Citilink Transit Tomorrow Plan

Existing Conditions & Choices Report

NOVEMBER 2026

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Transit Tomorrow

www.fwcitilink.com/transit-tomorrow

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1 Executive Summary

What is Transit Tomorrow?

Public transit can play a vital role in helping to keep Fort Wayne moving by reducing traffic, improving access to jobs, supporting the local economy, and helping residents who rely on Citilink to live their lives. **Transit Tomorrow is a chance to rethink the entire Citilink bus network and consider how it is meeting the region's varied mobility needs.**

A bus network redesign is a collaborative planning process to help an agency determine where bus service should go, when it should run, and how frequently it should operate.

The process will begin with a set of questions about which goals are the most important for transit to achieve. These discussions will help us create two concepts that show different ways the new network could be designed to achieve different goals.

We will share these concepts with the public to get input on how the proposed future bus network should be designed and which goals are more important. The final outcome of the project will be a new Citilink bus network in the Transit Tomorrow Long-Range Transit Plan (LRTP).



Figure 1: An image of downtown Fort Wayne.

Why is Transit Tomorrow Needed?

Citilink has proudly served the Fort Wayne region for nearly 60 years. During that time, our community has changed quite a bit. Population growth, evolving demographics, shifting employment centers, new developments, and changes in how people travel mean that the Citilink bus network needs to be updated regularly to keep up with demand.

While Citilink has made service changes in recent years, the agency has never re-imagined its entire bus network at once, nor developed an overall approach to network design. As a result, the existing Citilink network has not kept up with community needs and ridership has been in a steady decline since 2014.

This study will allow us to reorganize our bus system to align with current travel patterns, adjust to regional contexts, improve service reliability, and examine where additional efficiencies may be found.

The result will be a new Citilink bus network that is more reflective of community goals and more aligned with current and future travel demand.

What is the project timeline?

The Transit Tomorrow project kicked off in July 2026 and is scheduled to be completed by Fall 2027 with a new vision for the future Citilink bus network.

Over the last few months, the project team has been reviewing the Fort Wayne region and the existing Citilink bus network to better understand what is working and what could be improved. The findings from this evaluation are outlined in this report.

Next, we will be developing two bus network concepts that will be shared with the public in the spring. These two different concepts will be used to educate the community and key stakeholders about possible ways that the future bus network could be designed and to get feedback on which concepts would be better for Fort Wayne.

Community feedback and guidance from the Citilink Board of Directors will be used to develop our Draft Network Plan by Summer 2027. The final network plan that will be presented to the Citilink Board of Directors by Fall 2027.

When will the public be able to provide input?

Public input will be critical during the "Network Concepts" outreach phase this spring, and for the Draft Network Plan next summer.

Feedback on the different concepts will help us to determine which one would be best for Fort Wayne or which elements should be incorporated in the draft plan. Input on the draft network plan next summer will also be important to make sure we get the details right in the final plan.

When will the changes be implemented?

We are developing the new Citilink bus network as part of the Transit Tomorrow Long-Range Transit Plan that covers the next 10 years, but the timeline for when the new network, routes and schedules will be launched has not yet been determined and could be much sooner.

If funding is available, the first phases of the new bus network could be implemented as early as the next 2-5 years but no timeline has been set.

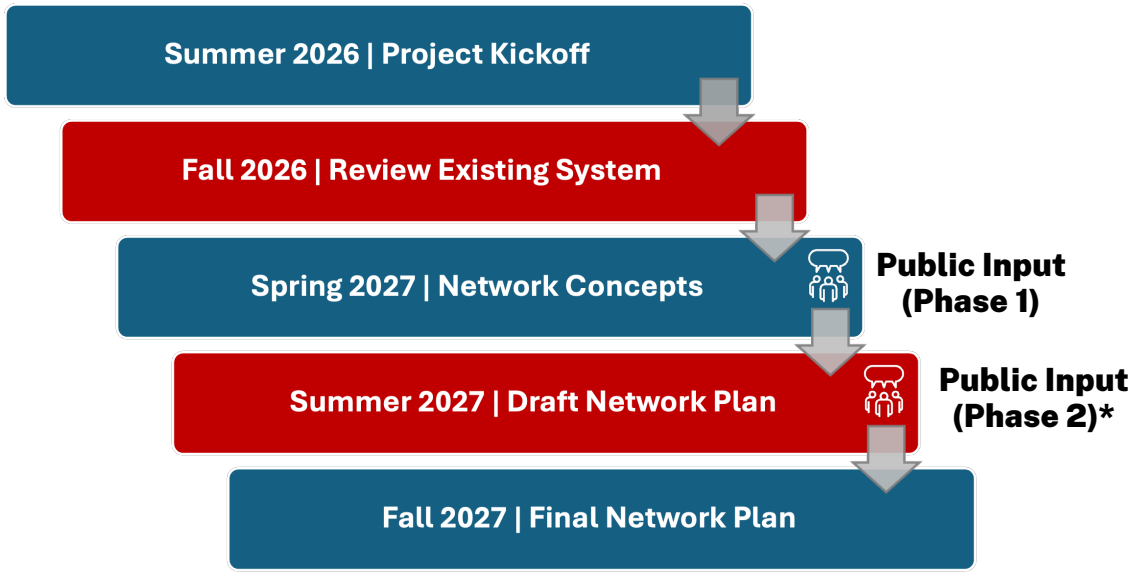


Figure 2: Transit Tomorrow Project Timeline

What is a transit system?

No single transit line or project can, by itself, transform a city. Transit is often referred to as a "system" or a "network" because it is a combination of many parts, working together. The graphic to the right describes what makes a transit system.

For Citilink the transit network includes:

- 18 local fixed-route buses;
- Two deviated-route services (Flexlink Routes 21 & 22); and
- Paratransit service, including Citilink Access and Access Plus.

Citilink has some heavily used lines and others that are lightly used. As this report will show, these differences are not hard to explain. Bus routes with higher ridership tend to be:

- more frequent, to reduce waiting time.
- running a longer service day, so that service is available whenever it is needed.
- focused on areas where more people are traveling, which maximizes demand at each stop.

However, lightly used lines may also serve important purposes in the community, as we discuss on the next page.

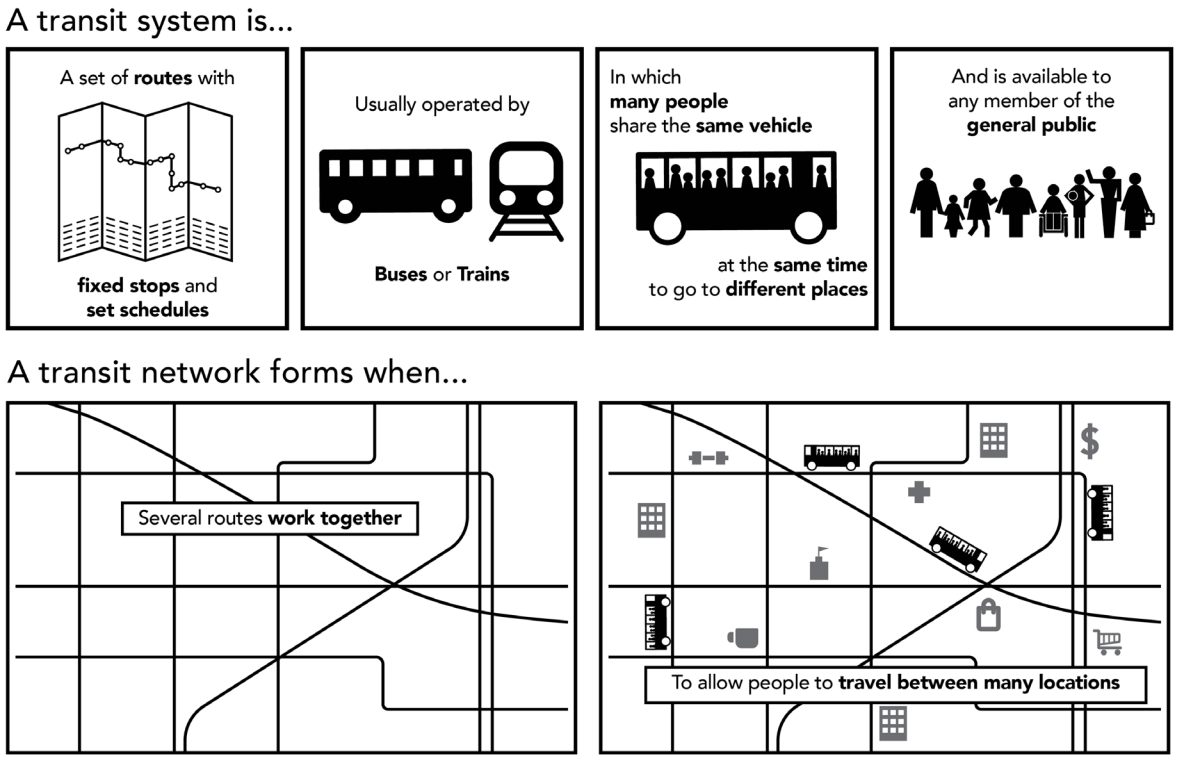


Figure 3: What is a Transit System?

The many goals of transit

Transit can serve many different goals, but it is not possible to excel towards all of the goals at the same time. Understanding which goals matter most to the Fort Wayne community is a key step in thinking about the future Citilink network.

Possible goals for transit include:

Economic: Transit can give businesses access to more workers, workers access to more jobs, and students access to education.

Environmental: Increased transit use can reduce air pollution and greenhouse gas emissions. Transit can also support more compact development conserving land.

