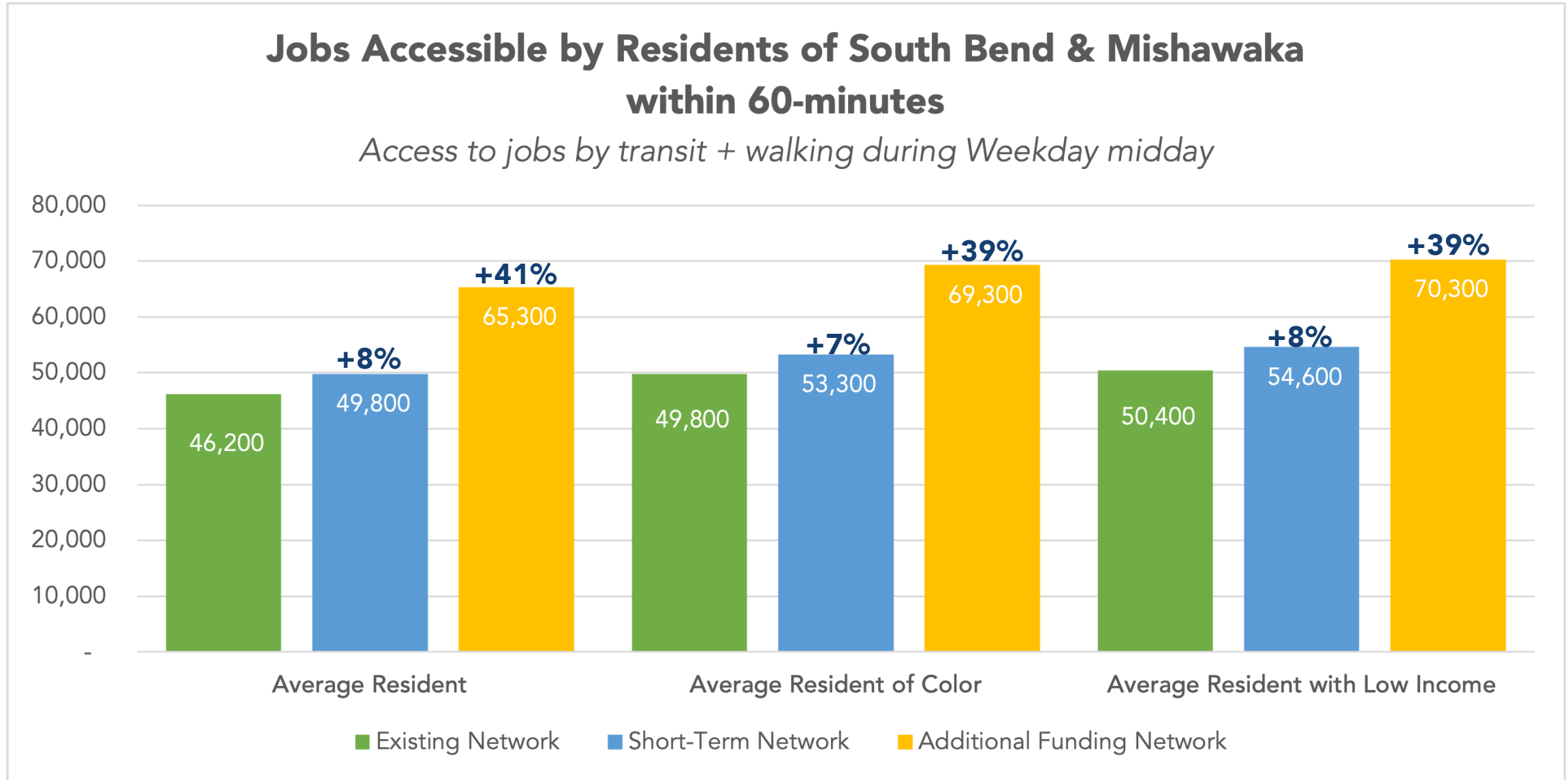
Even though the Short-Term Network is cost-neutral, the changes in the network have a net positive effect on access to jobs for the average person, average person of color, and average person in poverty. Each group sees access to jobs increase by 7-8% on average.

With the increased service, the Additional Funding Network can achieve much better outcomes. Access to jobs for all groups increase 39-41%.

The Short-Term Concept increases job access by about 7% for the average person, average person of color, and average person in poverty.

The Additional Funding Network significantly increases job access for all groups, with increases of about 40%.

Figure 30: Comparison of jobs reachable in 60 minutes in South Bend and Mishawaka under the Existing Network, Short-Term, and Additional Funding Concepts.



5

Draft Recommended Networks Elkhart and Goshen

Existing Interurban Trolley Network

77% Ridership / 23% Coverage

To help the reader compare the Existing Network, the Short-Term Concept, and the Additional Funding Concept, maps of each network for the Interurban Trolley service area (Elkhart and Goshen) are shown on the following pages.

In each network map, routes are color-coded by midday frequency. The choice of midday, rather than morning or evening rush hour, is intentional. While travel often peaks at rush hour, many people need to travel at midday. Retail and restaurant industries change shifts throughout the day, particularly in midday and later evening. Office workers may need to travel for meetings or personal appointments. College students often attend midday classes. Parents may need to pick up a sick kid from school.

In the Interurban Trolley Network, frequency of service is consistent across most of the day. Notably, there is no service at all on Sundays. The frequency charts show the pattern of frequency, starting on page 37.

- **Blue** means about every **30 minutes** in the middle of the day. Some routes in this category have headways of up to 35 minutes.
- **Green** means about every **60 minutes**

The maps in this report highlight the city-wide and region-wide differences between the Concepts. For more details on the existing network, its design and performance, see the [Choices Report](#), published in February.

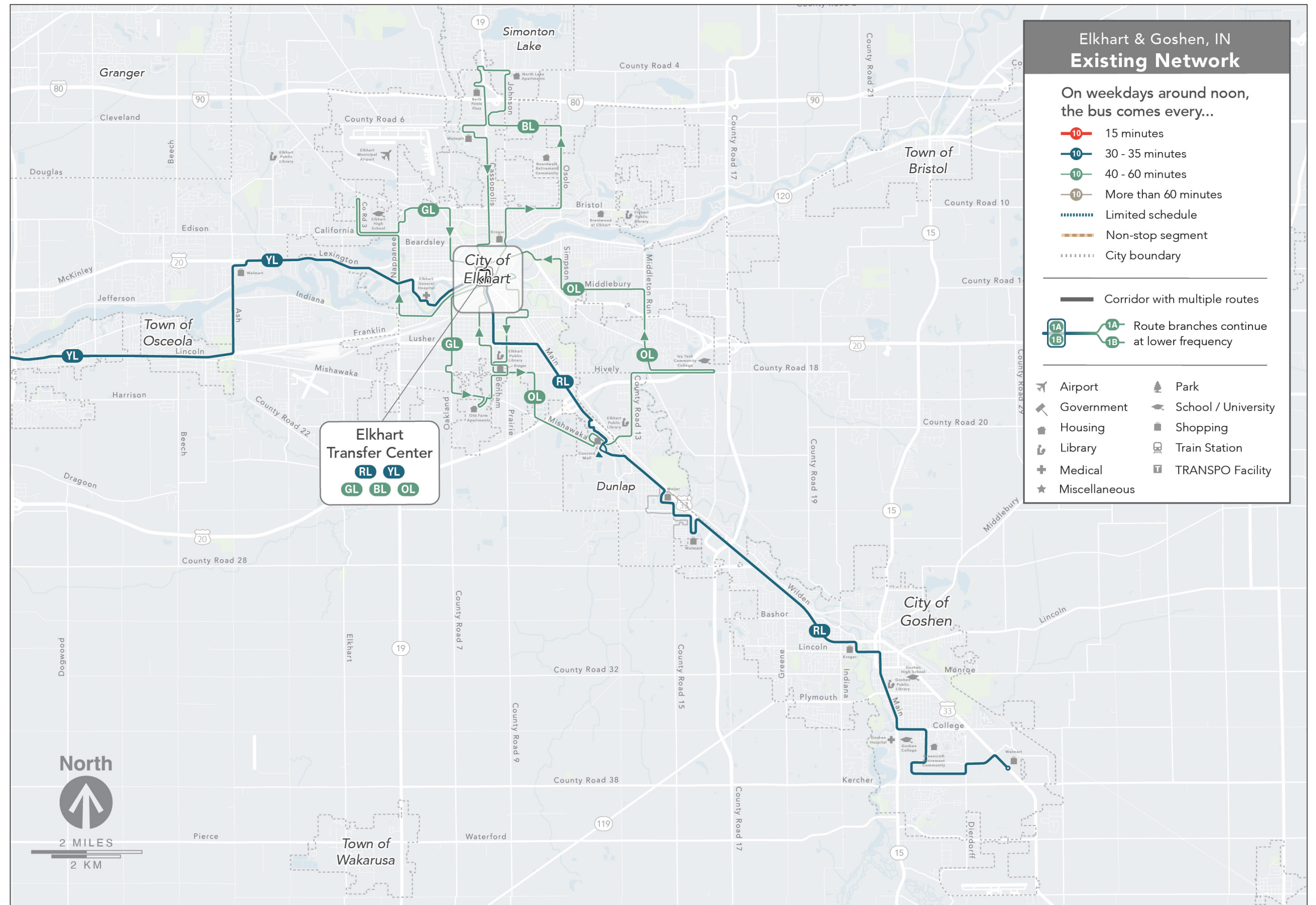


Figure 31: Interurban Trolley network of bus routes, as of 2021

Short-Term Interurban Trolley Network

60% Ridership / 40% Coverage

The Short-Term concept makes a few adjustments to improve service within the current budget and the policy direction from the MACOG Board to maintain nearly all existing coverage. There are more changes in Goshen since the City has committed to funding two additional buses.

Key differences from today's network include:

- All routes are numbered. With the addition of two new routes, color-coded route naming does not work well. Routes are now numbered:
 - Yellow Line is now Route 30.
 - Red Line is now Route 50.
 - Green Line is now Route 32.
 - Blue Line is now Route 33.
 - Orange Line is now Route 35.
- Routes 32 and 33 each have small routing tweaks to connect shopping centers and other destinations more efficiently.
- Route 35 (Orange Line) no longer serves Concord Mall since activity in that area is much lower as the mall is mostly closed. With the time savings from not serving the mall, Route 35 now serves more of the industrial areas along Middlebury Street, Toledo Road, Eastland Drive, and County Road 17.
- In Goshen, new Route 52 serves West and North Goshen, reaching Roxbury Park, Arbor Ridge Apartments, and the Chamberlain Neighborhood.
- New Route 53 serves parts of South Goshen including Historic Southside, Rieth Park, Greencroft, all the way to Winchester Trails.
- With the new Route 53, Route 50 (Red Line) is shifted to Main Street to directly serve Goshen Hospital and Goshen College. Route 50 also has a new deviation to serve the new County Courthouse location and to save time for this deviation, Route 50 only serves the south side of Concord Mall.

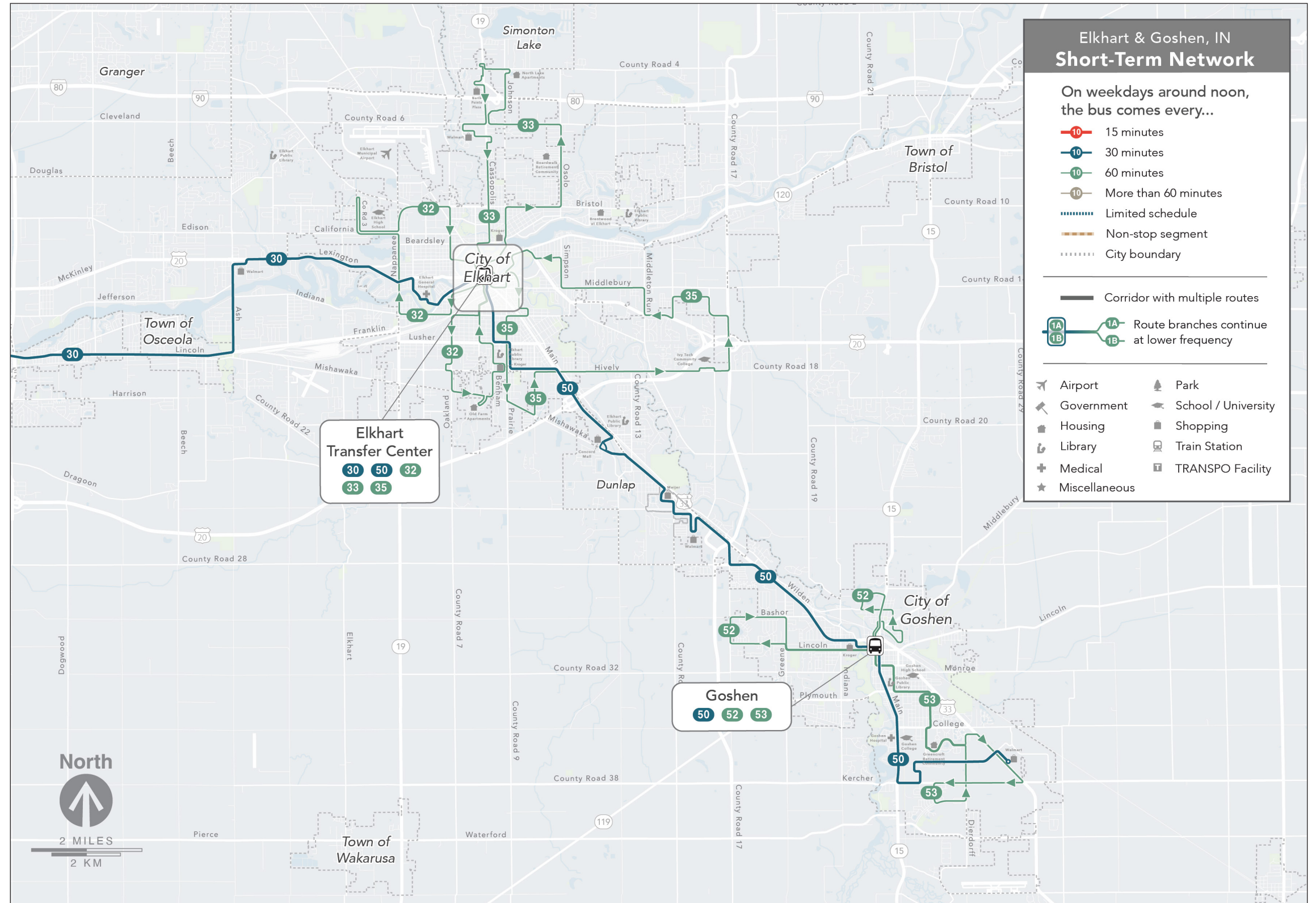


Figure 32: Interurban Trolley Short-Term Recommended Network

Downtown Elkhart Short-Term Network

The Short-Term Network also makes a number of changes to routing within the Downtown Elkhart area. Overall, routing is simplified slightly. A few deviations are removed to speed up service and some routes are consolidated to provide more two-way service.

- Route 32 (Green Line) to the southwest has been adjusted to be two-way on Benham, Dr MLK Jr Drive, and 6th to Indiana to provide two-way service to Washington Gardens.
- Route 32 (Green Line) to the northwest has been adjusted to use Marion Street to Oakland to Indiana for its outbound trip to provide coverage where the southwest portion of the loop used to serve. For its inbound path, it has been shifted to use Michigan to Lexington to reach downtown.
- The outbound path of Route 35 (Orange Line) has been adjusted to follow 3rd to Harrison to Main to Middlebury to Prairie to Waterfall to Richmond Street. It then follows its existing path to Pierre Moran Park. These changes have been made to reduce the time it takes to get out of downtown and allow the route to be extended to more of the industrial areas to the east.
- Route 35 (Orange Line) will serve Waterfall Apartments at the intersection of Waterfall Drive and Prairie Avenue in both directions, instead of only in one-direction. Service will be from stops on Prairie Street as the route will no longer pull up to the front door, via Division Street, as it does today.



Figure 33: Existing Interurban Trolley Network in Downtown Elkhart



Figure 34: Short-Term Network in Downtown Elkhart

One-Way Loop: Route 35 Orange Line

In Elkhart, service is spread quite thin, and most routes have long one-way loops to maximize coverage. As discussed in the Choices Report, these large one-way loops create challenges for travel around the city. A major challenge is that they force very indirect travel for many trips.

One route in particular, Route 35 (Orange Line) faces another challenge in that it is the largest, most indirect loop in the system, and it travels counter-clockwise. By traveling counterclockwise, it make many more left turns than right turns in its movement around southeastern Elkhart. In transit, extra turns add more time and left turns in particular are usually time consuming and less reliable. Therefore, there are a number of reasons to reverse the direction of the Route 35 loop.

The one advantage to the counterclockwise pattern is that Routes 32 and 35 can be timed to meet at the Pierre Moran Shopping Center, so riders in southwest Elkhart can transfer to go to Ivy Tech or other destinations on Route 35 without having to go all the way downtown. Switching the direction of Route 35 would make this timed connection impossible.

In the Short-Term Network recommendations, Route 35 keeps its current counterclockwise design. It is worth consideration by the community, though, if the timed connection at Pierre Moran is worth the less reliable operation of Route 35.

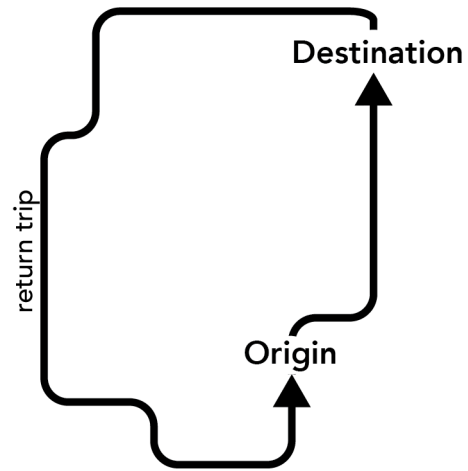


Figure 35: In a one-way loop, the more direct the service from A to B, the more circuitous it's likely to be on the return trip.

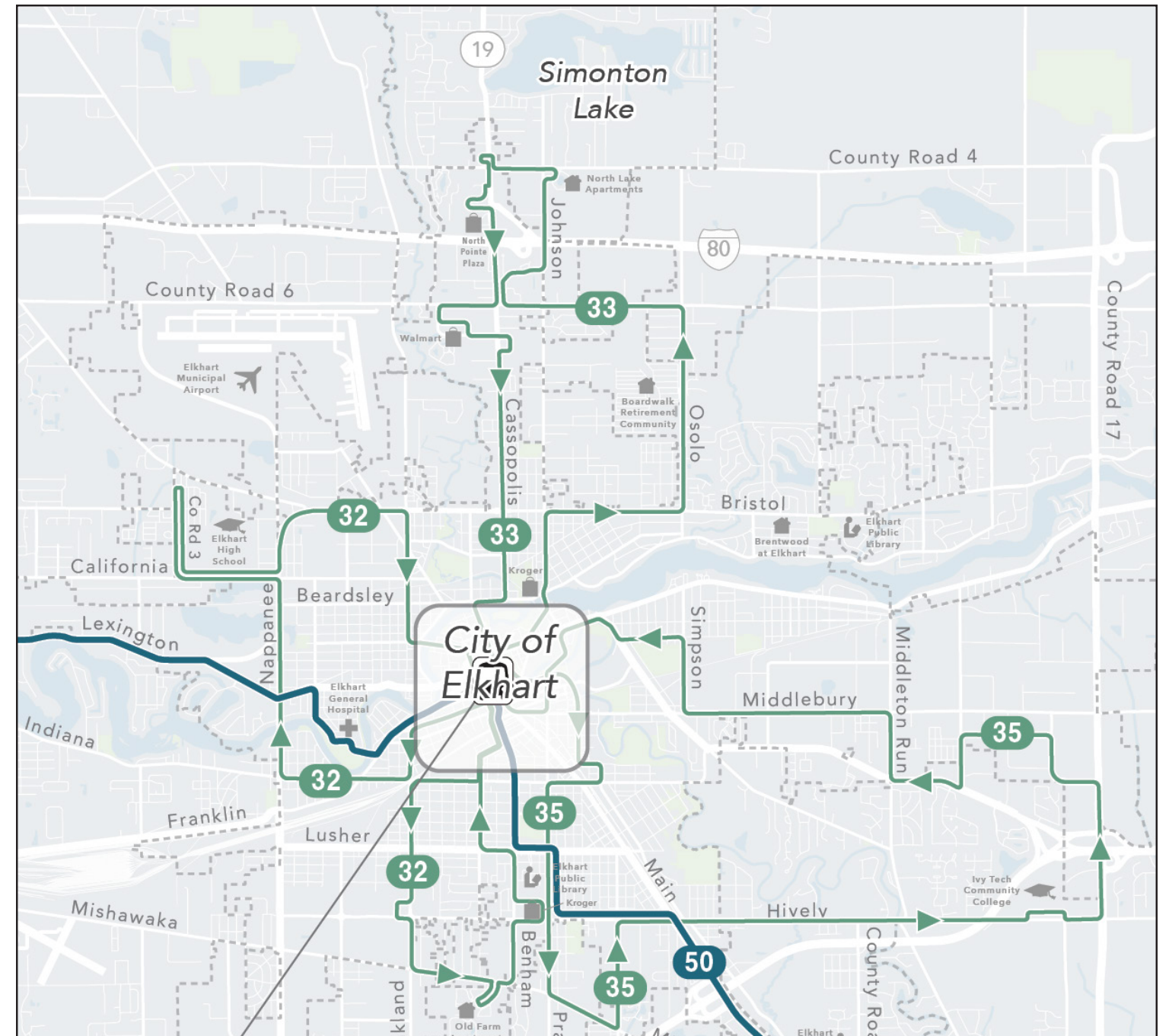


Figure 36: Elkhart in the Short-Term Network

Existing Networks Span of Service

The chart in Figure 20 summarizes each route's frequency and span for the existing Transpo and Interurban Trolley networks. This graphic illustrates how much less service is available during evenings and on weekends.

As discussed in the Choices Report, the Existing Network the lack of Sunday service is a significant limit on the usefulness of service to many people. Also, the Interurban Trolley has no service after 7pm, severely limiting the usefulness of service to service and retail workers.

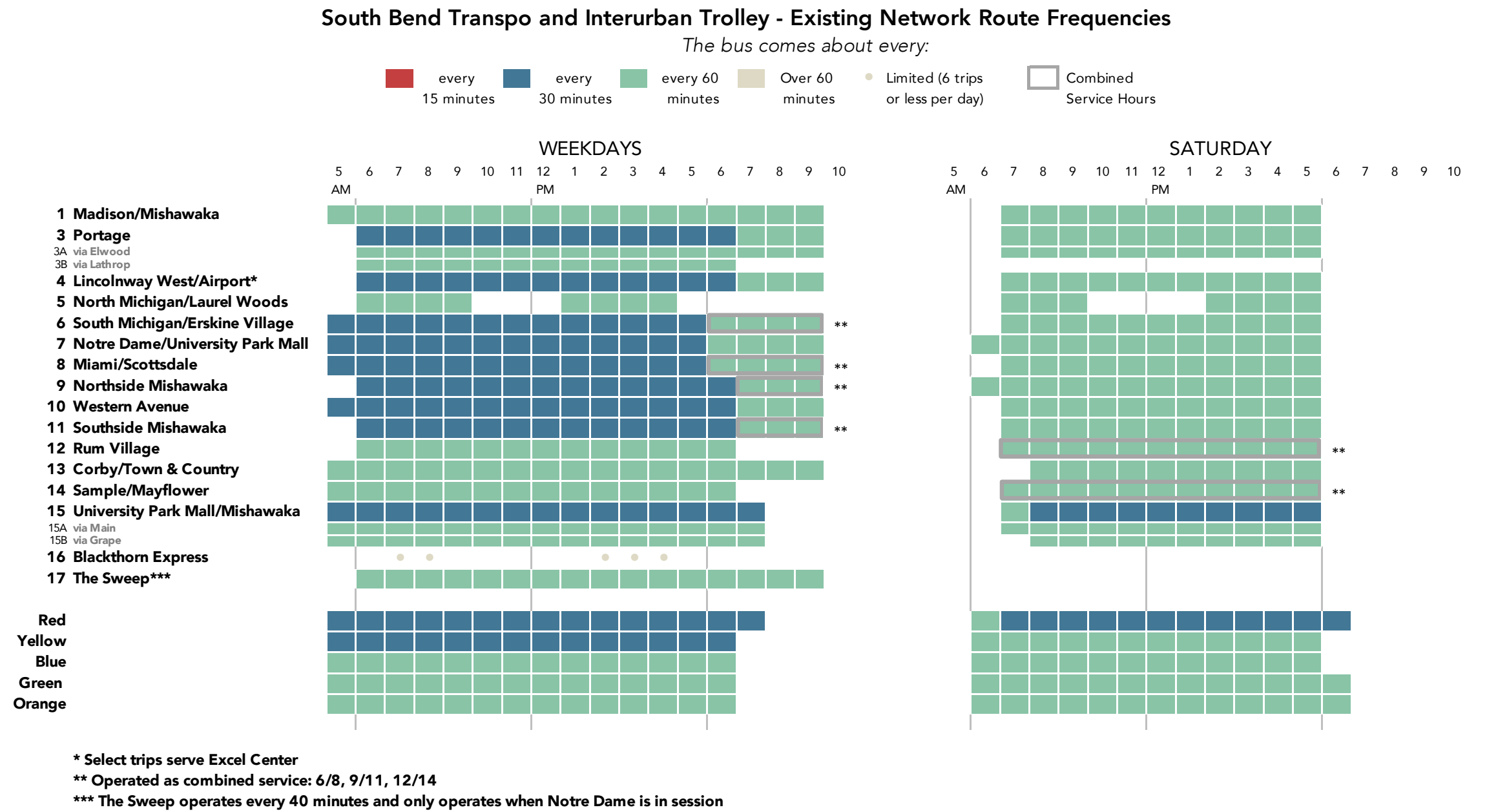


Figure 37: This chart shows approximately how often the bus runs throughout the day, on weekdays and weekends, on each Transpo and Interurban Trolley route.

Short-Term Network Span of Service

The chart in Figure 21 summarizes each route's frequency and span for the Short-Term Interurban Trolley and Transpo Networks. In general, routes still operate similar spans and days of the week. With no additional budget for service, it would be impossible to add significant new hours of service in the evening, or Sunday service, without major cuts to coverage or frequency of service.

In the Short-Term Network, the new routes added in Goshen have hourly service with the same level and pattern of service as other hourly routes in the Interurban Trolley Network, from about 5am to 7pm each weekday and Saturdays.

In the Short-Term Network, frequency of all-day service is the same as today, with limited evening service and no Sunday service.

South Bend Transpo and Interurban Trolley - Short-Term Network Route Frequencies

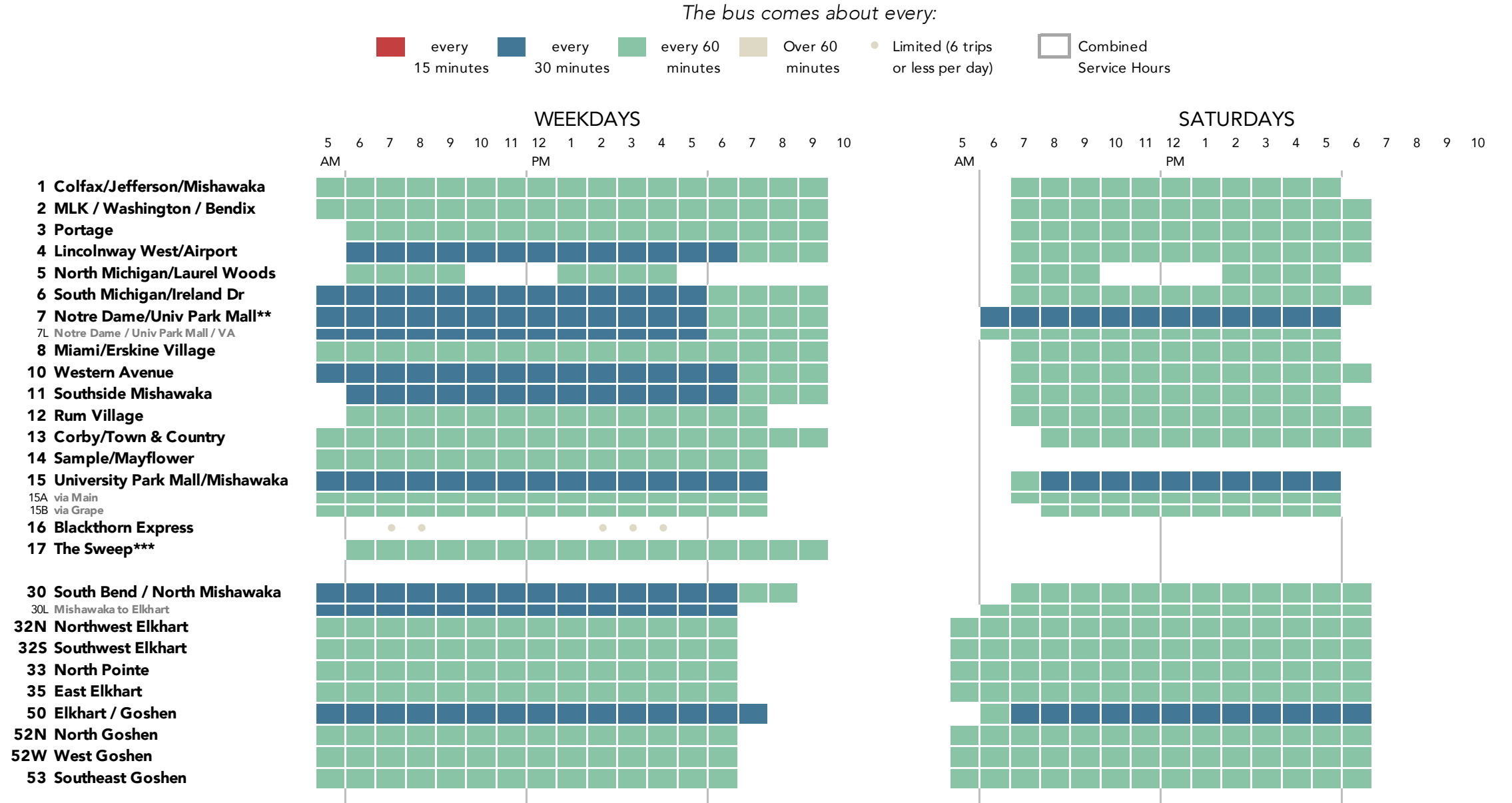


Figure 38: The spans of service on routes in the Short-Term Network are very similar to today's network, with limited evening service and no Sunday service.

Additional Funding Interurban Trolley Network

+80% Service

The Additional Funding Concept assumes about an 80% increase from the existing network. With this increased investment, it is possible to significantly improve service and usefulness to many destinations. This improved network focuses mostly on improved service to areas already served in the Existing or Short-Term Networks, though a few new areas are served.

Key differences from today's network include:

- Improved 30-minute frequency of service on two corridors in Elkhart: Cassopolis with a simplified Route 33 and to the southwest with a new Route 36 serving South 6th Street and Oakland Avenue.
- A new hourly Route 34 serving Osolo Road, the Industrial Park along CR 6, ending near CR 17 at the under construction Amazon Facility.
- Every 30-minute service on the new Route 52 in West Goshen and the new Route 53 in southern Goshen, Rieth Park, and Greencroft.
- Route 50 (Red Line) is extended farther south to provide 30-minute service to Winchester Trails.
- A revised, simpler service to North Main Street and Arbor Ridge Apartments with hourly service on Route 51A.
- A new hourly service through the Chamberlain neighborhood and East Goshen on Route 51B.
- With better service in southwest Elkhart, the looping pattern for Route 35 (Orange Line) is reversed to travel clockwise, simplifying and speeding service.