Social: Transit can help meet the needs of people who are in various situations of disadvantage, providing them with access to support services and opportunity.

Health: Transit can support physical activity by walking and biking. It can also improve health by bringing health care, services and food within reach of disadvantaged people.

Personal Liberty: By providing people the ability to reach more places than they otherwise would, a transit system can be a tool for personal liberty, empowering people to make choices and fulfill their individual goals.

Do buses need to be full for transit to be "successful"? That depends on transit's purpose in the community.

Some of these goals are served by high transit ridership. For example, the environmental benefits of transit are only realized when many people choose to ride the bus rather than driving. The same is true of some economic and health outcomes.

We call these types of goals "ridership goals" because they are achieved through high ridership.

Other goals are served by the mere presence of transit. For example, a bus route through a low-density neighborhood provides a critical service for residents in that area who are unable to drive to meet their basic needs. The buses on this type of route will run empty for most of the day, but the route is achieving the goals of providing bus service to every taxpayer, or at least the people who need the service the most.

We call these goals "coverage goals" because they are achieved by covering geographic areas with service, regardless of ridership.



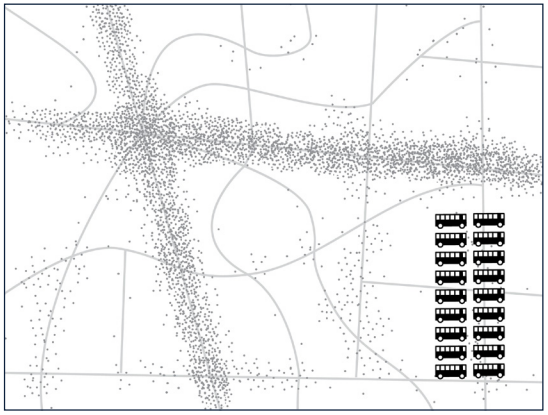
Figure 4: A mostly empty bus isn't always a bad thing.

Competing Goals - Ridership vs. Coverage

All transit agencies must balance competing goals as they decide how to design their networks and where to spend their resources. For example, should an agency add more service to increase frequency during weekday peak hours for commuters or should they use those extra resources to run service earlier during mornings and later during evenings for people who need to travel during times when service is not available?

While there are many different competing goals or "tradeoffs" for transit, the most important ones that a transit agency like Citilink needs to consider are ridership and coverage. Within a limited budget, if an agency wants to do more of one, it must do less of the other. This problem arises from the fact that the two goals produce opposite kinds of design. We explain this trade-off in the image at the right.

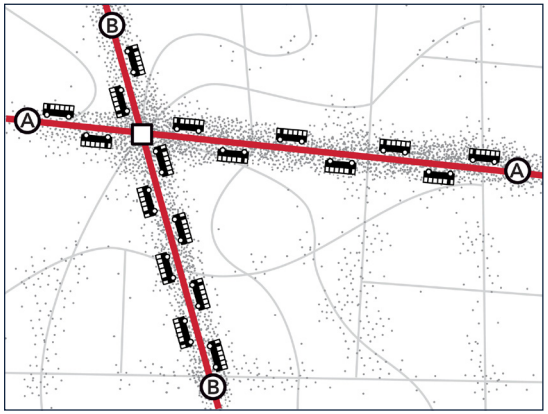
The "right" balance of ridership and coverage goals will be different in every community so public input on this tradeoff is particularly important.



Imagine you are the transit planner for this fictional town. The dots are people and jobs—most are concentrated around two roads, as in many towns.

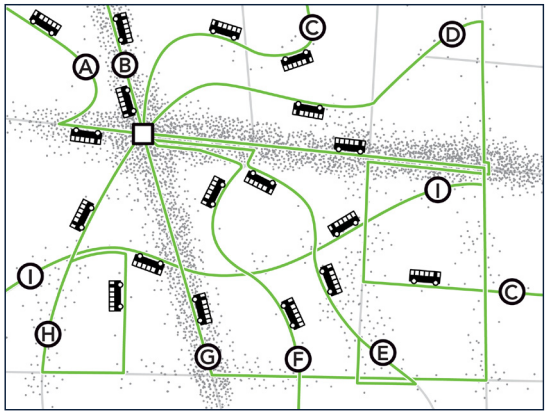
You have 18 buses to design a transit network.

Before you can plan transit routes, you must first decide: What is the purpose of your transit system?



High Ridership Goal

All 18 buses are focused on the busiest streets, so buses come frequently (maybe every 15 minutes). Waits are short but walks to service are longer for people in less populated areas. Frequency and ridership are high but some places have no service.



High Coverage Goal

The 18 buses are spread around so that there is a route on every street. Everyone lives near a stop, but buses come infrequent (maybe every 60 minutes). Only a few people can bear to wait so long, so ridership is low.

Figure 5: Ridership vs. Coverage

What causes high ridership?

When we say ridership, we refer to the number of people getting on the bus. Most transit agencies consider high ridership an important goal, but many factors outside of Citilink's control can affect ridership. These include gas prices, the economy and the availability of competing modes like rideshares. In addition, city decisions on land-use and street design affect the number of people who ride but are largely out of Citilink's influence.

The most important aspect of transit service that translates to higher ridership is frequency, or how often a bus arrives on a given route.

High frequency service means the bus is always coming soon, so people don't have to wait as long. A bus that is coming every 15 minutes will be far more useful than a bus that only runs once an hour, so more people will ride.

Frequency and waiting time don't just happen at the beginning of a trip, they also happen at the end. If you have to be at a medical appointment at a certain time, a 60 minute frequency may force you to choose between being 40 minutes early or 20 minutes late. In addition, missing an infrequent bus can mean an extremely long wait.

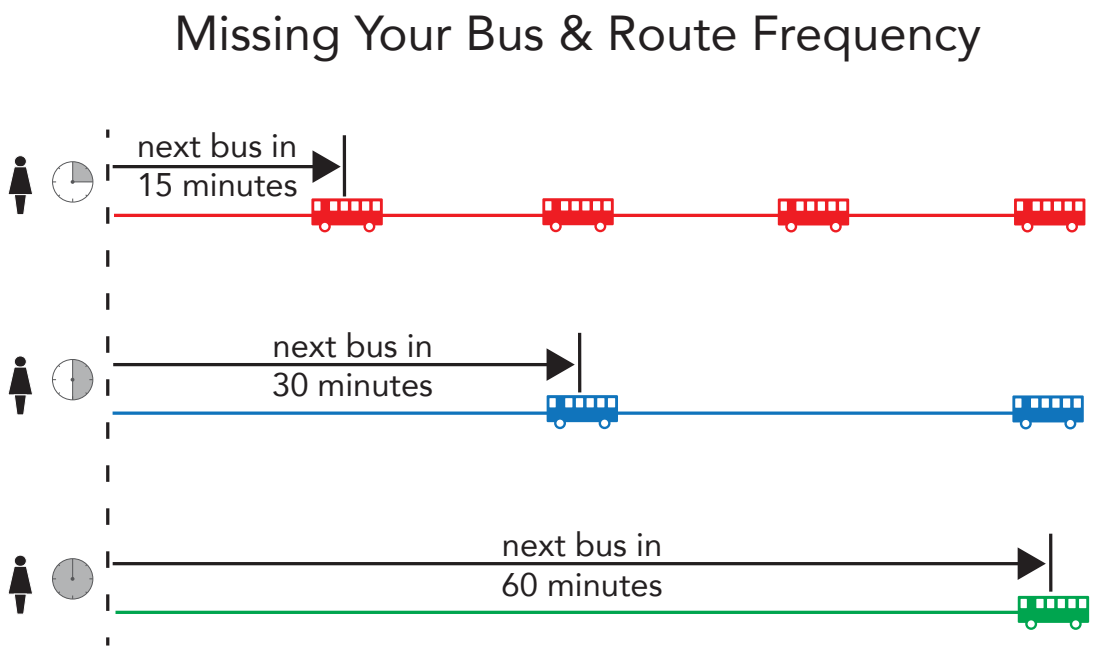


Figure 6: Why is high frequency service so important?

Frequent service is also much more reliable and convenient. Service disruptions from missed trips are less painful to riders when there is another bus coming soon. Transfers between routes are more convenient, even when you just miss your connection. And even short trips can be made on transit when the wait times are short enough.

Because of these factors, the optimal conditions for high ridership occur when frequent, all-day bus routes are located in the places where street design and land uses and densities are more conducive to transit use.

You can read more about how land use affect transit starting on page 22.

Recent Service & Ridership Trends

Over the last decade, the quantity of fixed-route bus service provided by Citilink has remained relatively flat with roughly 100,000 revenue hours operated each year.

During the same period, annual ridership levels have dropped from nearly 2 million boardings in FY 2014 to less than 1.5 million boardings in FY 2025. The agency recorded just 1 million boardings in FY 2020 due to the pandemic but returned to near pre-COVID ridership levels in FY 2024 and FY 2025. Like many other transit agencies across the country, Citilink ridership saw a steady decline that began around FY 2014 and was only interrupted by the sharp drop during the pandemic.

Not surprisingly, ridership productivity has also decreased over the last decade. The system recorded nearly 19 boardings per revenue hour in FY 2014, but drew just 14 boardings per revenue hour in FY 2025.

These recent trends suggest that the Citilink network may be less aligned with ridership demand than it has in the past and that it will benefit from a comprehensive review.