As a reminder:

- **Blue** means about every **30 minutes** or better in the middle of the day.
- **Green** means about every **60 minutes**.

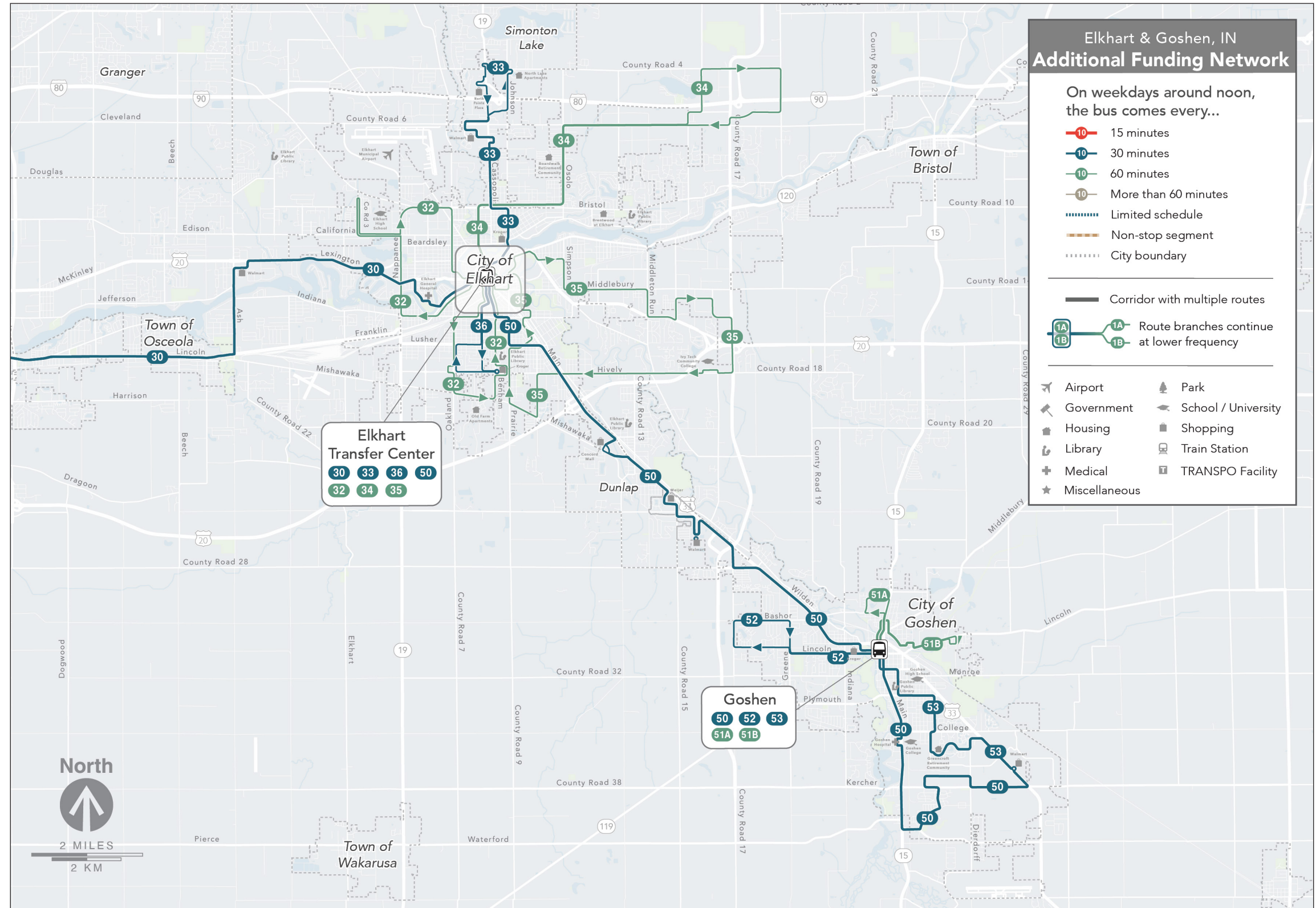


Figure 39: Interurban Trolley Additional Funding Network

Downtown Elkhart Additional Funding Network

The map in Figure 41 shows the Additional Funding Network within Downtown Elkhart. The Additional Funding Network has many of the same design features as the Short-Term network, but with new services added.

The revised and improved Route 33 would use Jackson Boulevard, Elkhart Avenue, and Johnson Street with two-way service through this relatively dense area to the northeast of downtown.

With the improved Route 33 on Johnson and Elkhart, the new Route 34 provides two-way hourly service along North Main Street, Beardsley and the southern portion of Cassopolis Road before heading east toward Osolo Road.

With the new Route 36 providing two-way service every 30 minutes on South 6th Street, Route 50 (Red Line) is shifted to Prairie Avenue from Benham Avenue between Indiana Avenue and Lusher Avenue, to avoid concentrating 30 minute service on two streets only a 1/4 mile apart. Route 32 (Green Line) is shifted to Benham Avenue to maintain coverage on this street.

As a reminder:

- **Blue** means about every **30 minutes** or better in the middle of the day.
- **Green** means about every **60 minutes**.



Figure 40: Downtown Elkhart Service in the Additional Funding Network.

Additional Funding Network Span of Service

The chart in Figure 24 shows the frequency of service by time of day and day of week for the Additional Funding Network. The frequency of service is improved for key routes in both Elkhart and Goshen. In addition, most routes would operate until 10pm on weekdays and 9pm on Saturdays. Also, most routes would operate on Sundays, for the first time, with service from 6am to 9pm, the same as on Saturday.

The major exception is that Route 51B (East Goshen) would not run after 6pm or on weekends. This is due to how that route is interconnected with Routes 51A and 52 and the reduced frequency on Route 52 in the evenings and on weekends. When Route 52 is running every 30 minutes there is spare time in the schedule to operate Route 51B effectively for free. When Route 52 runs only hourly, there is not the extra time to operate Route 51B.

The frequency of service provided goes down at 7pm on weekdays, so that 30-minute routes become every 60 minutes from 7 to 10pm on weekdays. The frequency of service on Saturday and Sunday is similar to the evening service provided on most routes. Route 50 would have 30-minute service on Saturdays and 60-minute service on Sundays.

The Additional Funding Network includes more service in the evening and on Sundays, in addition to improved frequency of service.

South Bend Transpo and Interurban Trolley - Additional Funding Network Route Frequencies

The bus comes about every:

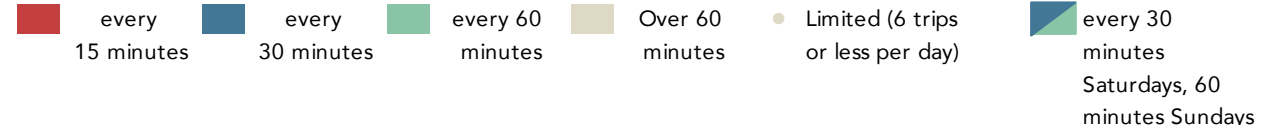


Figure 41: The frequency of service in the Additional Funding Network is significantly better on most routes, and all routes run into the evening and on Sundays.

6 Elkhart and Goshen Outcomes

Proximity to Transit: Elkhart and Goshen Residents and Jobs

The bar charts in Figure 42 show how many residents and jobs would be “close enough” to 30-minute or 60-minute transit service for the Existing, Short-Term, and Additional Funding Networks in Elkhart and Goshen. These charts assume that someone is near transit service if they are within ½ mile of a bus stop as the crow flies. Walking ½ mile over flat ground takes the average person about 10 minutes.

Compared to Existing, the Short-Term Network would

- increase the percent of residents near any service from 59% to 70%, but slightly reduce those near 30 minute service from 34% to 30%.
- increase the percent of jobs near any service from 52% to 62% but slightly reduce those near 30 minute service from 33% to 32%.

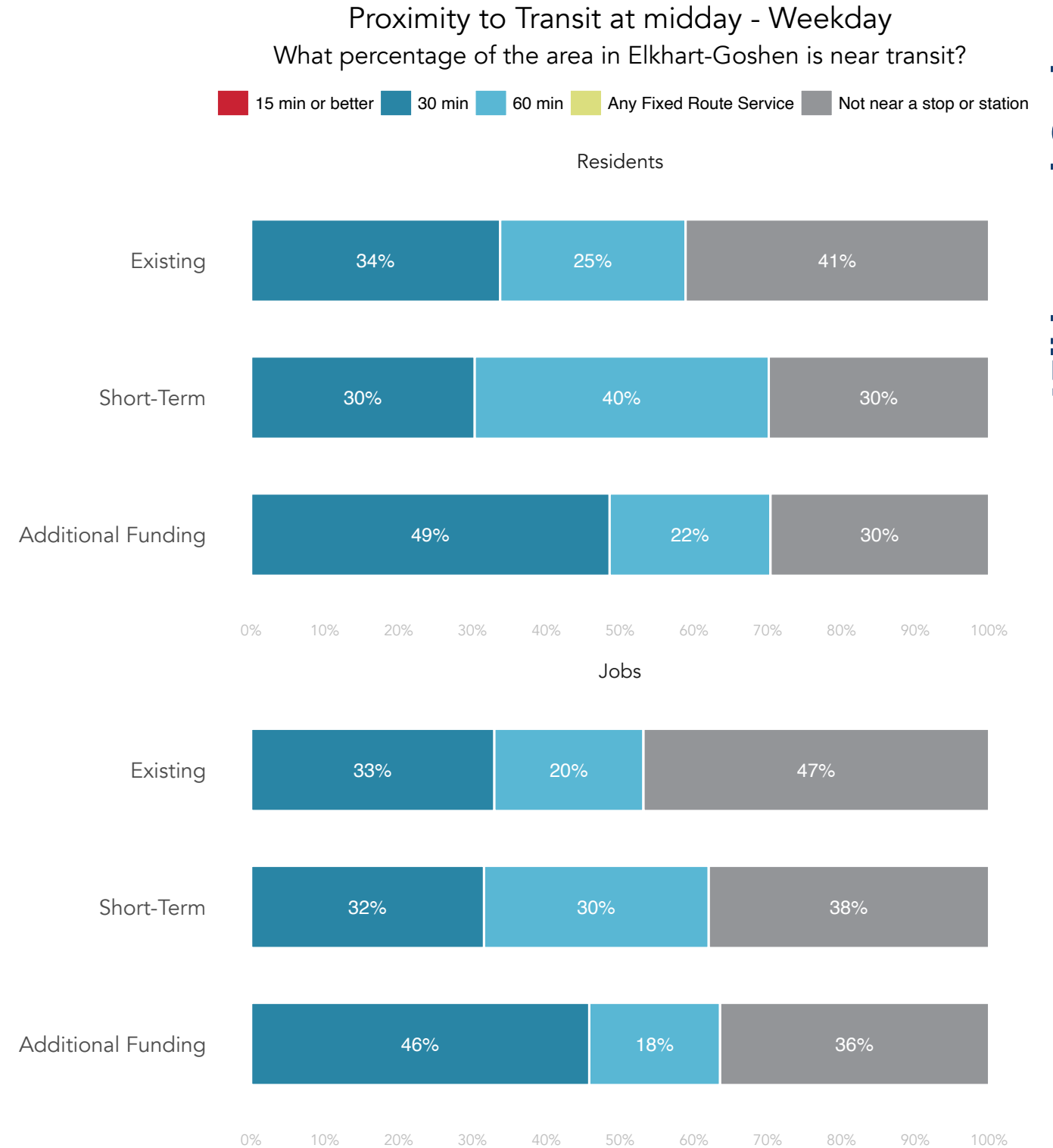
Part of the reason for the decrease in people served by 30 minute service is that Route 50 (Red Line) is moved from College Avenue to Main Street to serve the hospital and the college more directly. This removes 30-minute service for residents of Greencroft, which is relatively dense. These residents would instead be served with 60 minute service, but it would be provided more directly to the center of the community, which residents have requested. Therefore, the trade-off here is for less walking but more waiting for a large senior housing community. Conversations with community leaders suggests that Greencroft residents prefer less walking more than less waiting and that this change would be favored.

Compared to Existing, the Additional Funding Network would

- increase the percent of residents near at least 30 minute service from 34% to 49%,
- increase the percent of residents served by any transit from 59% to 70%,
- increase the percent of jobs near at least 30 minute service from 33% to 46%,
- increase the percent of jobs served by any transit from 53% to 64%.

For Elkhart and Goshen, the Short-Term Network increases coverage to a greater degree than in South Bend and Mishawaka because it includes two additional buses that Goshen has committed to funding. By adding service, the Short-Term can expand coverage to a greater degree than is possible for the concepts in South Bend and Mishawaka without having to sacrifice frequency.

Figure 42: Percent of residents and jobs in Elkhart and Goshen near transit in the Existing, Short-Term, and Additional Funding Networks.



Note: Proximity is measured as being located within 1/2 mile of a bus or rail stop.

Proximity for Elkhart and Goshen Populations of Concern

The charts in Figure 43 show the differences in proximity to service for residents of color, residents in poverty, and seniors for Elkhart and Goshen.

Compared to Existing, the Short-Term Network would

- increase the percent of people of color near any transit service from 62% to 73%,
- reduce the percent of people of color near 30 minute service from 41% to 36%.
- increase the percent of people in poverty near any transit service from 65% to 74%,
- reduce the percent of people in poverty near 30 minute service from 41% to 38%.
- increase the percent of seniors near any service from 50% to 61%,
- reduce the percent of seniors near 30 minute service from 30% to 24%.

The above patterns are similar to the effects of the Short-Term Network on all people, where service is spread a bit more thinly in order to cover more people, jobs, and places. Thus, it is unlikely that any group is bearing a disproportionate burden or gaining a disproportionate benefit from the Short-Term Network changes.

Compared to Existing, the Additional Funding Network would

- increase the percent of people of color near 30 minute or better service from 41% to 53%,
- increase the percent of people of color near any service from 62% to 73%,
- increase the percent of people in poverty near 30 minute or better service from 41% to 53%,
- increase the percent of people in poverty near any service from 65% to 74%,

- increase the percent of senior residents near 30 minute or better service from 30% to 47%.
- increase the percent of senior residents near any transit service from 50% to 62%.

For people of color, the increase in proximity to 30 minute service is slightly less than it is for the overall population—15% for the overall population and 12% for people of color. Similarly, people in poverty see their proximity to 30 minute service go up by 12%. For seniors, proximity to 30 minute service goes up by 17%.

A key reason for this difference is that people of color and people in poverty are more likely to already be near 30 minute service, with 41% near 30 minute service today versus 34% of all people. Therefore, new service to new areas is less likely to serve these populations.

The increases in proximity to any service for people of color and people in poverty are 11% and 9% respectively. These increases are closer to the overall increase to all residents (12%).

While the improvements for people of color and people in poverty are lower than for the overall population, the differences are not substantially smaller. Assessment of other outcomes may, described below, may also help provide context about whether the recommended networks are equitable.

Proximity to Transit at midday - Weekday
What percentage of the area in Elkhart-Goshen is near transit?

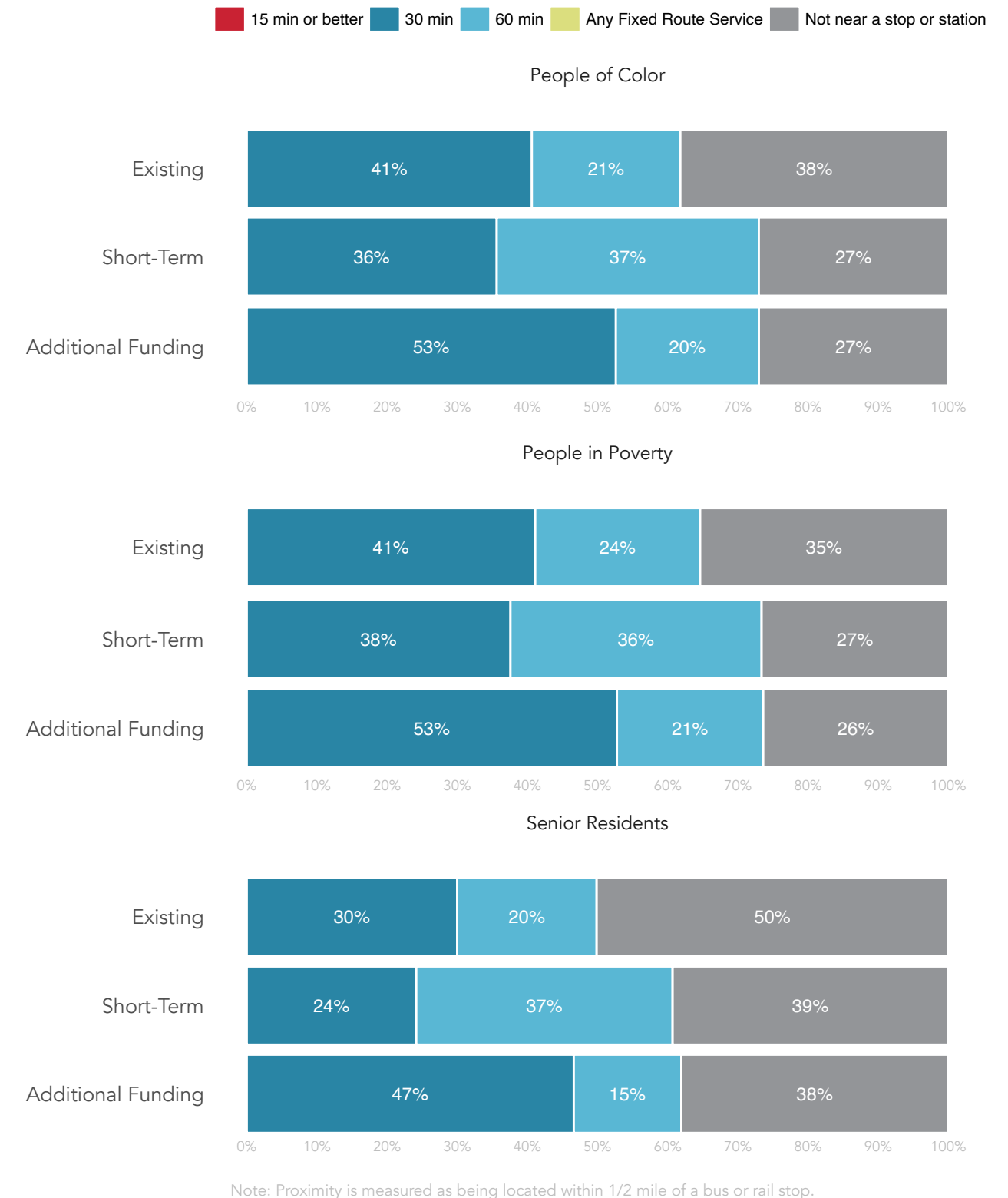


Figure 43: Percent of people of color, people in poverty, and senior residents in Elkhart and Goshen near transit in the Existing, Short-Term, and Additional Funding Networks.

Access from Downtown Elkhart

Where can I go in 60 minutes?

People ride transit if they find it useful. High transit ridership results when transit is useful to large numbers of people. A helpful way to illustrate the usefulness of a network is to visualize where a person could go using public transit and walking, from a certain location, in a certain amount of time.

The maps in Figure 44 show someone's access to and from Downtown Elkhart in 60 minutes, at noon on a weekday in the Short-Term and Additional Funding Networks. Each network is compared to the Existing Network. The technical term for this illustration is isochrone. A more useful transit network is one in which these isochrones are larger, so that each person is likely to find the network useful for more trips.

The dark blue represents areas that are reachable today and in the corresponding network. Areas that are newly reachable are shown in light blue, and areas that would no longer be reachable are shown in gray. The maps show that the Short-Term Network has a small gray area south of Downtown Goshen, meaning those areas can no longer be reached in 60 minutes or less. In the Additional Funding Network there are some areas in light blue, such as the far north end of the Cassopolis corridor.

Not Just the Area – Also What is Inside the Area

The real measure of usefulness is not just how much geographic area we can reach, but how many useful destinations are in that area. These maps and analysis also show the quantity of people and jobs reachable from each location mapped. The tables below each map show that for trips beginning in Downtown Elkhart, the

Additional Funding Concept would increase access to residents and jobs over the existing network by about 10%. The Short-Term network, would actually result in a small decrease in access, of about 2%, due to the deviation in the Route 50 (Red Line) adding time to the trip to Goshen, and reducing access to south Goshen.

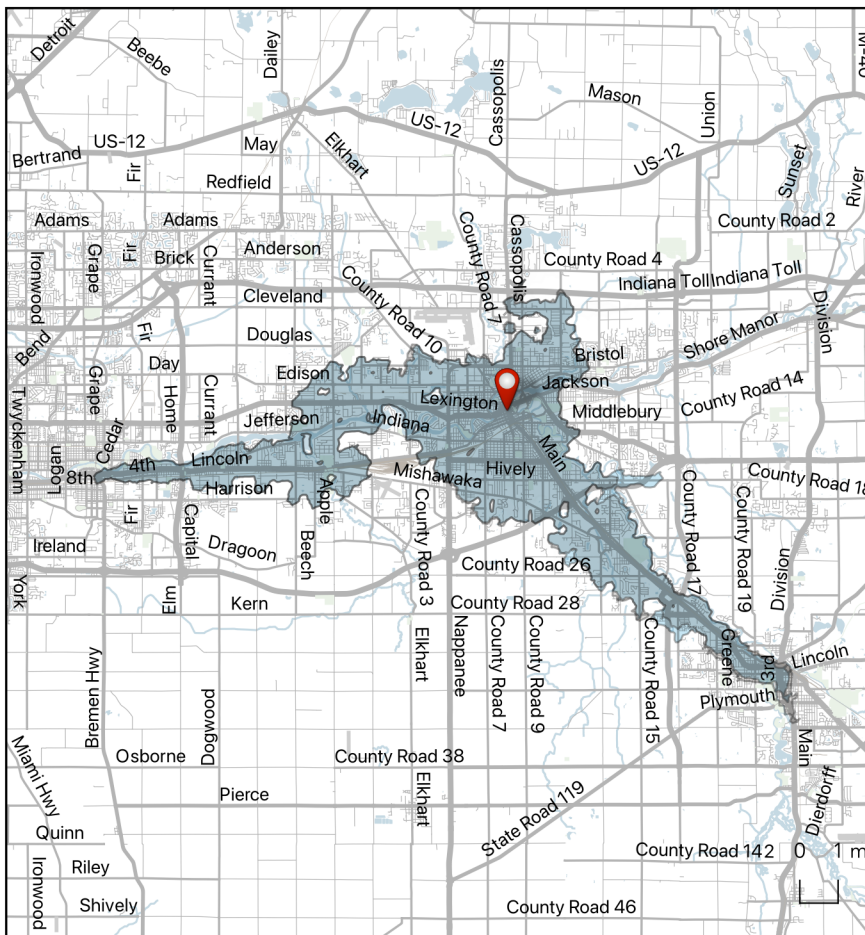
Higher ridership arises from service being useful, for more people, to get to more busy places. That's why predictive models of ridership do this very same analysis behind-the-scenes.

When reviewing these maps remember that waiting time counts, and in most cases, a longer walk to a high-frequency route can get people farther and faster, than a shorter walk to an infrequent route. Also, remember that some of the access shown in these maps isn't reached on a single route, but requires a transfer.

Figure 44: Isochrone map of access to and from Downtown Elkhart

How far can I travel in **60 minutes** from Elkhart Transfer Center on weekdays at noon using:

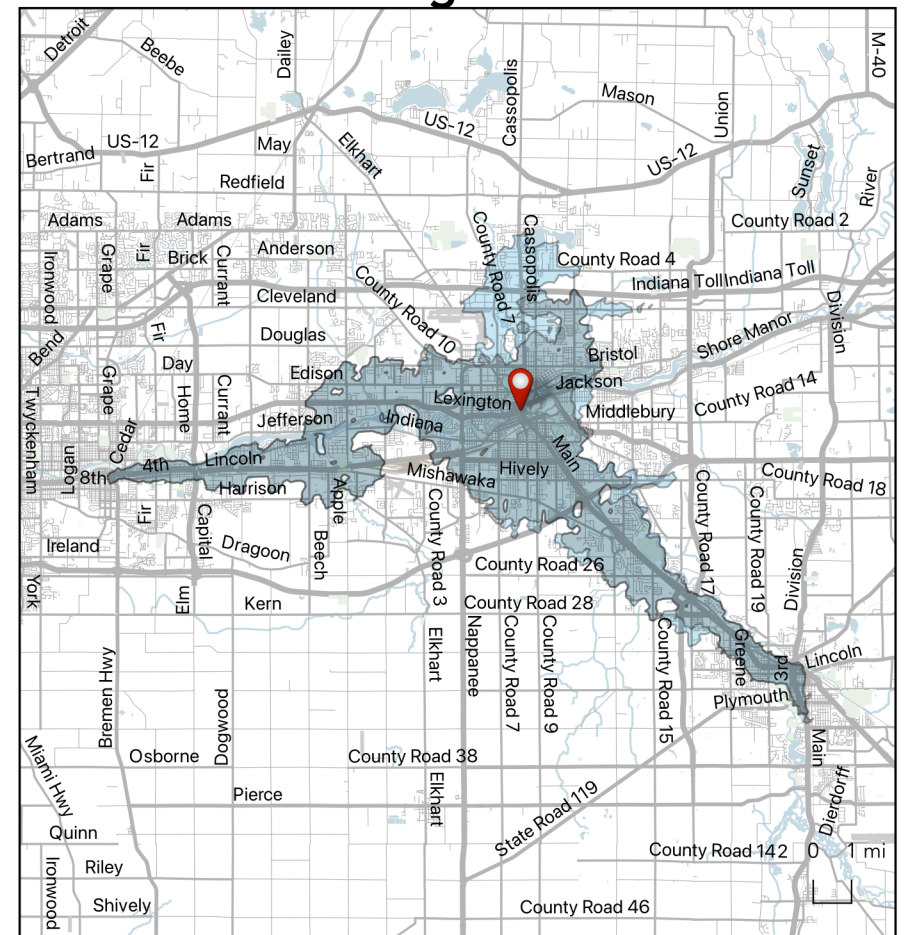
Short-Term Network?



	Change	% Change
Residents Accessible	-1,300	-1.5%
Jobs Accessible	-1,500	-2.5%



Additional Funding Network?

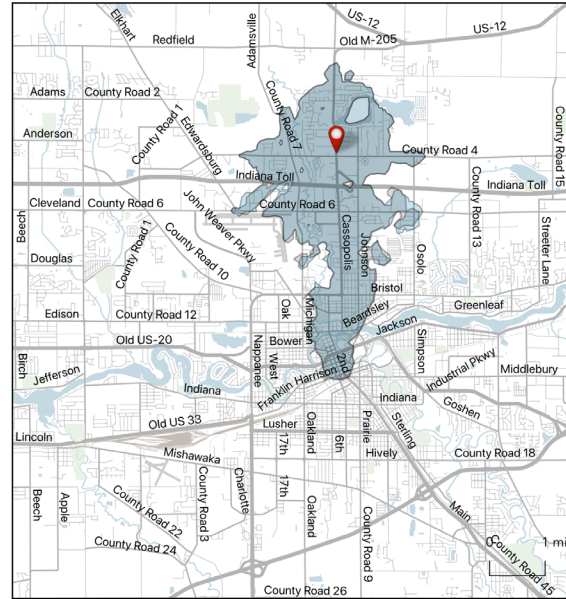


	Change	% Change
Residents Accessible	+7,300	+9.0%
Jobs Accessible	+6,400	+9.0%

How far can I travel in **60 minutes** from

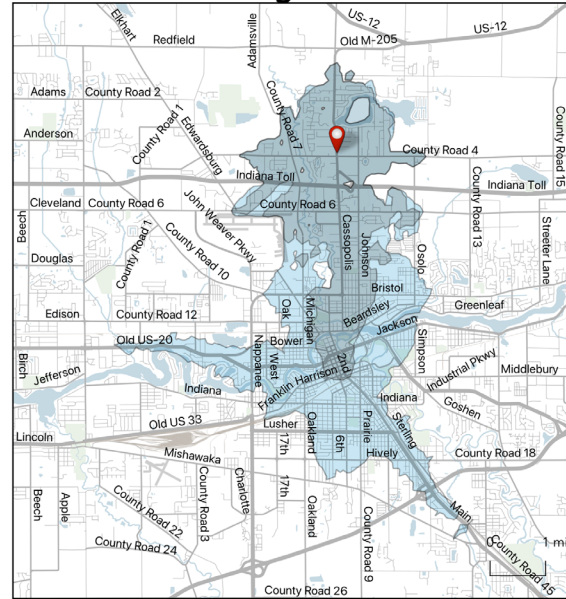
Elkhart - County Road 4 and Cassopolis
on weekdays at noon using:

Short-Term Network?



	Change	% Change
Residents Accessible	+0	0.0%
Jobs Accessible	+0	-0.5%

Additional Funding Network?

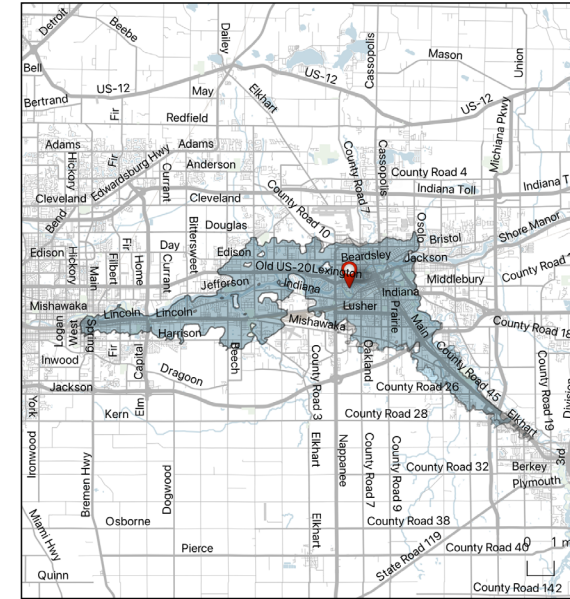


	Change	% Change
Residents Accessible	+27,900	+232.5%
Jobs Accessible	+19,600	+232.5%

How far can I travel in **60 minutes** from

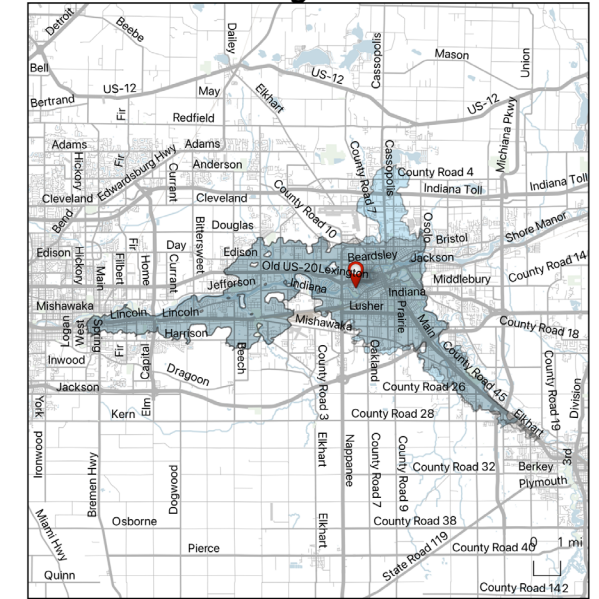
Elkhart General Hospital
on weekdays at noon using:

Short-Term Network?



	Change	% Change
Residents Accessible	-800	-1.0%
Jobs Accessible	-800	-1.5%

Additional Funding Network?