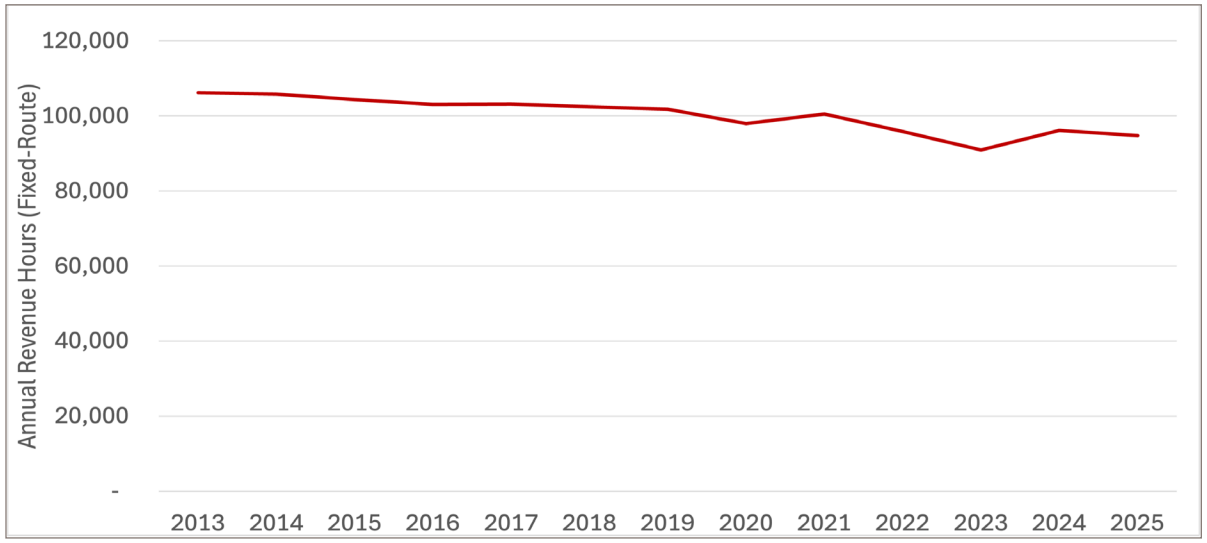


Figure 7: **Citilink Service Levels (FY 2013 - FY 2025)**

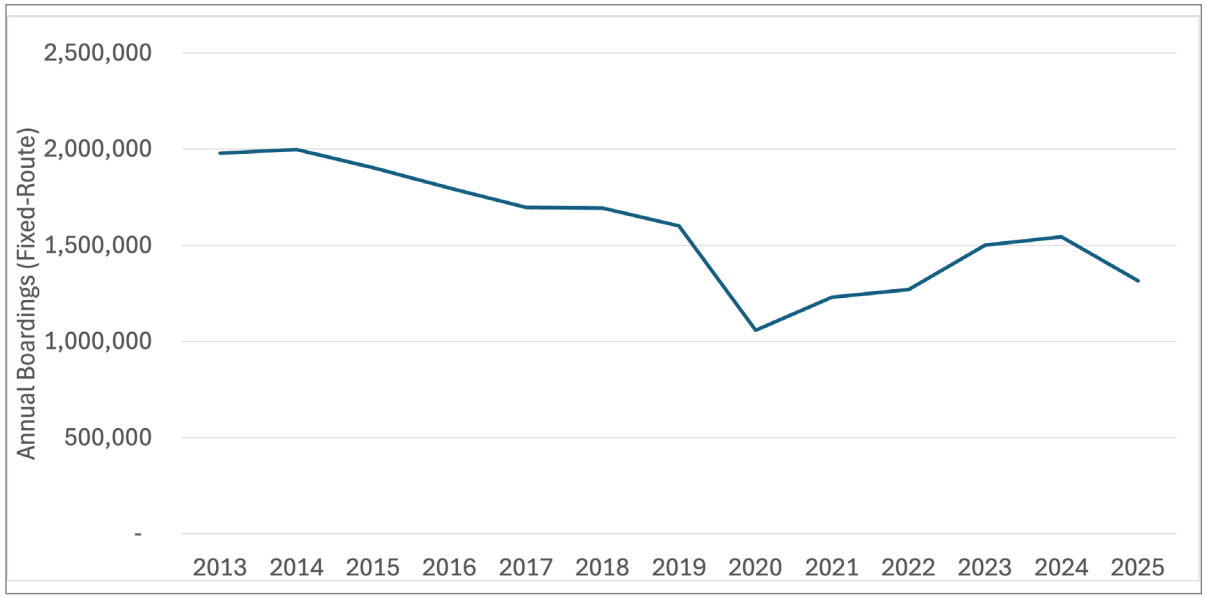


Figure 8: Citilink Ridership (FY 2013 - FY 2025)

Investment & Relevance vs. Peer Cities

The following charts show the performance of the Citilink compared to systems with similar population sizes, geographies and costs of living. Canadian cities often have a similar urban form to American cities with greater transit investment, so we have included Regina (Saskatchewan) and London (Ontario) as comparable peers.

Investment

Investment measures the quantity of service relative to population size, specifically revenue hours per capita. Citilink provides roughly 0.4 revenue hours per capita, which is higher than Green Bay and Wichita, but lower than neighboring cities like South Bend, Evansville, Toledo, Dayton and Grand Rapids.

Relevance

Relevance measures how many people ride transit (annual boardings) relative to the total population. With a few exceptions, relevance tracks very closely with investment, indicating that most agencies are getting what they pay for.

Service relevance in Fort Wayne is relatively low (5 boardings per capita), but is comparable to Wichita and Green Bay, as well as in-state neighbors like South Bend and Evansville. Bus networks with low relevance often provide baseline service for community members with no other travel options, but are largely irrelevant for most other residents. As a result, public perception of bus service is usually quite low.

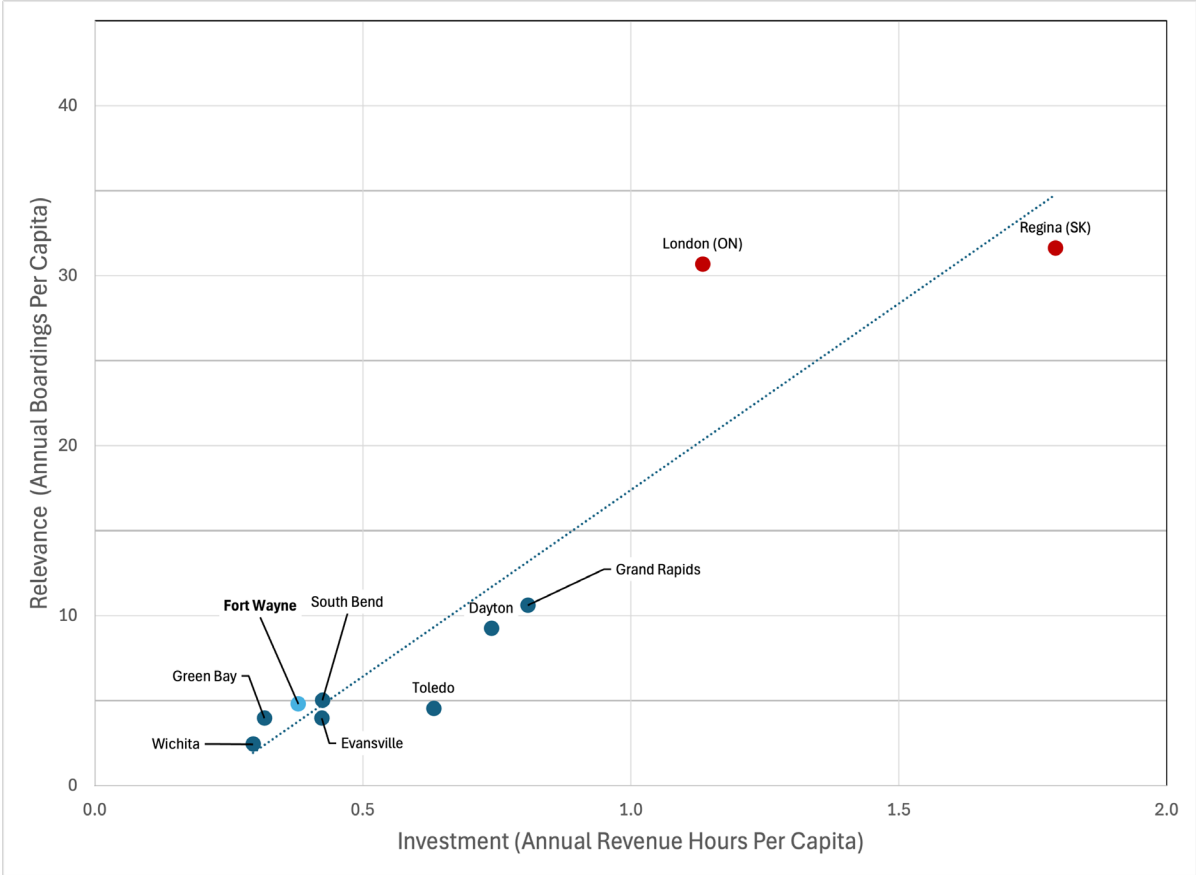


Figure 9: Service Investment & Relevance (FY 2024)

Dayton, Grand Rapids and the two Canadian peer cities are examples of cities that have invested more in transit per capita. These cities demonstrate the untapped potential of transit that could be realized with additional investment.