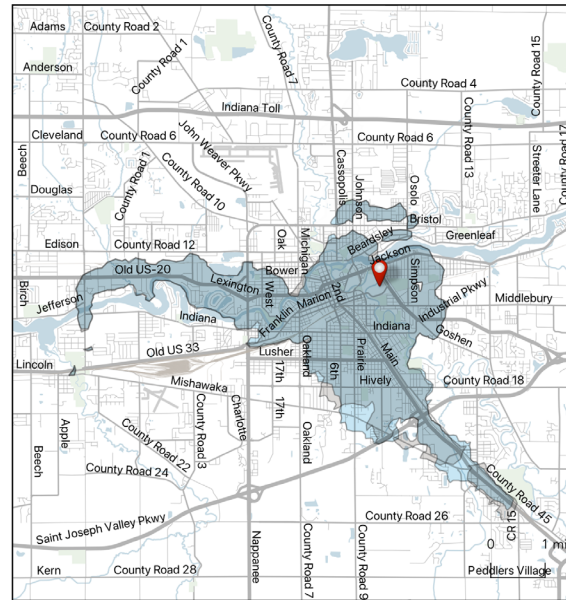
	Change	% Change
Residents Accessible	+4,900	+7.0%
Jobs Accessible	+6,200	+7.0%

Most places in Elkhart see a small increase in access in the Short-Term Network and a large increase in the Additional Funding Network.

How far can I travel in **60 minutes** from

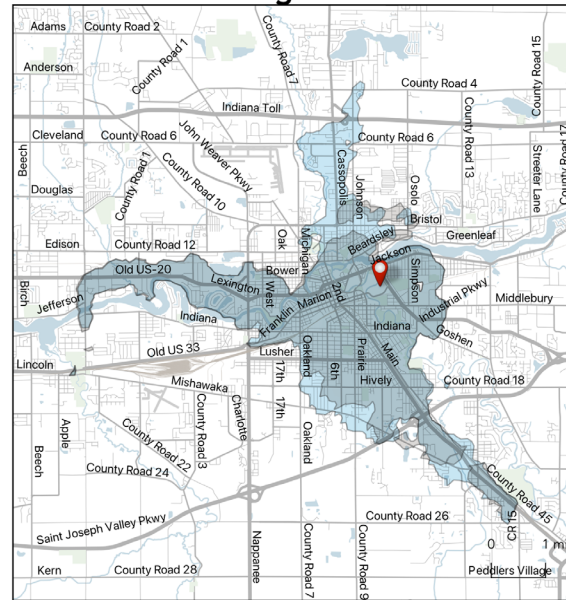
Elkhart East High School (formerly Central)
on weekdays at noon using:

Short-Term Network?



	Change	% Change
Residents Accessible	+300	+1.0%
Jobs Accessible	+0	0.0%

Additional Funding Network?

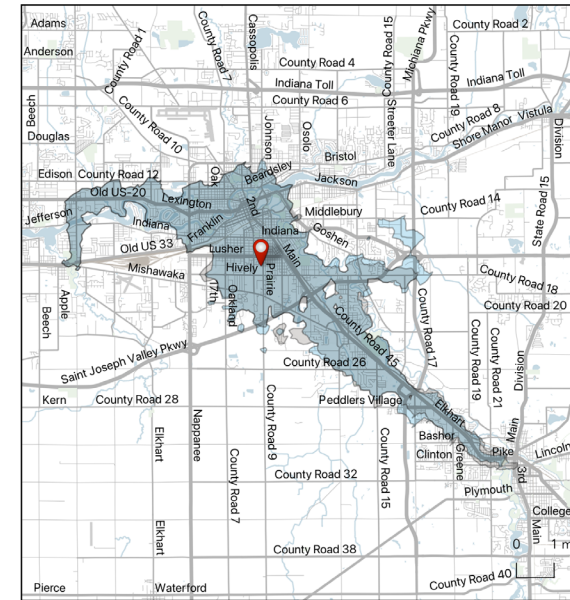


	Change	% Change
Residents Accessible	+5,300	+16.0%
Jobs Accessible	+4,900	+16.0%

How far can I travel in **60 minutes** from

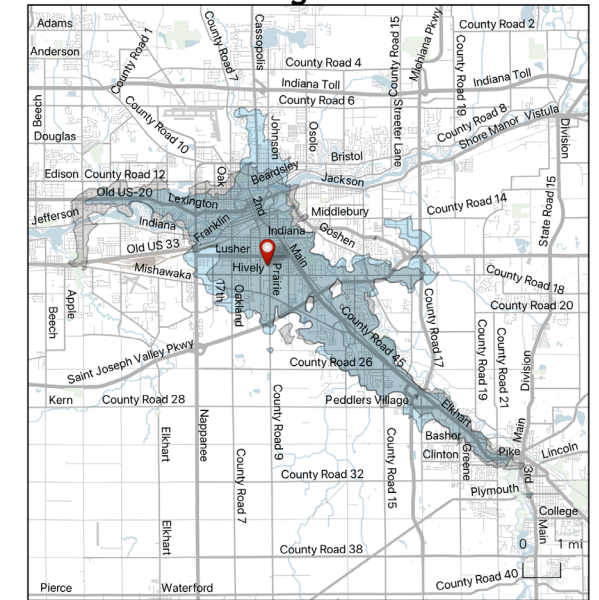
Kroger - Pierre Moran Plaza
on weekdays at noon using:

Short-Term Network?



	Change	% Change
Residents Accessible	-100	-0.5%
Jobs Accessible	-400	-1.0%

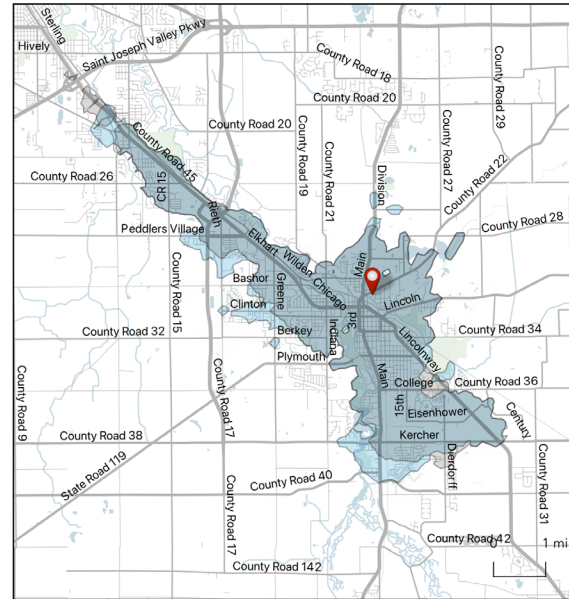
Additional Funding Network?



	Change	% Change
Residents Accessible	-400	-1.0%
Jobs Accessible	-1,600	-1.0%

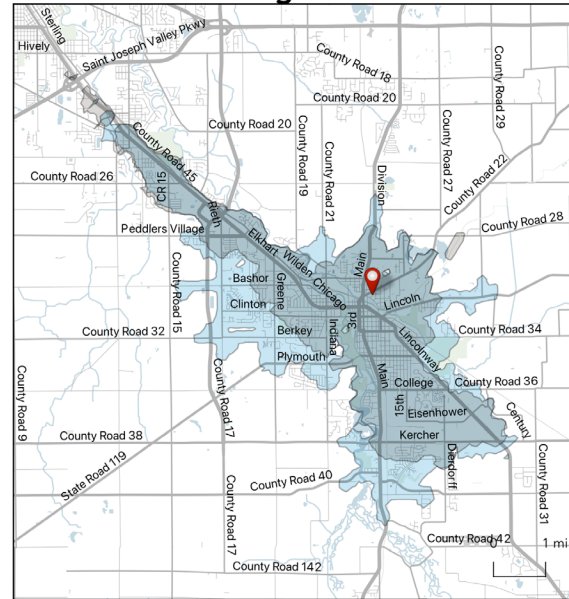
How far can I travel in **60 minutes** from
Boys and Girls Club of Goshen
on weekdays at noon using:

Short-Term Network?



	Change	% Change
Residents Accessible	+1,600	+6.5%
Jobs Accessible	+300	+1.0%

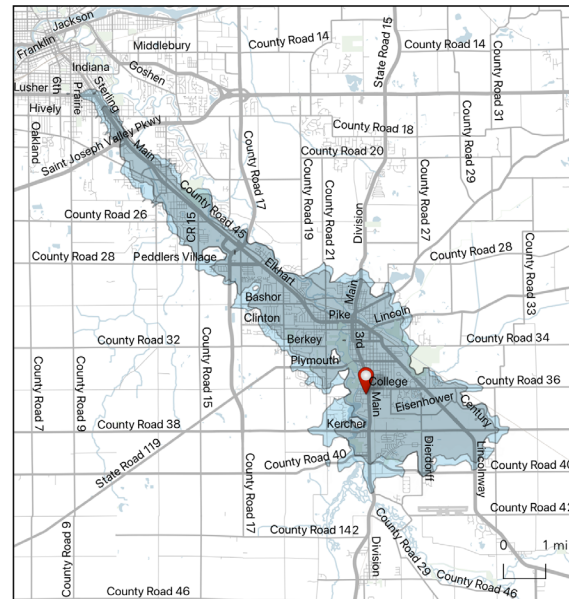
Additional Funding Network?



	Change	% Change
Residents Accessible	+7,300	+29.5%
Jobs Accessible	+2,600	+29.5%

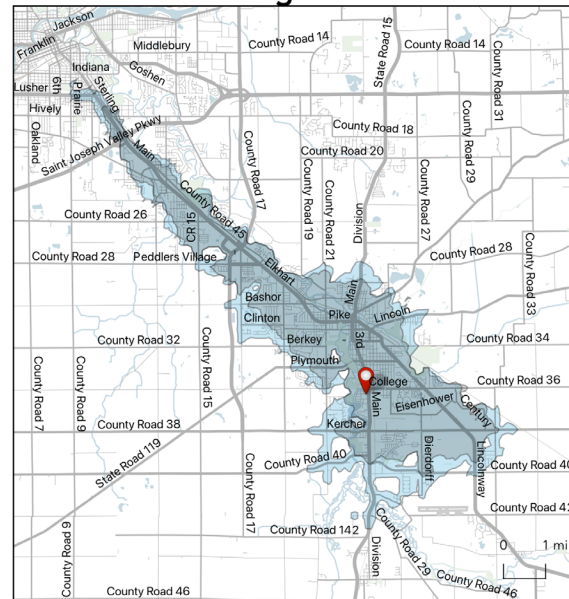
How far can I travel in **60 minutes** from
Goshen Hospital
on weekdays at noon using:

Short-Term Network?



	Change	% Change
Residents Accessible	+4,600	+15.5%
Jobs Accessible	+2,400	+8.5%

Additional Funding Network?

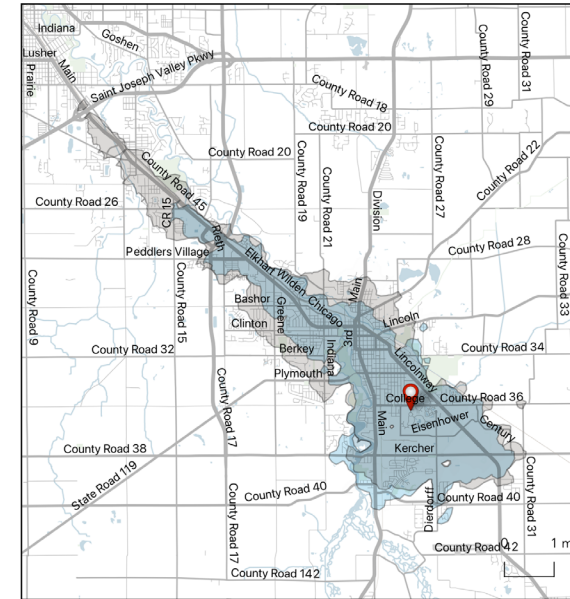


	Change	% Change
Residents Accessible	+7,000	+23.5%
Jobs Accessible	+3,100	+23.5%

Most places in Goshen see a small increase in access in the Short-Term Network and a large increase in the Additional Funding Network.

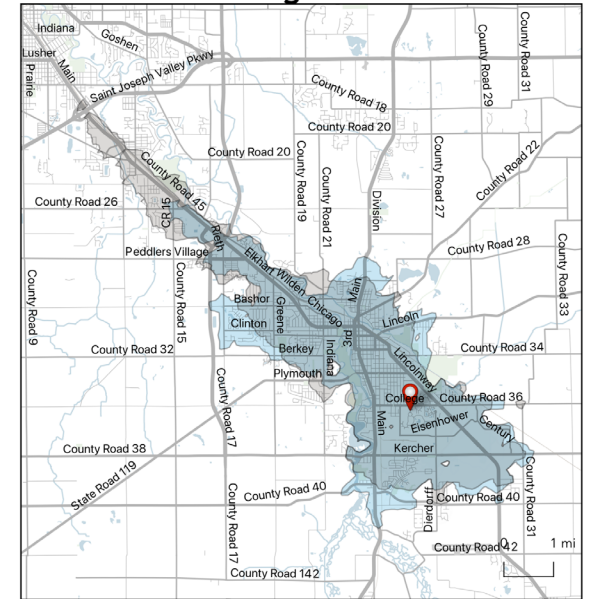
How far can I travel in **60 minutes** from
Greencroft Goshen Community Center
on weekdays at noon using:

Short-Term Network?



	Change	% Change
Residents Accessible	-6,100	-21.5%
Jobs Accessible	-3,800	-14.5%

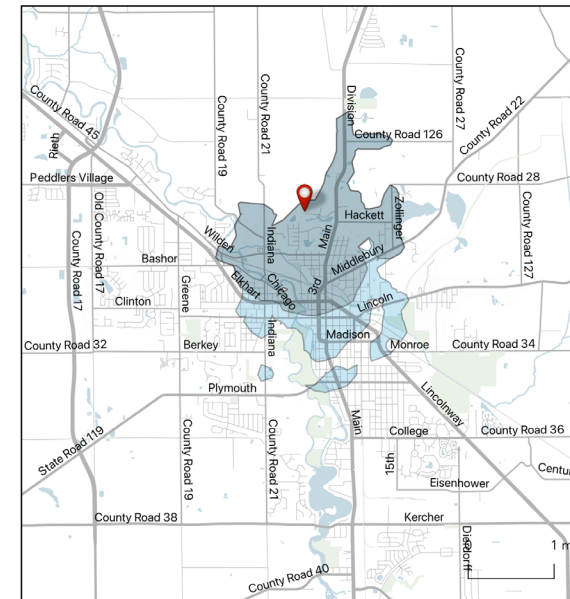
Additional Funding Network?



	Change	% Change
Residents Accessible	-100	-0.5%
Jobs Accessible	-1,300	-0.5%

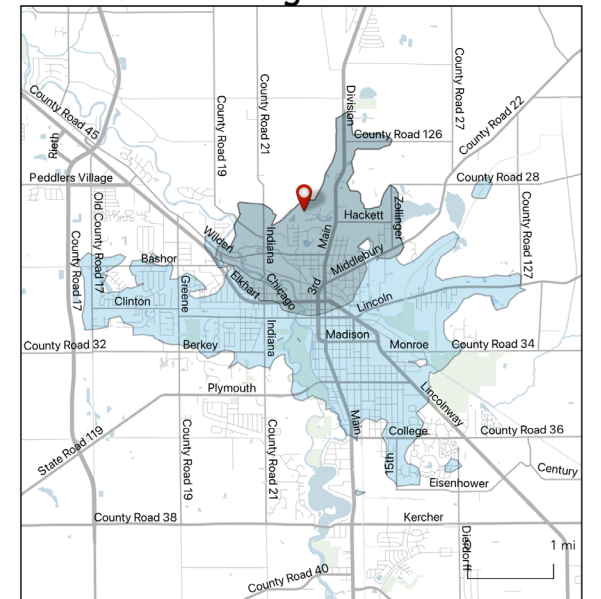
How far can I travel in **60 minutes** from
Oaklawn Goshen
on weekdays at noon using:

Short-Term Network?



	Change	% Change
Residents Accessible	+3,600	+91.0%
Jobs Accessible	+3,100	+137.0%

Additional Funding Network?



	Change	% Change
Residents Accessible	+13,000	+332.0%
Jobs Accessible	+8,500	+332.0%

Change in Access: Short-Term Concept in Elkhart and Goshen

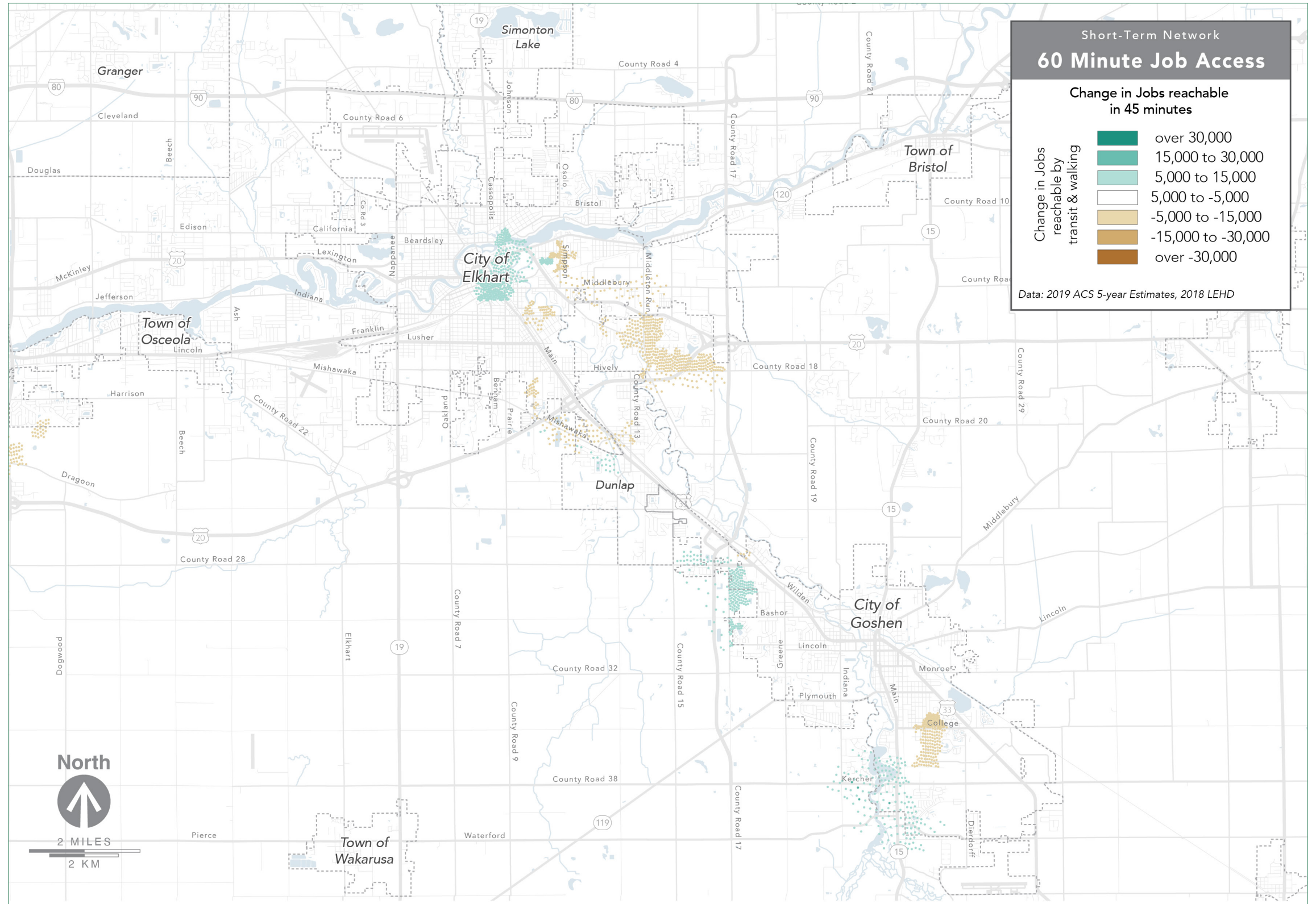
Job access change within Elkhart and Goshen is generally less dramatic than it is in South Bend and Mishawaka because jobs are less concentrated in Elkhart County. With more diffuse job locations, improvements in transit service do not deliver as large an increase in job access as is possible in South Bend and Mishawaka. Nevertheless, the changes in job access tell us about the relative increase in access to opportunities in Elkhart and Goshen.

In the Short-Term Concept there are a few areas that see increases in job access, including:

- areas just south and east of Downtown Elkhart. With changes in the path of Routes 32 and 35, access in these areas is improved;
- along Peddlers Village Road where Route 50 (Red Line) would be shifted to serve the area directly;
- in West Goshen around Roxbury Park, where new Route 52 provides service;
- in South Goshen along Main Street near Kercher Road and the hospital where the revised Route 50 (Red Line) would now serve the area.

A few areas would see decreases in access, such as along Hively Avenue in east Elkhart due to changes in Route 35 (Orange Line). There are also decreases around the Greencroft Community in Goshen due to how Route 50 is realigned.

Figure 45: Change in jobs reachable in 60 minutes in Elkhart and Goshen under the Coverage Concept



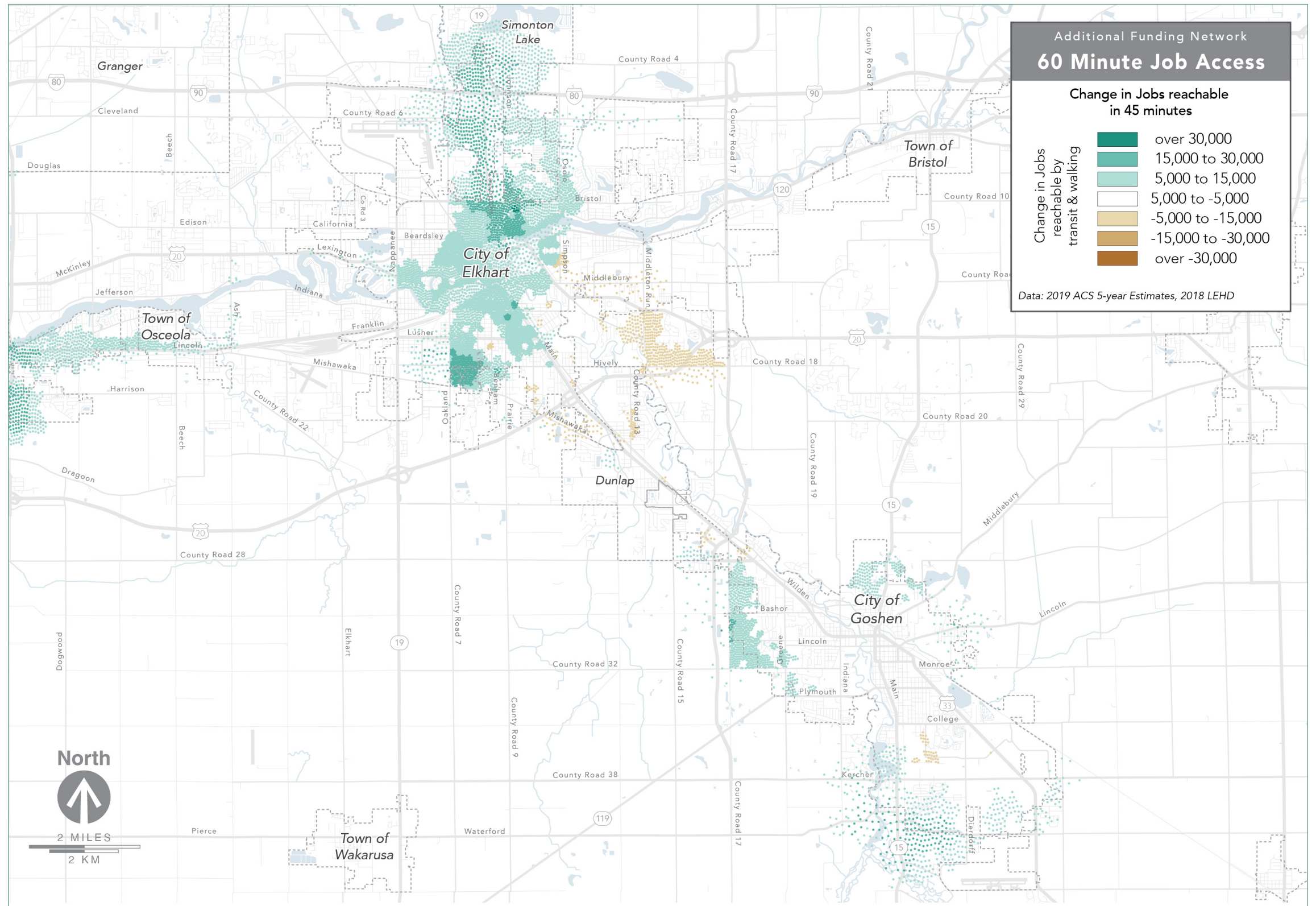
Change in Access: Additional Funding Concept in Elkhart and Goshen

In the Additional Funding Concept there are many areas that see increases in job access, including:

- much of North Elkhart along Johnson and Cassopolis Streets;
- areas along Benham Avenue and Prairie Street south of Hively Avenue;
- along Peddlers Village Road where Route 50 (Red Line) would be shifted to serve the area directly;
- in North Goshen, along Main Street where the new Route 51A would provide every 60 minute service;
- in East Goshen, where the new Route 51B would provide 60 minute service.
- in South Goshen along Main Street by the hospital, Kercher Road, and Winchester Trails where the revised Route 50 (Red Line) would now serve the area.

A few areas would see decreases in access, such as along Hively Avenue in east Elkhart due to changes in Route 35 (Orange Line), similar to the effects in the Short-Term Network. There are also decreases around the Greencroft Community though the declines are less significant than in the Short-Term Network with the new Route 53 operating at 30 minute frequency in the Additional Funding Network.

Figure 46: Change in jobs reachable in 60 minutes in Elkhart and Goshen under the Additional Funding Concept



Access Change for Different Populations: Elkhart and Goshen

The maps on the previous two pages show how much access increases or decreases across different parts of Elkhart and Goshen. By adding up all the jobs reachable by anyone and dividing it by the total population, we can get an average of jobs reachable across the entire service area.

The chart in Figure 47 shows that how many jobs the average person, average person of color, and average person in poverty could reach in the Existing, Short-Term Network, and Additional Funding Networks.

While the Short-Term Network adds service in Goshen, the net effect of the changes is that job access stays about the same across all of Elkhart and Goshen. For the average resident, average resident of color, and average low-income resident, jobs reachable in 60 minutes remains the same as under the Existing Network.

With the large increase in service under the Additional Funding Network, much higher job access is achievable. Access to jobs for all groups increases by 16-17% in the Additional Funding Network. This is not as high as the increase in job access in South Bend and Mishawaka, despite a similar level of increased service (80%). There are two reasons for this: first, jobs are more dispersed in Elkhart and Goshen and therefore improved service has less of a positive effect on job access and second more of the increased service in Elkhart and Goshen is going to evening and Sunday service, since the Interurban Trolley has no evening or Sunday service today.

If we look solely at access change within Goshen, shown in Figure 48, the Short-Term Network shows a 3-5% improvement in job access and the Additional Funding Network shows a 9-13% increase in job access.

Figure 47: Comparison of jobs reachable in 60 minutes in Elkhart and Goshen under the Existing, Short-Term, and Additional Funding Networks.

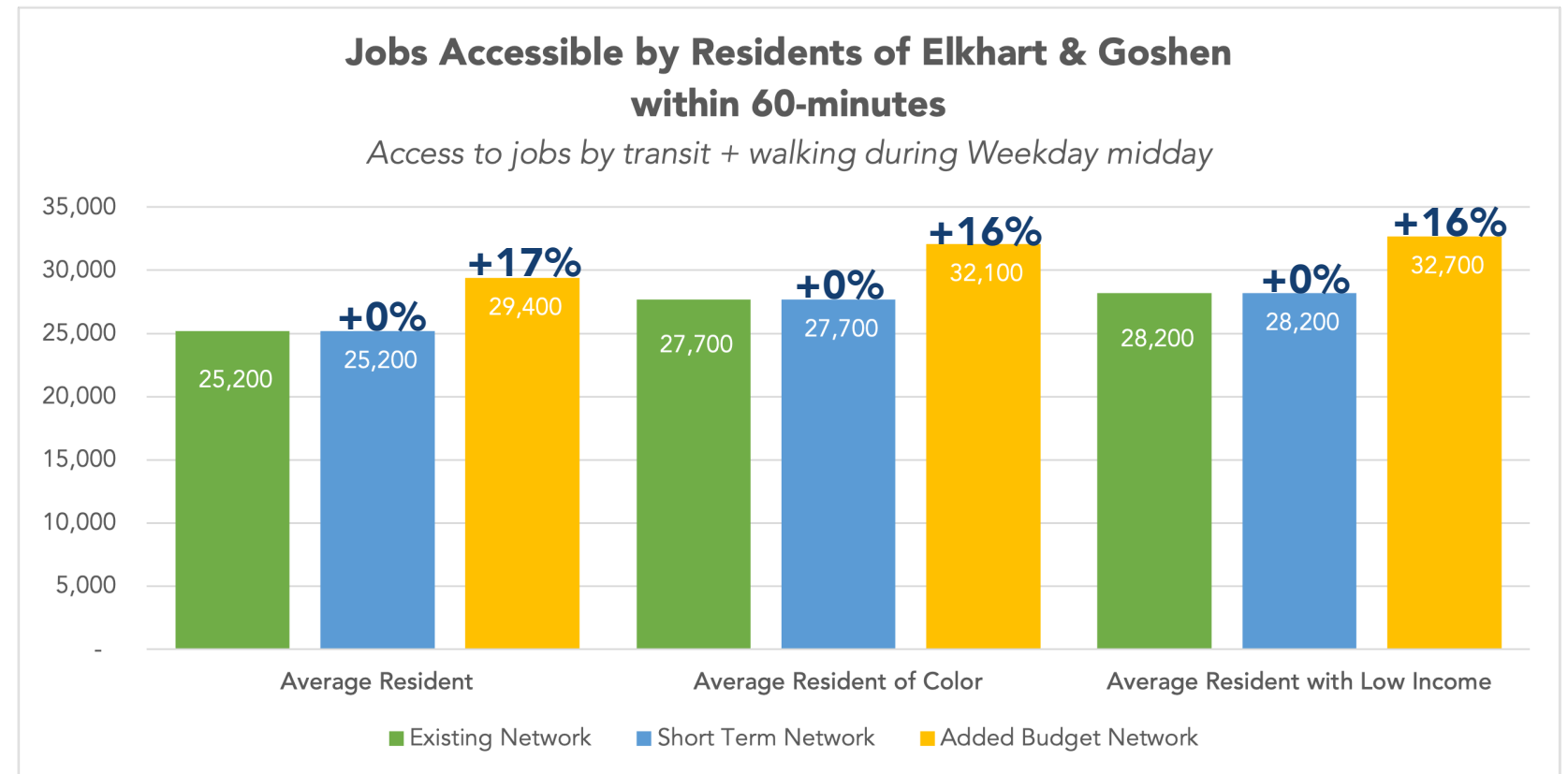
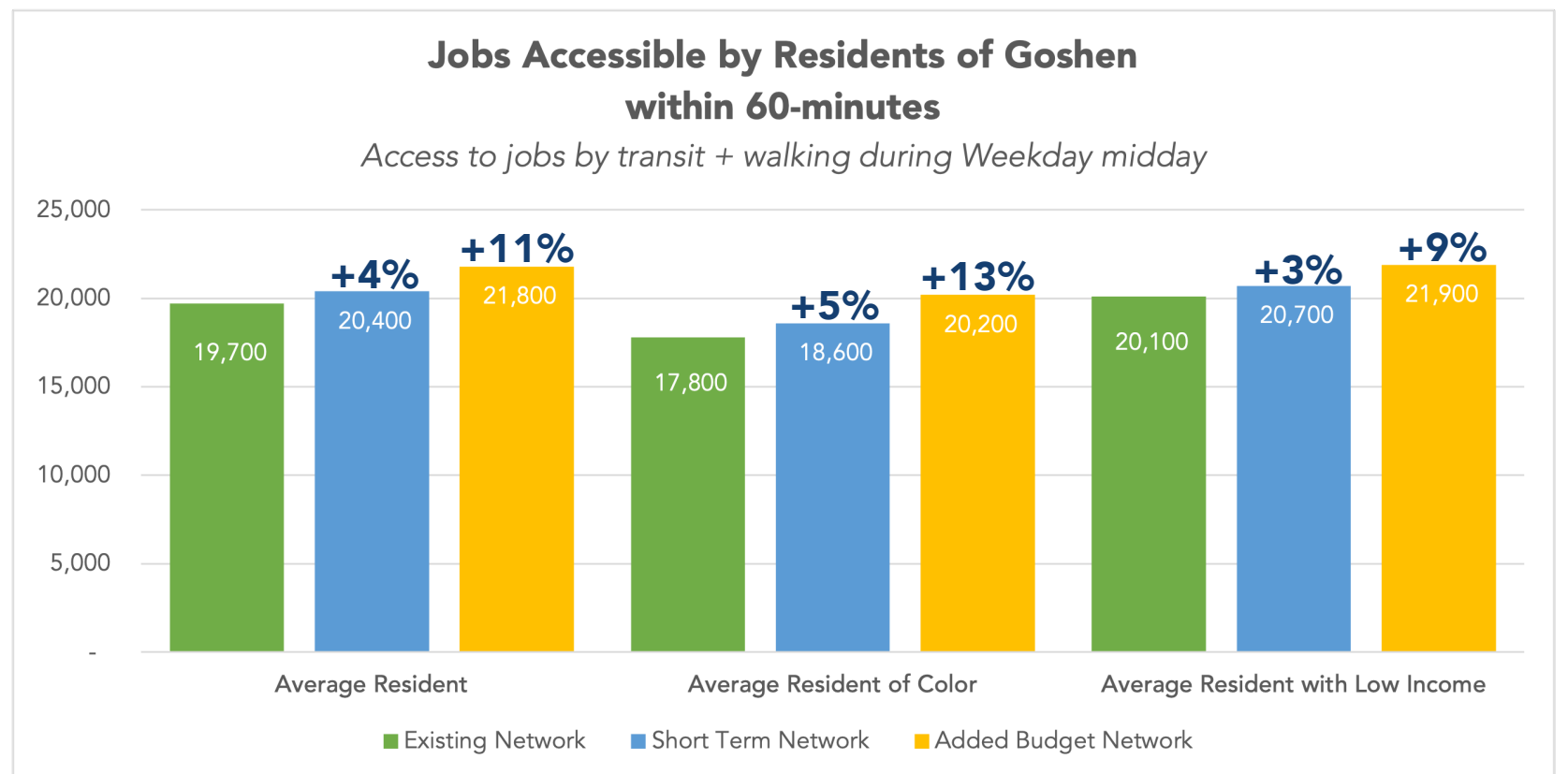