Ridership Productivity vs. Peer Cities

Productivity

People who value the congestion mitigation, environmental sustainability or economic benefits of transit will talk about ridership as the key to meeting their goals; however, the more important measure is not sheer ridership but **ridership relative to cost.** Ridership relative to cost is called "productivity." In this report, productivity is measured as boardings per revenue hour:

$$Productivity = \frac{Ridership}{Cost} = \frac{Boardings}{Revenue\ Hours}$$

Despite recent ridership declines, Citilink's ridership productivity ranks slightly above average compared to most of its domestic peers. Grand Rapids, Green Bay and Regina are all slightly higher than Fort Wayne, while London (Ontario) outpaces the entire group with over 27 boardings per revenue hour.

IF ridership were the primary goal, Citilink should aim to increase ridership productivity.

IF coverage were the primary goal, Citilink should expect to see a decrease in ridership productivity.

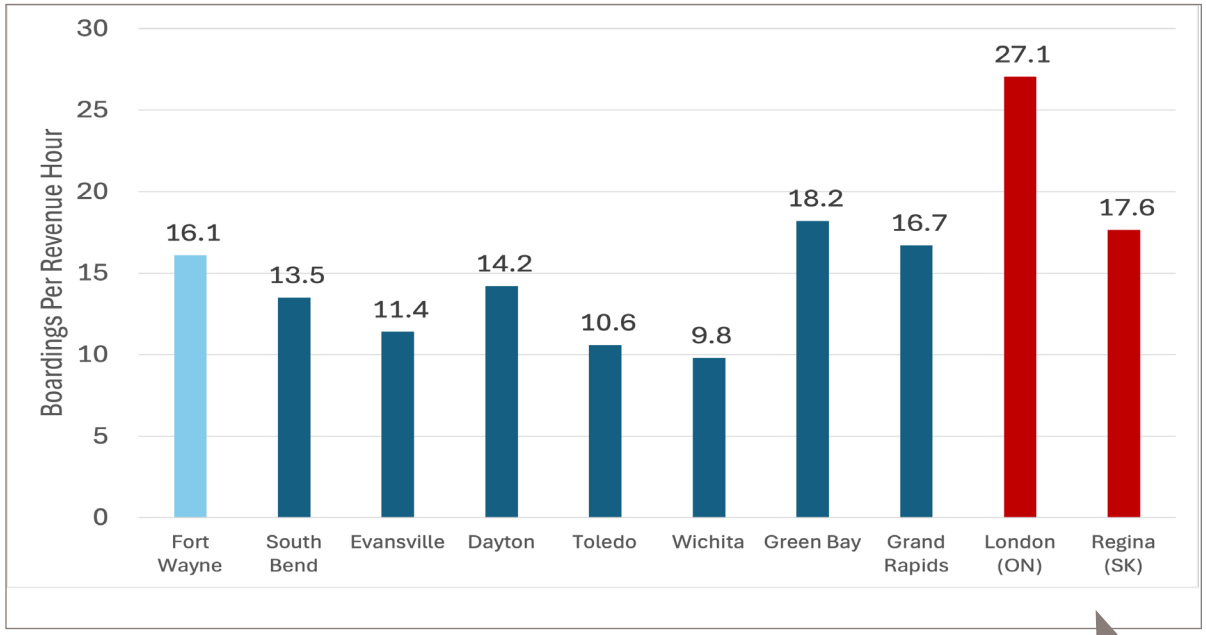


Figure 10: Ridership Productivity by City (FY 2024)

Why Canada?

Canadian peer cities can be a useful points of comparison for how additional investment in transit can pay off with increased usage. Unlike Europe or Asia, Canadian cities are usually similar to U.S. cities in terms of size, density and land use patterns, but they are different in that they run far more transit service than their U.S. counterparts. London (Ontario) and Regina (Saskatchewan) are similar to Fort Wayne in terms of population size, geography and cost of living, but the figures on the two preceding pages show that they have much higher investment and relevance. **Canada shows us that if a US city wanted higher benefits from transit at higher levels of investment, that might be possible.**

Key Findings - Existing Network

This report reviews the existing Citilink network to evaluate its performance and how it is meeting the needs of Fort Wayne. Key findings include:

Existing Network. The existing Citilink bus system is designed as a hub-and-spoke network to transport riders to and from Central Station and Downtown Fort Wayne. This highly-efficient "pulse" network has served the region well in past decades, but has not been able to grow and evolve with the communities it serves.

Frequencies & Spans. Most routes in the Citilink network only run once per hour, which makes the service difficult to use for many people. Routes generally do not operate past 8:00 PM on weekdays or 6:00 PM on Saturdays, and no service is provided on Sundays. The resulting network is comprised mostly of routes that don't run often enough or at all the times when they are needed.

Focus on Coverage. With most routes running every 60 minutes to provide some service close to as many people as possible, the Existing Network prioritizes wide geographic coverage over getting high ridership. This study will explore whether that reflects the communities goals for transit.

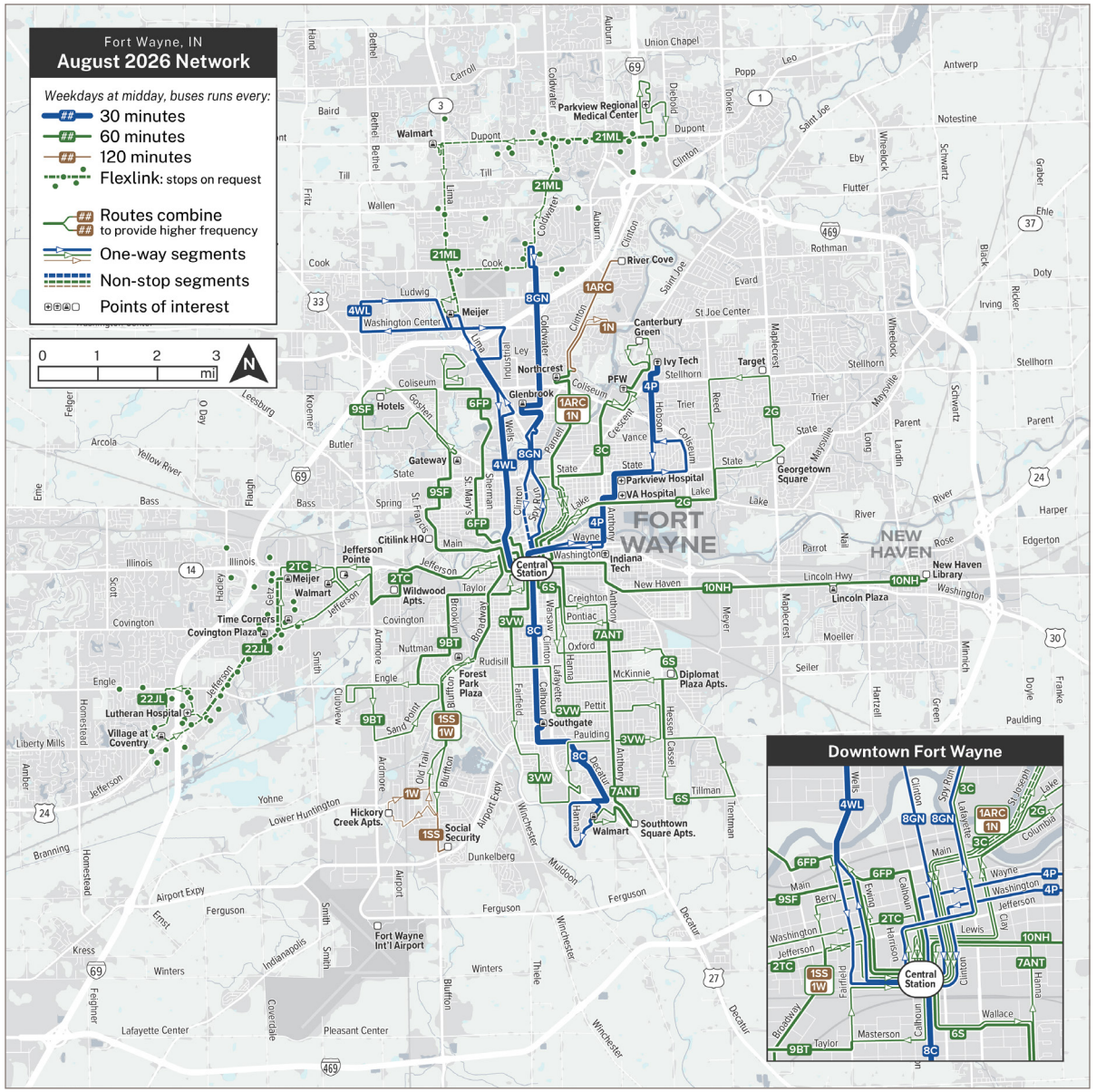


Figure 11: Existing Citilink Bus Network Map (August 2026)

Key Findings - Travel Patterns

Less Downtown Demand. Travel demand to and from Downtown Fort Wayne has diminished in recent years, particularly since the COVID-19 pandemic. Shopping centers and hospitals in outlying areas (e.g. Glenbrook Square, Jefferson Point, Parkview Regional Medical Center, Lutheran Hospital) are now driving more travel demand than downtown.

Fewer Commuters. While midday and afternoon ridership levels remain high, the ridership peak on weekdays from 6:00 to 9:00 AM has disappeared, likely due to telework and employment shifts. This suggests that Citilink is now being used for more shift employees and shopping trips than typical "9-to-5" commuters.

Evolving Rider Demographics. The most recent onboard survey showed that the average Citilink rider is older, less likely to have access to a car and earns less money than 2018. The percentage of riders over the age of 65 has doubled during that span, and number of customer who don't have access to a car has risen from 67 percent to 86 percent. The percentage of households with annual incomes below $50,000 has risen from 65% in 2018 to 79% in 2026.

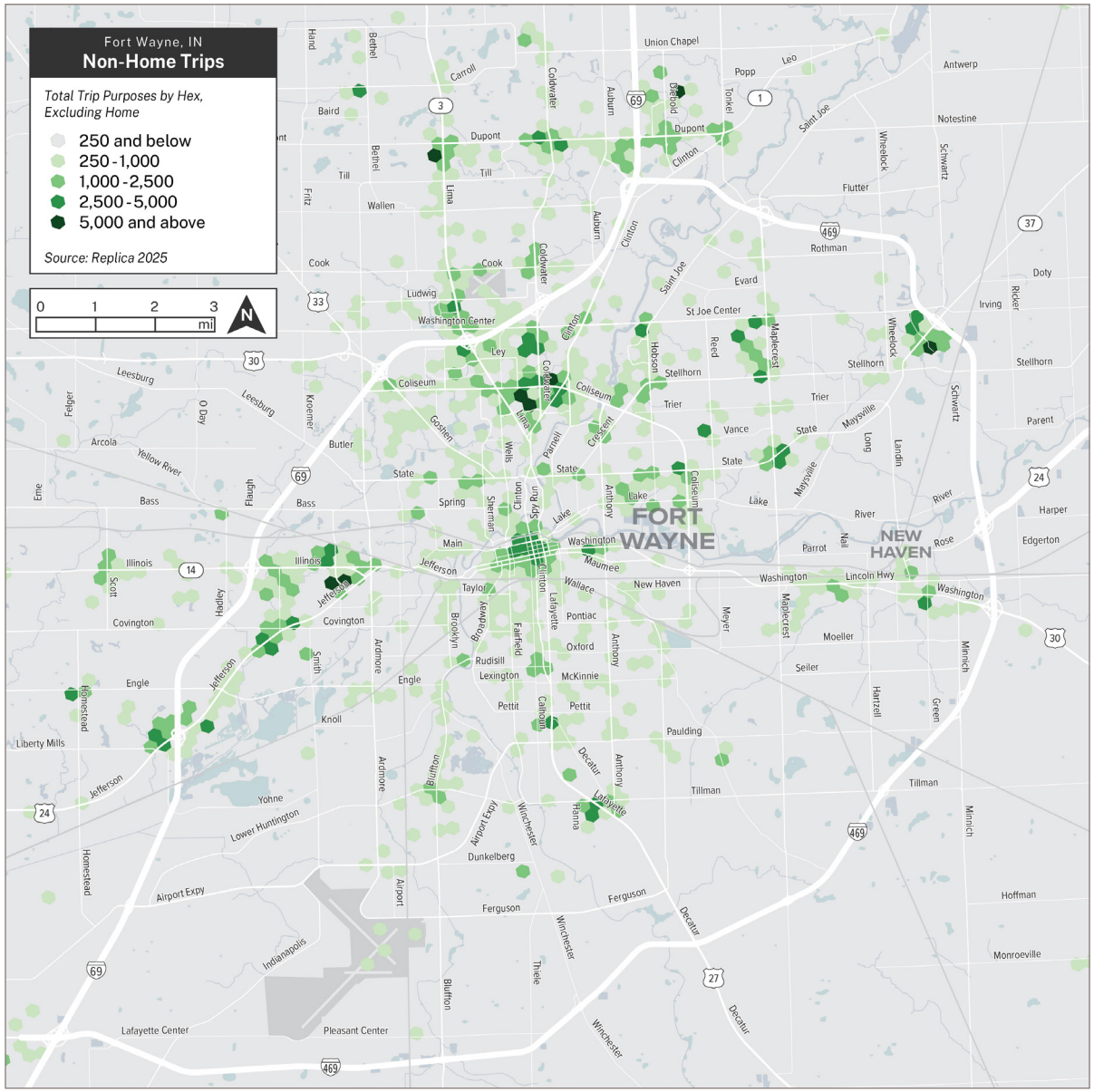


Figure 12: Non-Home Based Trip Destinations (Source: Replica Trip Data)

Key Findings - Service Levels

Service Levels. In the last decade, Fort Wayne has not been able to increase investment in Citilink service enough to keep up with rising costs and population growth. Service levels have been flat or decreasing, which means that service quality and reliability are being diluted.

Low Investment & Relevance. Fort Wayne is comparable to Evansville and South Bend in terms of investment and ridership per capita, but falls short of other peer cities like Dayton (OH) and Grand Rapids (MI).

Ridership Decline. Like many transit agencies across the country, Citilink ridership has been in steady decline for the last decade and overall productivity continues to decrease. This may indicate that the Citilink bus network is less aligned with regional priorities or needs than it could be.

Service Reliability. Weekday on-time performance for Citilink service was measured as 68% in September, which is well below the agency target of 85%. This issue is most prevalent during weekday afternoons, when many buses are not able to make it back to Central Station in time for their timed connections which reduces systemwide reliability and leaves passengers stranded.

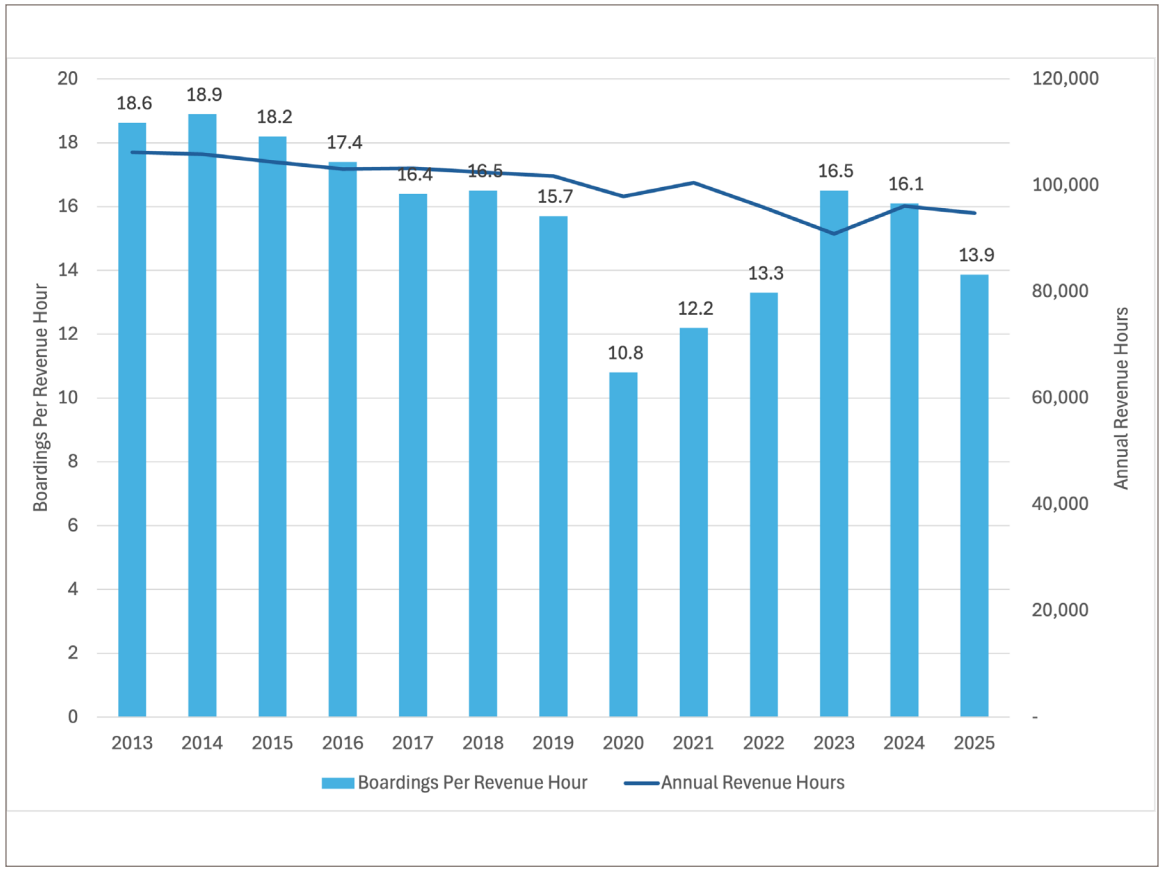


Figure 13: Ridership Productivity & Service Levels Since 2013

These findings highlight some trends and challenges that make it difficult for the current network to succeed. This project is a unique opportunity to set a new course with a new bus network that reflects community values and meets the current and future needs of Fort Wayne.

What else is in this report?

Geometry of Transit

In Chapter 2, we summarize the basic principles of transit geometry, how they affect the access and opportunities that transit can provide to residents, workers, and visitors, and how the underlying geometry forces every community to grapple with some key value trade-offs in the design of its transit system.

Markets and Needs

In Chapter 3, we assess the markets for transit in the Greater Fort Wayne region, the potential for high ridership, and the areas where the need for transit is high but the density of demand is not.

By "market" we are referring specifically to the demands for transit that result in high ridership relative to cost. This way of thinking about a transit market is similar to the way a private business thinks about its market for sales – how many potential customers there are, how useful they will find the product, and how well the product competes for their business.

Existing Transit Network

In Chapter 4, we analyze the existing Citilink network's performance, including the frequency, spans, ridership, productivity, and specific observations about the structure of the network.

Key Questions

In Chapter 5, we summarize key value choices that only the community and its leaders can make about how transit should serve the Fort Wayne community. These value choices cannot be answered by technical experts because they are questions about what goals and values the community prioritizes. There is not a technically correct answer to these value questions.