Figure 48: Comparison of jobs reachable in 60 minutes in Goshen alone under the Existing, Short-Term, and Additional Funding Networks.



7

Additional Recommendations and Next Steps

Create a Regional Vanpool Program

Fixed route transit service is not the only tool to support access to jobs and opportunity for those without cars or those who cannot drive. Vanpool and carpool programs are a commonly used approach to help connect people to major employment centers. In South Bend, Mishawaka, Elkhart, and Goshen there are many industrial parks and large areas of manufacturing, logistics, and warehousing operations, particularly on the periphery of the urban areas. Newer facilities are being built regularly, and those on the edge of the developed areas are particularly hard to serve with fixed route transit.

Two long-established service types geared towards this form of travel demand are carpools and vanpools.

Carpooling is simply the practice of sharing rides to work, and rarely involves the support of a public transit provider; in fact, the main role of the employer is usually to match employees who live nearby into groups. Employees own the vehicle and do the driving, so there is no operating or maintenance cost incurred by any organization, although some transportation managers for large employers or educational institutions do provide subsidies as part of broader transportation demand management programs.

Vanpooling is based on the same basic principle, but with one important difference: instead of driving their own cars, users drive a larger van that is provided to them. Users share driving duties, and the van is often stored at the home of the user doing the driving the next day.

Vanpool Support Spectrum

Based on USDOT Guidance (Ridesharing Options Analysis and Practitioners' Toolkit), public agencies can advance vanpooling with a spectrum of services aimed at encouraging vanpool usage. The spectrum ranges from low to high in the level of investment, time, and coordination:

- Organize and setup a system (web-based or other) for potential riders to connect.
- Collect origin and destination information and manually match compatible users.
- Connect compatible users and provide incentives like a guaranteed ride home program or subsidies.
- Connect compatible users, provide supportive services, and contract or manage vehicles and subsidize operating costs like insurance and fuel.

Most vanpooling programs can be supported through federal funding, such as CMAQ grants, to help with purchase or lease of the vanpool vehicles, and for planning support for regional staff to help with ridematching and employer outreach. One advantage of vanpools over other programs is their relative speed of deployment. An agency like MACOG may be able to leverage existing federal or state funding or existing fleet contracts to handle vehicle procurement and maintenance. Implementation also relies on conversations with major employers and the business community to get buy-in and local support.

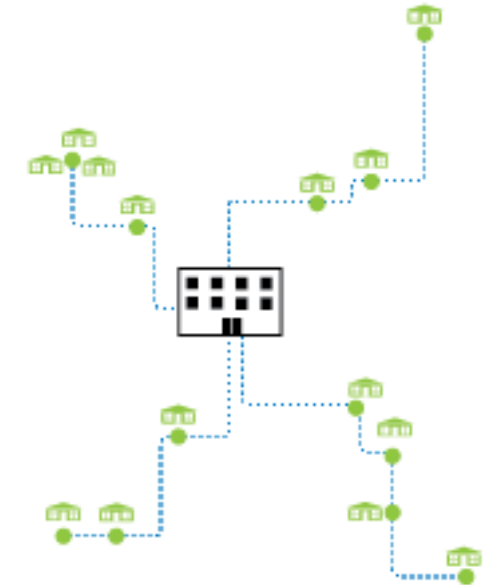
To support a vanpool program for the region, MACOG will likely need the following:

- Dedicated funding for at least one staff member, or a portion of one staff members time, to manage the vanpool program, support ridematching, outreach and connection with employers, and other key tasks.
- Funding to support purchase or leasing of vanpool vehicles, insurance, and other associated costs.
- Development of supportive programs, like guaranteed ride home, incentive systems like rewards for regular use (of vanpooling and transit)

Because vanpool programs are designed around the needs of a particular destination, they are adaptable to a vast range of use cases. An example described in TCRP Synthesis 154 is the vanpool program of Okanogan County Transit Authority (OCTA) in northern Washington State which is geared towards Department of the Interior employees at federal dams and National Forest sites, supported by the federal Vanpool Transportation Fringe Benefit Program.

A region vanpool program managed by MACOG could work this way:

- MACOG staff reaches out to an employer or group of employers located in close proximity to discuss transportation options for their employees.
- Based on employee home locations, employment site, and travel patterns, vanpool is selected as the preferred mobility option.
- Employers contribute a portion of the cost of operation (in the form of guaranteed fares) for an initial period of time during employee uptake (trial period) and advertise the availability of the new service.
- MACOG provides the vehicle(s), and if interest is great enough, divides participating employees into geographically efficient rider groups.
- At the end of the trial period, MACOG and partner staff assess ridership and financial sustainability of the program.



**Vanpool -
Fixed set of pickup
locations on the
way to a workplace**

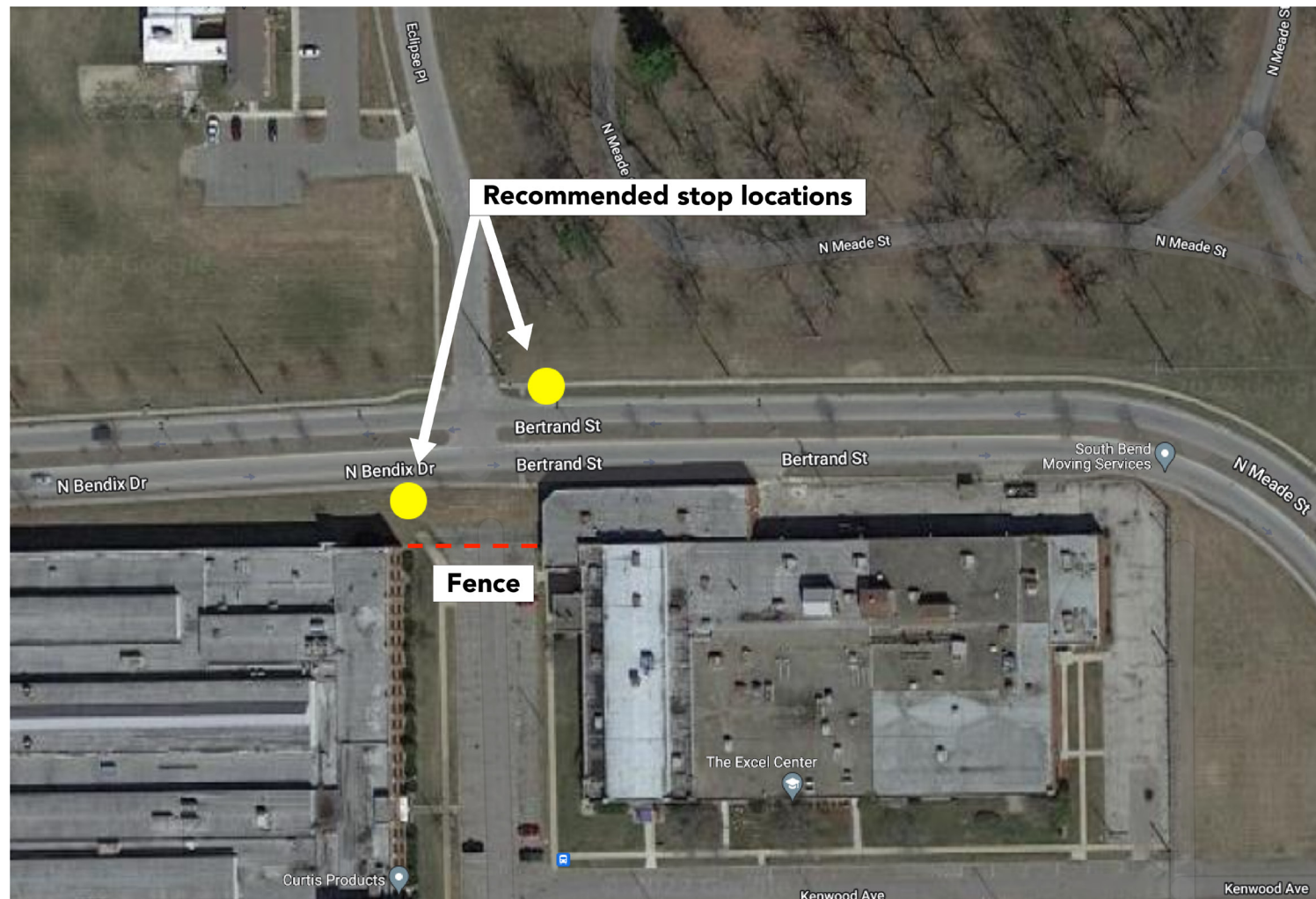
Excel Center Area Improvements

The Excel Center is an important destination for many people in need as it provides many support services such as on-site childcare, transportation assistance, and college credit and industry-recognized certification courses for free. The challenge in reaching the Excel Center is that it is located in a cul-de-sac industrial complex that requires a long, circuitous deviation to enter and exit. Today's Route 4 enters the complex and turns around in the parking lot in only one direction of service. Only select trips on Route 4 currently service the Excel Center at specific times; regular 30 minute service is not provided.

The proposed Route 2 would no longer enter the parking lot, but pass by the facility to the north along Bertrand Street and Bendix Drive.

To ensure that people can still access the Excel Center it is essential that the City of South Bend and Transpo work together to provide stops at the intersection of Bertrand/Bendix and Eclipse Place (the yellow dots in Figure 50), a marked crosswalk at this intersection, and work with Goodwill to remove the fence that prevents access to the Excel Center from this intersection.

Figure 50: Aerial view near the Excel Center.



Removing these pedestrian barriers and providing stops at the location shown will provide easy access to the Excel Center with the westbound stop less than 450 feet from the Excel Center entrance.

By providing stops here, Excel Center users will have relatively easy access and other riders going to and from other destinations won't be excessively delayed in a long deviation.

Figure 51: View of the sidewalk and access from the intersection directly north of the Excel Center



Figure 49: Short-Term Network near the Excel Center.



Oaklawn Area Improvements

Oaklawn Hospital is an important destination for many people as it provides mental health and addiction treatment services on an in-patient and out-patient basis. Directly serving the front door of Oaklawn is challenging due to the narrow access road and limited space on-site to turn buses around. Serving Oaklawn directly would take so much time that it would not be possible to serve the Arbor Ridge Apartments on Johnston Street.

The compromise solution proposed is to serve the area via a loop via Wilden Avenue to Michigan Avenue to Johnston Street to Main Street on the hourly Route 52. To provide access to Oaklawn,

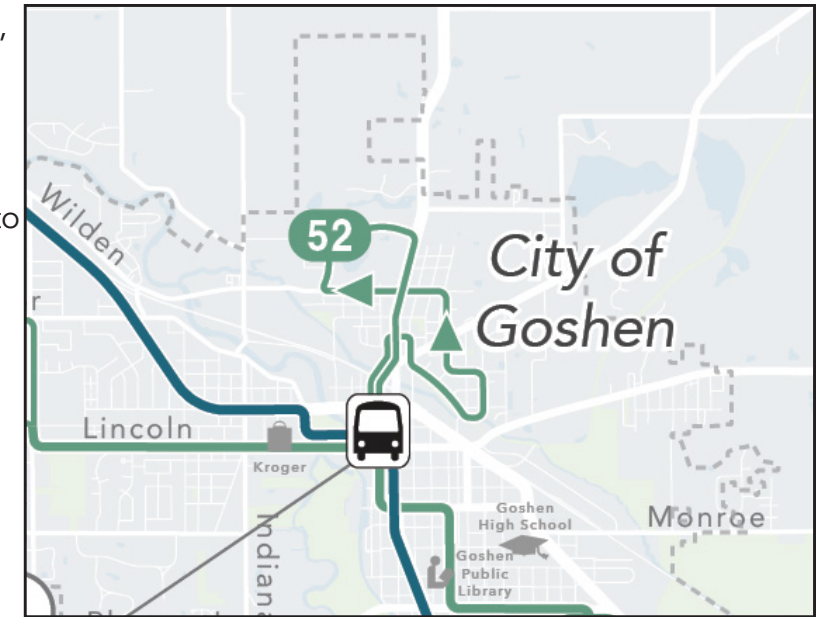
improvements would be needed to have walking access to the rear of the facility via Michigan Avenue, as shown in Figure 53.

There is currently a fence at the end of Michigan Avenue (see Figure 54), which would need to be removed or opened during hours when transit is operating so that people could access Oaklawn from Michigan Avenue. Also, the median in Michigan Avenue at its intersection with Wilden Avenue would likely need to be narrowed or removed to allow buses to turn into the North Meadow Estates neighborhood.

Figure 53: Aerial view near Oaklawn.



Figure 52: Short-Term Network near Oaklawn.



In the long-term, if Oaklawn, the City of Goshen, and neighbors agree, it might be possible to provide full street access via Michigan Avenue into the Oaklawn property, allowing Route 52 to go through the Oaklawn property and serve the facility more directly. Oaklawn might also need to widen its internal access road and make adjustments to its parking lots to ensure buses could navigate through the property.

Figure 54: View of the gate preventing pedestrian access to Oaklawn from Michigan Avenue.



Goshen Hospital and Goshen College Area Improvements

Goshen Hospital is an important destination for many people in need as it provides medical care and jobs. Similarly, Goshen College is a major destination in the area and provides educational opportunities and many local jobs. For these reasons, Route 50 (Red Line) has been realigned to provide more direct service to both destinations.

There are some challenges, however, in providing adequate stops in this area that are fully accessible per current regulations related to the Americans with Disabilities Act and that have sufficient sidewalk access to be useful for reaching adjacent facilities.



The stop at Main Street and Lafayette Street in the northbound direction will become more important for people north of College Avenue now that this route would not use College Avenue. This stop has an awkward higher curb that steps back from the street. A higher curb can be useful, if it is flush with the edge of the street, as it can reduce the need to have the bus kneel for passengers to board. The current curb design, however, makes boarding the bus much harder. Redesigning the curb and adding a bus pad and shelter at this location to make it fully accessible is recommended.

2 On Main Street at College Avenue a northbound bus stop would be needed, ideally on the near-side of the intersection (south of College Avenue). This is also likely a good location for a bus shelter, given relatively high use by people going to and from the College. Currently there is a right-turn only lane at this intersection in the northbound direction. In many cities but stops can be placed in these locations if traffic control signs are changed to say "Right Lane MUST Turn Right - Except Buses".

3 Bus stops would also be useful at High Park Avenue, preferably in both directions, particularly for access to Goshen Hospital. Northbound stop would likely be north of the intersection, since there is no sidewalk on the northbound side of the street (adjacent to Goshen College) from High Park Avenue to Westwood Road. In the long-term it would be helpful to add sidewalk along this section of Main Street to improve pedestrian access to Goshen College for Route 50 riders.

4 Westwood Road would be an even better location for bus stops in both directions as it has a signal with pedestrian crossing signals. A northbound stop could likely be located far-side of the intersection, just north of the crosswalk. The addition of a bus pad and sidewalk connections to the existing sidewalk and crosswalk would be needed. A southbound bus stop would likely need to be near-side, about 50 feet north of the southbound stop bar. The sidewalk in this area is relatively narrow and slightly below the grade level of the street. This may require some regrading and installation of a bus pad to provide adequate, accessible access.

Figure 55: New path of Route 50 near Goshen College and Goshen Hospital.



Funding Additional Service for Transpo

It is one thing to lay out a plan of service improvements and all the ways it makes life better for people, but it is altogether another challenge to actually fund that network. Figure 56 provides a set of improvements in service from the Additional Funding Network. The list includes various network changes and adjustments from the Additional Funding Network, as well as various frequency and span of service improvements. The additional annual revenue hours required for each improvement is listed in the third column. Annual revenue hours are a close proxy for the operating costs of new service, as labor is the dominant factor in annual operating costs. In the fourth column is the estimated annual operating costs in dollars, assuming an average cost of \$100 per revenue hour, which is the approximate recent costs for Transpo service. If all improvements in the Additional Funding Network were implemented, Transpo would need to operate about 88,000 additional revenue hours per year, costing about \$8,800,000 more per year.

These improvements are organized in a set of successive, stacked improvements, so that items lower in the table assume that items higher in the table have been implemented already. So, for example, the extension of Route 7 along Main Street to replace Route 15A with 30 minute service is listed first. If that improvement was not done, then implementing Item 7 (Increasing Frequency of Service from 60 to 30 minutes) would cost an additional 5,000 annual revenue hours so that service on Main Street in Mishawaka would be increased from 60 to 30 minutes. Improvements lower on the list could be done before items higher on the list, but the cost of improvements might be slightly higher or lower, as the costs of some improvements are interdependent.

Current Transpo Funding

As discussed in the Concepts Report in detail, Transpo has four main funding sources:

- **Local funding** provides the largest share of support (37%) to operate service from a special property tax (29% of revenues), a local option income tax (6%), and excise taxes (2%).
- **Federal funding** provides the second largest pot of operating support, primarily from Federal Transit Administration (FTA) Section 5307 funding that supports 27% of the budget. FTA rules limit how much federal funding can be used to operate service, whereas most federal dollars must be used for capital items (like new buses and facilities).
- **State funding** provided about 19% of Transpo revenues, or about \$2 million, in 2019. Indiana’s Public Mass Transportation Fund is the primary source of state support for transit. Changes in state budgeting priorities suggest that this funding source will decline in the future.
- **Fares** made up 13%, or \$1.4 million, of Transpo revenues in 2019. Fare revenues have been volatile during the pandemic since ridership dropped significantly before rebounding somewhat in 2021 and 2022.

Miscellaneous items support the remaining 4%, or approximately \$0.4 million, in operating funds for Transpo.

Funding Additional Service

Given the limitations of Federal and State funding as well as the limited portion that fare revenues provide, there are few options to support the investment needed for the service improvements in Figure 56.

One possible source of short-term funding is the Federal Congestion Mitigation and Air Quality (CMAQ) program. This program is intended for use in projects that are likely to reduce traffic congestion and improve air quality. CMAQ funds can be used to support the operating costs of new transit routes for up to three years. So, a new bus route could be funded from CMAQ grants for up to three years.

MACOG oversees the approximately \$1.7 million per year that St. Joseph County is allocated from Federal CMAQ funds. Most of those funds are dedicated to specific investments in the regional

Transportation Improvement Program. Therefore, it would be challenging to use funding from the CMAQ program in the next few years.

The primary investments in the Additional Funding Network are improvements to existing routes. One of the few “new routes” proposed in the Transpo network is the new Route 2, proposed in the Short-Term Network. If CMAQ funding could be reallocated in the near term, then local funding could be reallocated from the new Route 2 to other services to make some improvements in the table below. Route 2 costs about 7,500 annual revenue hours and would require \$750,000 in CMAQ funding. So, such a trade could pay for Improvement 1 and 3 in the table below, but only for 3 years.

Ultimately most funding for the improvements identified below would need to come from local funding sources like property, sales, or other optional local tax sources.

Figure 56: Table of Improvements to Transpo Service from the Additional Funding Network

Improvement #	Improvement	Annual Revenue Hours	Estimated Annual Operating Cost (\$100 per Revenue Hour)
1	Route 7 - Extended service to Mishawaka Transit Center (via Route 15A path)	5,000	\$500,000
2	Route 11 - Extended 30 minute service to east Mishawaka	3,000	\$300,000
3	All-day Service on Route 5	2,500	\$250,000
4	All-day Service on Route 16	3,500	\$350,000
5	Evening Service Expansion (Most Routes run to 10pm)	9,000	\$900,000
6	Sunday Service	18,000	\$1,800,000
7	Increased Frequency (most 60 minute routes improved to 30 minutes)	31,000	\$3,100,000
8	Frequent Service (Routes 3, 6, 7, 10, and 30 to 15 minutes)	16,000	\$1,600,000

Funding Additional Service for Interurban Trolley

Figure 57 provides a set of improvements to Interurban Trolley services from the Additional Funding Network. The list includes various network changes and adjustments from the Additional Funding Network, as well as various frequency and span of service improvements. The additional annual revenue hours required for each improvement is listed in the third column. Annual revenue hours are a close proxy for the operating costs of new service, as labor is the dominant factor in annual operating costs. In the fourth column is the estimated annual operating costs in dollars, assuming an average cost of \$80 per revenue hour, which is the approximate recent costs for Interurban Trolley service. If all improvements in the Additional Funding Network were implemented, Interurban Trolley would need to operate about 44,400 additional revenue hours per year, costing about \$3,200,000 more per year.

These improvements are organized in a set of successive, stacked improvements, so that items lower in the table assume that items higher in the table have been implemented already. So, for example, the consolidation of Route 33 with two-way service on Cassopolis along with the new Route 24 (Improvement 1) is needed before consistent 30 minute service on Route 33 (Improvement 3) is logical. Improvements lower on the list could be done before items higher on the list, but the cost of improvements might be slightly higher or lower, as the costs of some improvements are interdependent.

Current Interurban Trolley Funding

As discussed in the Concepts Report in detail, the Interurban Trolley has four main funding sources:

- **Federal funding** provided the largest share of revenues to Interurban Trolley funding, at \$1.2 million in 2019. As described on the previous page, federal funding uses are limited and require a local match to support the use of those funds for operating or capital spending.

Since Interurban Trolley cannot use all of its allocated federal funding, MACOG trades federal funding with other cities to get additional local match funding (that it holds in a Transit Trust Account), as described in more detail in the Concepts Report.

- **State funding** contributed 18%, or about \$600,000 to Interurban Trolley in 2019.
- **Fares and pass revenues** contributed about 10%, or \$300,000, of Interurban Trolley revenues in 2019.
- **Local funding** contributions made up only 6%, or about \$191,000 of Interurban Trolley's operating budget in 2019. With such limited local funding, it is impossible for Interurban Trolley to use all of its federal funding allocation, since those federal funds must be matched by local dollars.
- **The Transit Trust Account**, which draws down on the local dollars received from Lafayette in exchange for federal funding, contributed 18%, or about \$600,000, to Interurban Trolley operations in 2019.

The remaining 1%, or approximately \$40,000, in operating funds for Interurban Trolley in 2019 came from miscellaneous sources like advertising.

Funding Additional Service

Since Interurban Trolley does not use all of its FTA 5307 Funding today, and much of the funding it uses goes to operating support on a 50% basis. This means that local governments must match 50% of the federal funding.

One source of increased funding opportunity for Interurban Trolley is to use an FTA accounting method call Capital Cost of Contracting. Interurban Trolley service is

provided by a private contractor, and under FTA rules, MACOG could count 40% of the costs of the service provided as capital expenses, which only require a 20% local match. About 75% of Interurban Trolley costs are for contracted fixed route services. Under this FTA rule, an additional \$200,000 local investment could effectively leverage an additional \$800,000 per year in federal funding.

Another possible source of short-term funding is the Federal Congestion Mitigation and Air Quality (CMAQ) program. This program is intended for use in projects that are likely to reduce traffic congestion and improve air quality. CMAQ funds can be used to support the operating costs of new transit routes and for smaller urban areas like Elkhart and Goshen, CMAQ funding can be used for operating support with few limitations and only a 20% local match.

MACOG oversees the approximately \$1.1 million per year that Elkhart County is allocated from Federal CMAQ funds. Most of those funds are dedicated to specific investments in the regional Transportation Improvement Program. Therefore, it would be challenging to use funding from the CMAQ program in the next few years. If used, CMAQ funding would require about \$200,000 in

local matching funds, to make full use of the \$1.1 million per year in federal funding.

The region still has funding in the Transit Trust Fund from past trading with the City of Lafayette. Using about \$600,000 per year of this funding could help support the expansion of the network in the next few years as it looks to make use of the Capital Cost of Contracting and CMAQ funding sources in the future. As the region expands service, its allocation of FTA 5307 funding would also likely increase, slowly, since the formulas used to distribute funding include the amount of service provided in the past few years.

Using a combination of the above tools means that an increase in local funding of about \$600,000 could leverage enough additional Federal Funding to support up to 50% more service, if all CMAQ funding went to transit. In a few years, an extra \$600,000 in local funding would be needed to maintain that growth.

To achieve the full 80% growth of the entire Additional Funding Network would require further local funding of about \$1 million more than outline above.

Figure 57: Table of Improvements to Interurban Trolley Service from the Additional Funding Network

Improvement #	Improvement	Revenue Hours	Estimated Annual Operating Cost (\$80 per Revenue Hour)
1	Route 33 Converted to Two-Way Service and Add Route 34	4,200	\$336,000
2	New Route 36 for southwest Elkhart	4,200	\$336,000
3	30 Minute Service on Route 33	4,200	\$336,000
4	Evening Service on Weekdays and Saturdays	10,700	\$856,000
5	Adding Sunday Service	8,700	\$696,000
6	Increase Routes 52 and 53 to every 30 Minutes and add East Goshen Service with Route 51B	8,400	\$672,000

Next Steps

Next Steps

This Draft Recommendations Report represents the third step in a three-phase process of thinking about balancing goals and priorities for the region’s transit network. This report is the basis for public meetings, surveys, and outreach for the “Draft Plan Phase” of the **CONNECT** Transit Plan. The public, stakeholders, and riders will be invited to respond to these key questions and provide other input on their preferences around how transit serves South Bend, Mishawaka, Elkhart, Goshen, and surrounding communities.

The overall project timeline of work for **CONNECT** are shown below in Figure 58.

Input will be gathered through public meetings, an online survey, and other engagement events. The public health conditions mean that our study team may adjust our outreach events and processes depending on changes in guidelines and conditions.

As of the date this report was released, the following events are planned for public engagement:

- **Virtual Public Meeting**
Monday, December 12, 2022
6:30 PM - 8:00 PM
Via Zoom, signup at connecttransitplan.com

- **Mishawaka Open House**
Mishawaka-Penn-Harris Public Library
Eisen Room
209 Lincolnway E Highway, Mishawaka
Monday, January 9, 2023
3:30 PM - 5:30 PM
- **South Bend Open House**
St. Joe County Public Library,
Community Learning Center, Ballroom A&B
305 S. Michigan St. South Bend
Tuesday, January 10, 2023
4:00 PM - 6:00 PM
- **Elkhart Open House**
Elkhart Public Library
300 S. Second St. Elkhart
Wednesday, January 11, 2023
4:00 PM - 6:00 PM
- **Goshen Open House**
Goshen Public Library, Auditorium
601 South 5th Street Goshen
Thursday, January 12, 2023
4:00 PM - 6:00 PM

Details on the latest event and the online surveys will be available at

connecttransitplan.com

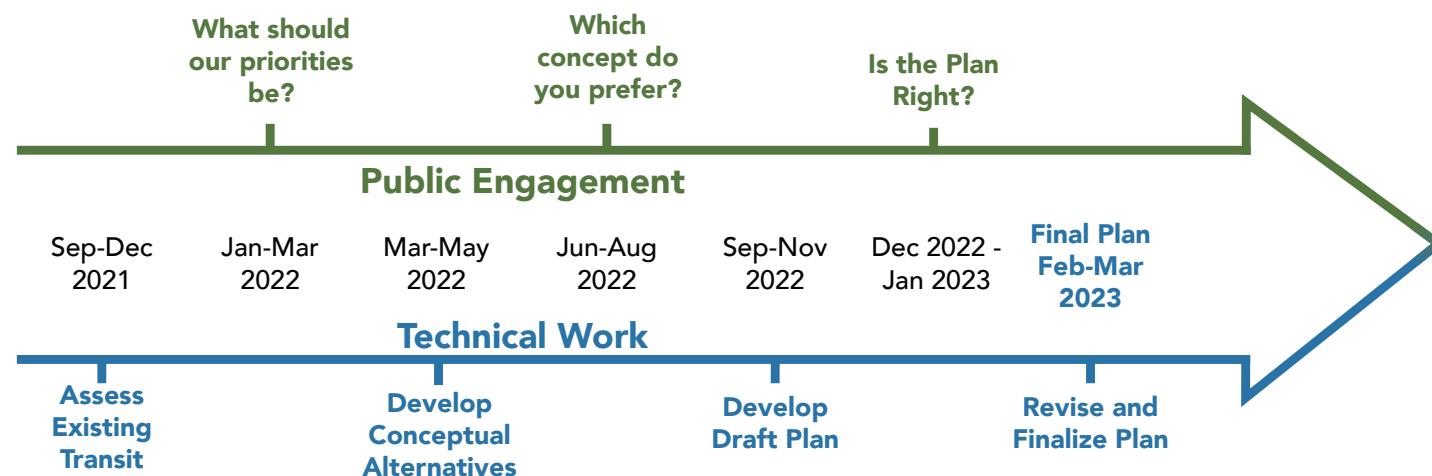


Figure 58: The timeline of engagement and technical activities for CONNECT.

Who will be consulted?

Many different people will be involved in guiding this plan:

- Transit riders
- People living on low incomes
- People of color and non-English speakers
- Civic and neighborhood leaders
- Employers and businesses
- Municipal staff
- Local elected officials
- Members of the MACOG TTAC and Policy Boards, and Transpo Board of Directors

How to get involved

For more information and to stay involved in the project, go to www.connecttransitplan.com and:

Learn More

- Get more background on the project
- See scheduled events
- Sign up for project emails

Give Input

- Take the [online survey](#)
- Join an online webinar
- Connect via social media

Share with Others

- Find videos, articles and reports to share
- Request a community presentation