2 Geometry of Transit

What is the product of transit?

Public transit can achieve many goals, but one of its more basic purposes is to help provide people with **access to opportunities** like work, shopping, medical needs, education, social services, and a variety of different economic, social and cultural activities.

Everyone has a limited amount of time in their day and can only spend so much time traveling to meet their basic needs. Maximizing the destinations or opportunities that people can reach in a limited amount of time is something we can calculate to evaluate how well transit is meeting this goal and how well it is serving its riders. The measurement of how many opportunities can be reached using transit is called "access" and can be represented by a "bubble" as shown in the figures to the right and on the following page.

What Access Achieves

When we expand the "bubble" of access for as many people as possible, several things happen as a result:

- We **make service more useful** for the trips people are already making and for other trips people might want to make by transit.
- We **increase ridership potential**, as a result of service being more useful for getting to more places. When transit is more useful, more people will use it.
- We increase transit's potential to help **reduce pollution and congestion and promote the local economy**. The degree to which transit achieves these goals is based on how many people use transit, and improving access is the best path to increasing ridership.
- We **expand access to opportunity** (jobs, education, shopping, social services, medical appointments), especially for people who rely on it.
- We **increase the economic attractiveness** of the urban area. Connecting people with opportunities like is the whole point of cities, so improving those connections makes any community more effective and increases the overall quality of life.

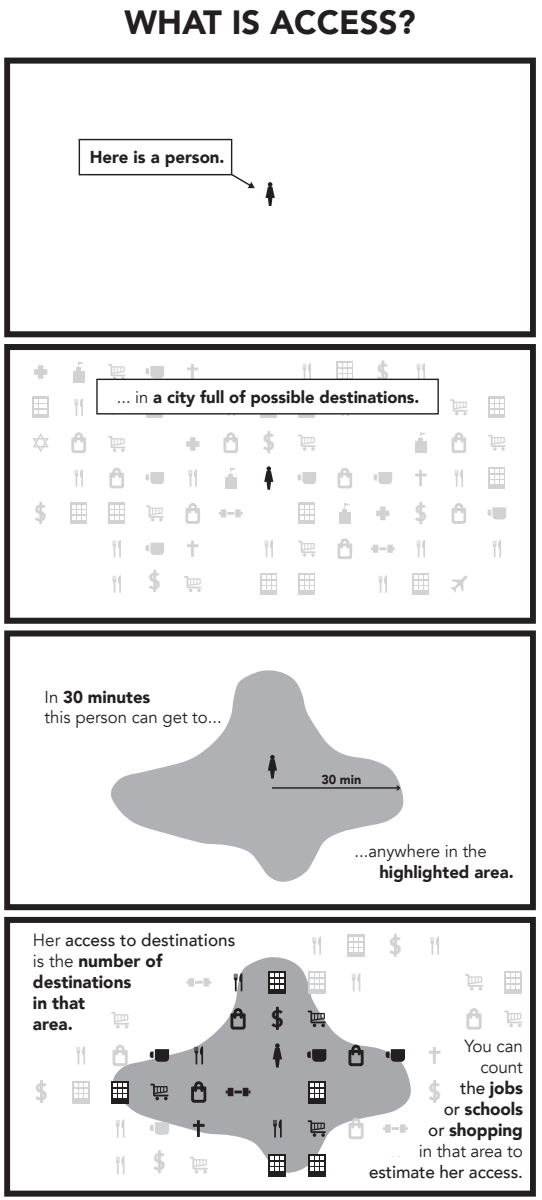


Figure 14: What is access?

Access & Freedom

Wherever you are, there is a limited number of places you could reach in a given amount of time. These places can be viewed on a map as a bubble around your location.

Think of this bubble as "the wall around your life." Beyond these walls are jobs you cannot hold, places you cannot shop, and a whole range of things you cannot do because it simply takes too long to get there.

The technical term for this is "access", but it could more appropriately be called "freedom", in the physical sense of that word. The extent of this bubble determines what your options are in life: for employment, school, shopping, or whatever places you want to reach.

If you have a bigger access bubble, you have more choices, so in an important sense, you are more free. That increase in freedom is also closely related to transit usefulness and ultimately ridership.

Access Is a Matter of Geometry

The way these factors combine and determine access is geometry because freedom (and access) is about what you *could* do, not predictions of what you *will* do.

Access is a basic driver of ridership, but it can also be considered a worthy goal in itself. Access from a particular location is something that gives that a location value. Real estate firms routinely study where you can get to by car from a particular development, and we can do a similar analysis using transit. If you are deciding where to live based on whether you can get to your job, school, or relatives, you are asking about access.

How Transit Expands Access

When using transit, the extent of access is determined by:

- **The transit network.** This includes the frequency, speed, and spans of service. These features determine how long it takes to get from any point to any other point.
- **The layout of the community.** For each transit stop on the network, this determines how many useful destinations are near the stop or within easy walking distance.



Figure 15: Transit expands access to opportunities.

Frequency is Freedom

Frequency refers to how often a bus comes, which determines maximum waiting time. Frequent service provides several related benefits for customers.

- **Short Waits.**
- **Fast Connections.** Transferring lets a rider reach many places along more than just one route. Frequency makes connections easy because the next bus is always coming soon.
- **Improves Reliability.** If a bus breaks down, the next bus is coming soon.
- **Spontaneity.** Rather than living around a bus schedule, customers can show up at the stop and go.

The payoffs of frequency are non-linear, with the highest ridership benefit usually being found with 5- to 15-minute frequencies.

This chart plots the frequency and productivity of Citilink bus routes, along with thousands of other routes from 50 other transit agencies - both small and large - from different parts of the country:

- The horizontal axis shows frequency (better, more useful frequency means a lower wait time, so more frequent service is to the left).
- The vertical axis shows productivity—ridership compared to the quantity of service.

Although the sample size is small, we see that productivity increases with frequency even though better frequency costs more. The cost of frequency is part of Quantity of Service, so it should pull the productivity ratio down, but instead it goes up.

How much frequency is enough? Two points should be noted:

- **15 minutes or better has the best chance of being useful.** Here, the non-linear payoff begins to appear.
- Trip length matters because **it doesn't make sense to wait a long time to travel a short distance.** Very short routes, don't make sense unless they can be run at frequencies well under 10 minutes.

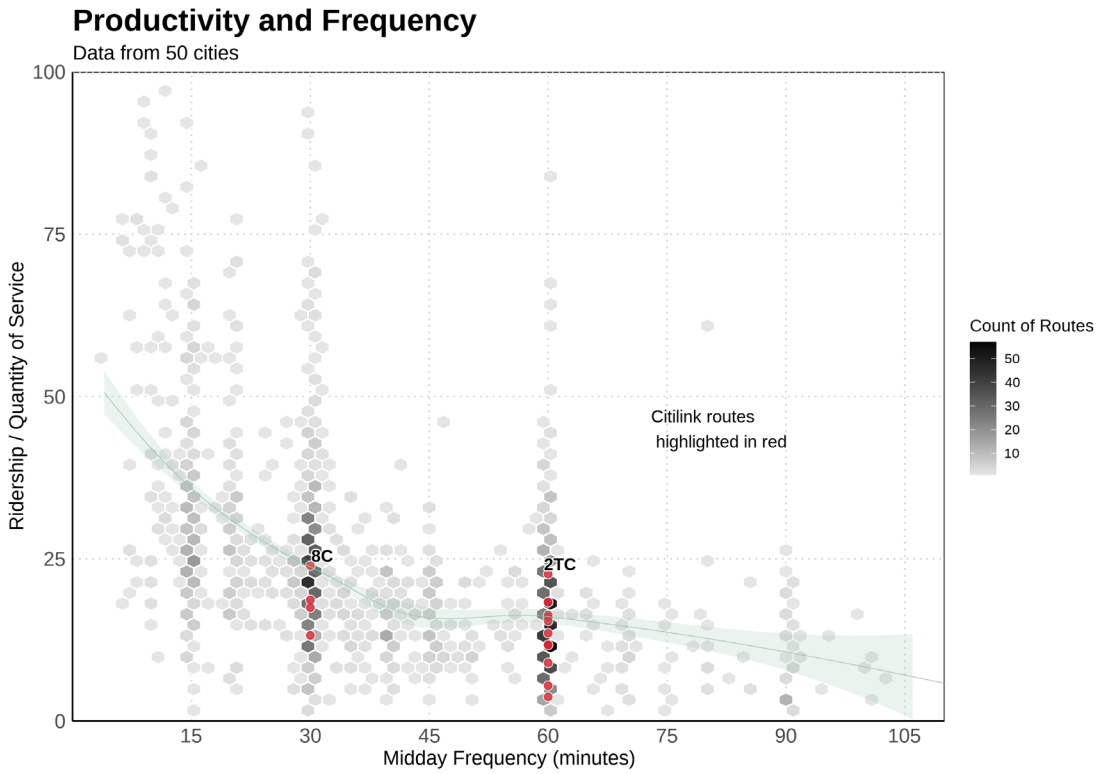


Figure 16: Ridership Productivity vs. Service Frequency (FY 2024)

Why do development patterns matter?

The layout of a community has an enormous impact on transit's ability to succeed there. These are purely geometric facts about a community's layout. In describing them, we are not saying anything about the people who live there. Four major features of a community determine transit potential. They are Density, Walkability, Linearity, and Continuity.

Density

Density is the number of residents or activity destinations in a fixed land area. For transit, what matters is the fixed land area round each transit stop.

The graphic on the right shows two identical bus routes. The route on the top is traveling in an area that has twice as many houses as the route on the bottom. All else being equal, places in Greater Fort Wayne that have higher density are likely to get higher transit ridership than places that are less dense, regardless of who lives there.

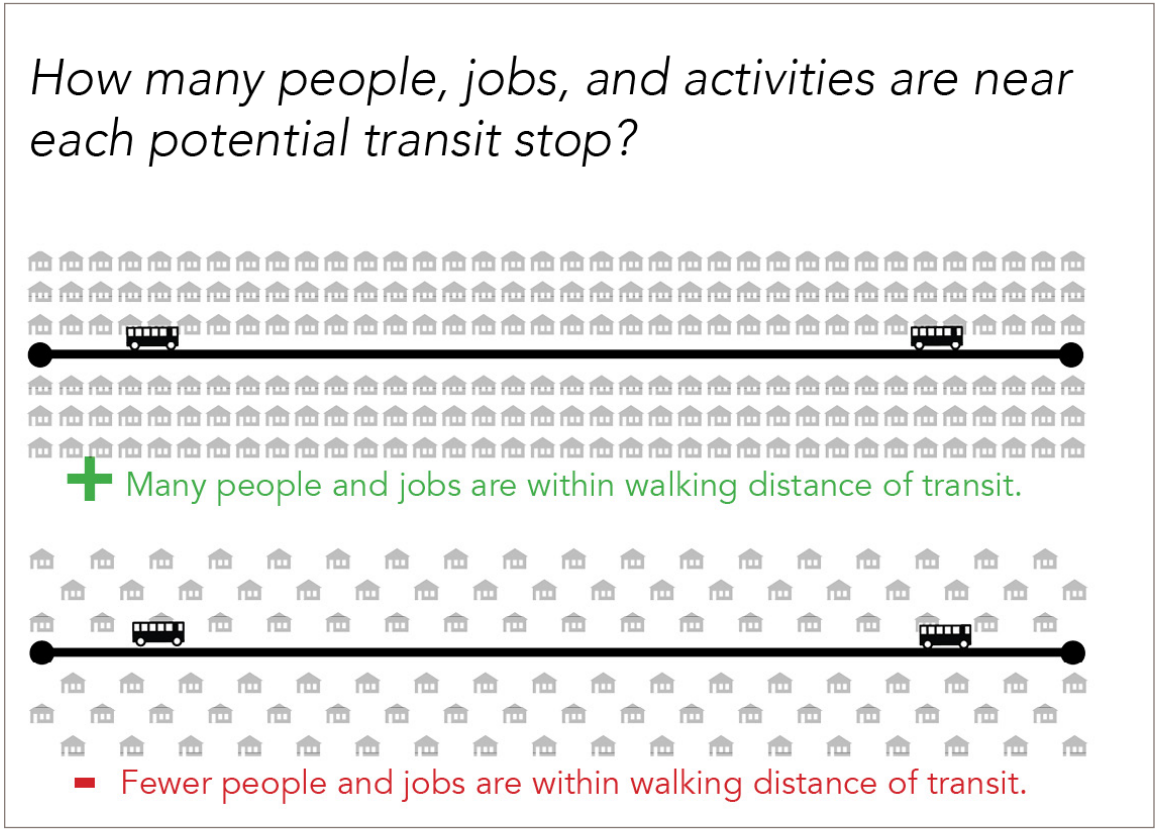


Figure 17: Higher density means more people are near transit.

Why do development patterns matter?

Walkability

To use transit, people need to be able to walk to the bus stop. The street design around a bus stop determines if people can reach the stop by walking.

The graphic on the right shows two bus stops with a 1/4 mile circle around each one. The black lines show the parts of the street network that are within 1/4 mile walk of the stop. Not all of the 1/4 mile circle is in a 1/4 mile walk.

The street network in the top example is a simple grid that allows many people to easily walk to the bus stop. The bottom example shows a disconnected street network where fewer places are within a 1/4 mile walk of the bus stop. Even though many people may live near this bus stop, they have to walk a longer distance to get there. To a transit planner who is trying to maximize ridership, the effect is the same as if the density were lower: fewer people can benefit from transit service in this area.

It is also important that people be able to cross the street to reach the bus stop. If a road is too dangerous to cross, people won't be able to ride transit in both directions. When they are dropped off on the opposite side of the street, they will be stuck.

Finally, the presence (or lack of) sidewalks and crosswalks can make a big difference in the degree to which people are willing and able to use the bus service. The Americans with Disabilities Act (ADA) of 1990 also provides minimum requirements to ensure that bus stops are accessible to all customers, including those using wheelchairs or other mobility devices. The combination of walkable streets and accessible bus stops are critical to maximizing walkability to transit.

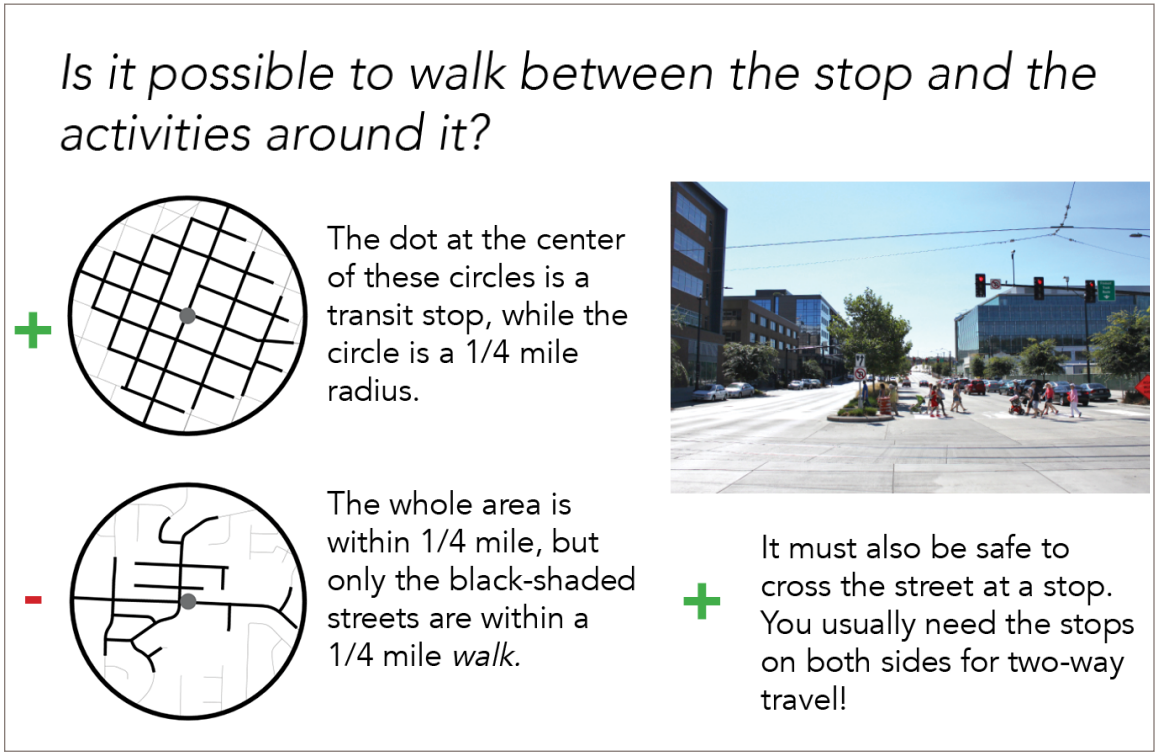


Figure 18: Higher walkability means more people can walk to transit.

Why do development patterns matter?

Linearity

The graphic on the right shows four destinations aligned in different ways. In the town on the top, all destinations are located along the main road. Transit can serve all destinations with a line that everyone will experience as direct. People riding from one end to the other will find this service useful because they are always traveling towards their destination.

The town on the bottom has the same four destinations located far from the main road. To serve these places, a bus needs to deviate from the main road and then drive back to the main road. If this is your destination, this is great for you. But if you are traveling between any other two points, you are traveling out of the way before getting where you want to go.

Also, the route on the bottom example is much longer, which means it's more expensive to operate for the transit agency. Having long or circuitous routes like this one means that Citilink can't provide as much frequency, so people will have to wait longer for the bus.

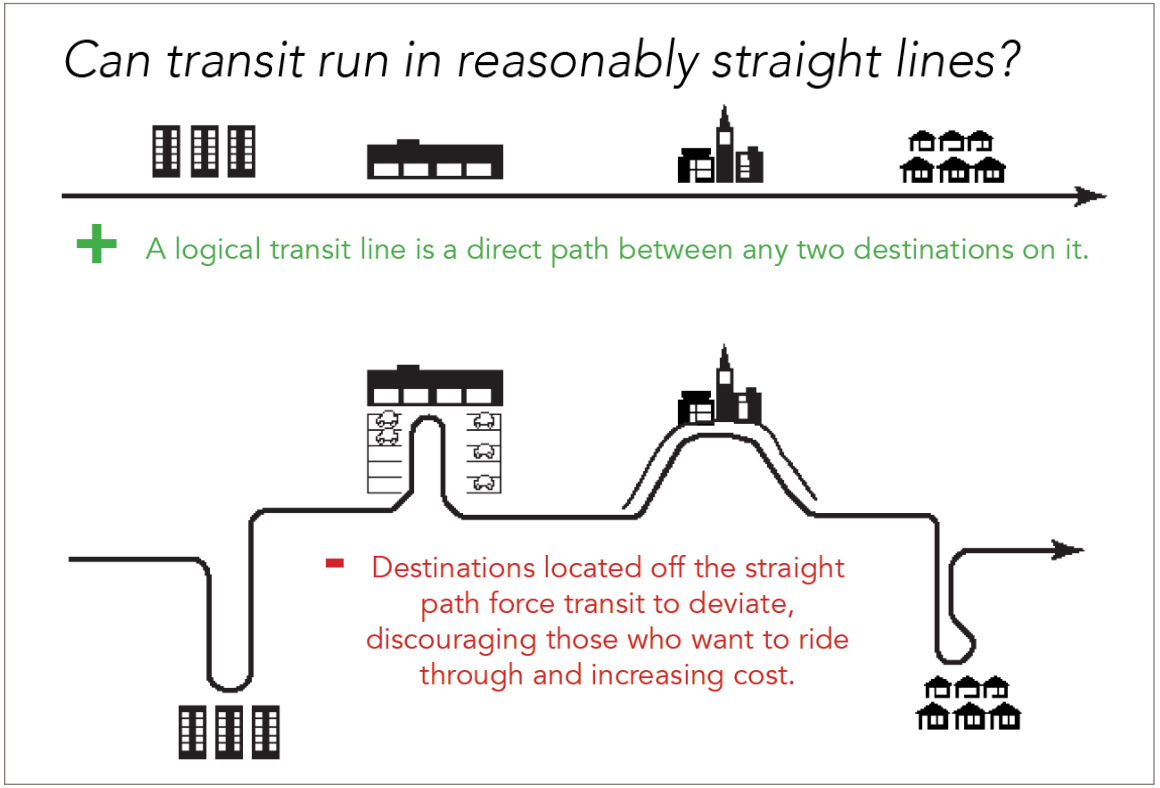


Figure 19: Linear development patterns are easier for transit to serve.

Why do development patterns matter?

Continuity

In transit, distance is a major contributor to the cost of operating bus service. Connecting places that are far away, with long gaps, is more expensive than places that are close to each other. Unfortunately, many U.S. cities have grown in ways that create longer distances between key destinations, especially in areas with medium- or low-density residential development.

Within a fixed budget, a more expensive route means that a bus can't come as frequently, so people have to wait longer. If waits are longer, less people are likely to find the service useful.

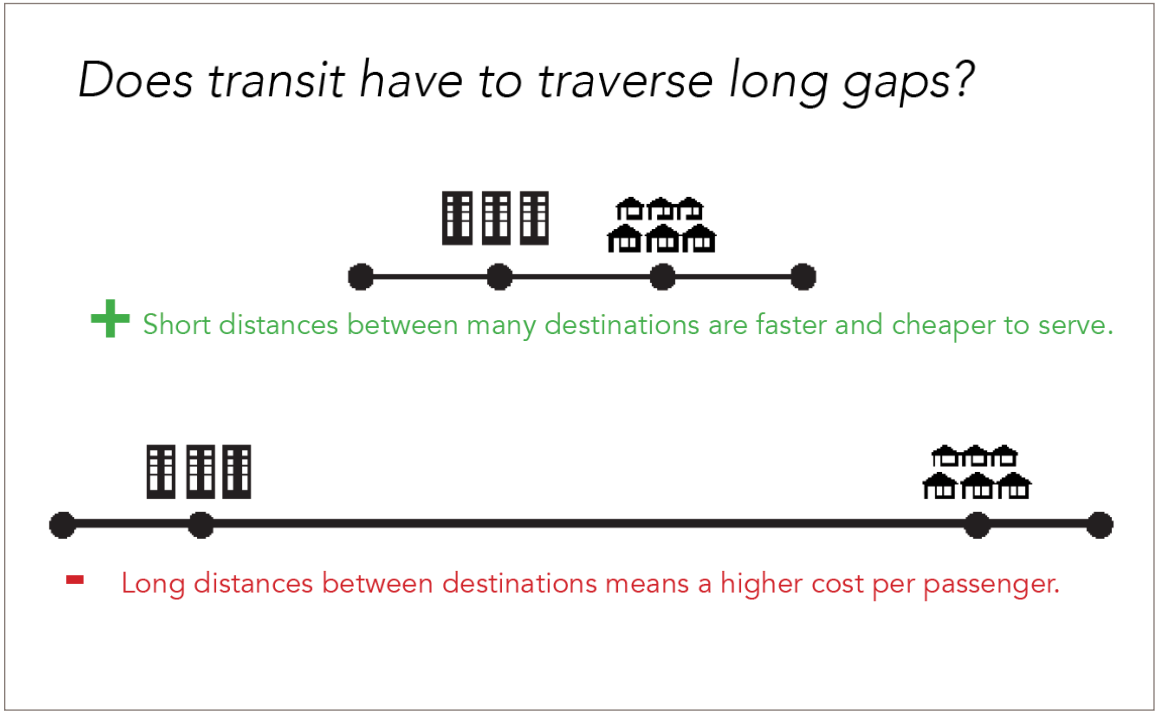


Figure 20: Continuity and shorter distances are easier for transit to serve.

Which goals are most important to you?

The previous pages describe how you would design a transit network **IF** your goal was high ridership—you would put frequent service in favorable development patterns. But at no point are we saying that you should want high ridership.

Within any fixed budget, there is a decision to be made between providing service with the goal of getting high ridership vs. providing wide geographic coverage.

Ridership-Coverage Trade-off

Imagine you are the transit planner for this fictional town. On the map to the right, the lines indicate roads and the dots indicate people and jobs. Most people and jobs are concentrated along two main roads, as in many towns. So, these are places that more people want to travel to and from.

You have 18 buses to design a transit network. Before you can plan transit routes, you must first decide: What is the purpose of your transit system?

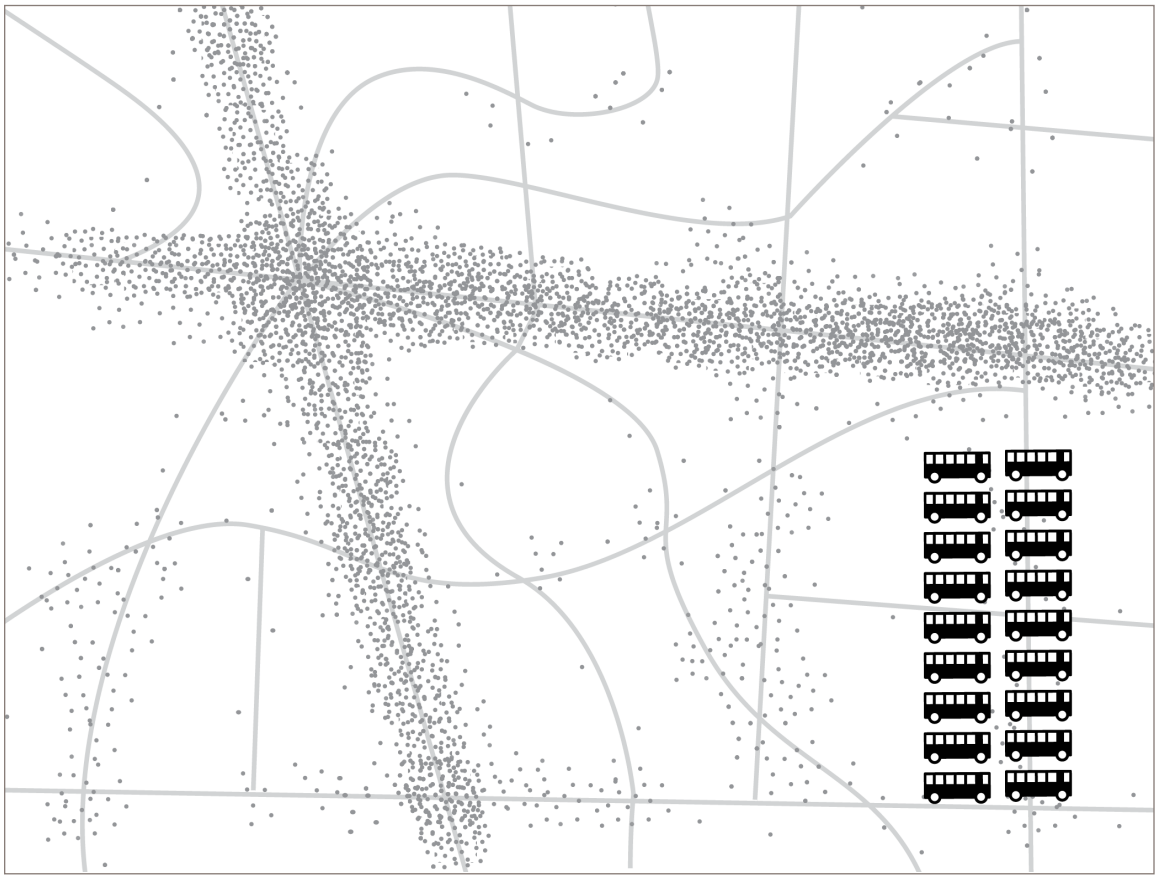


Figure 21: A diagram to demonstrate the Ridership vs. Coverage tradeoff.

Ridership Goals

If the goal is high ridership, you would concentrate all 18 buses on the busiest areas. You would only have two routes but waits for service are short.

Since the service is direct and frequent, many people would find the service useful, so many would use transit.

Frequent service is available in places with the greatest travel demand, but some places have no service.

Performance Measure(s):

Productivity

Ridership relative to cost

Proximity to Frequent Service

Percent of residents or jobs within walking distance of bus stops with frequent service (e.g. 15 minutes or better).

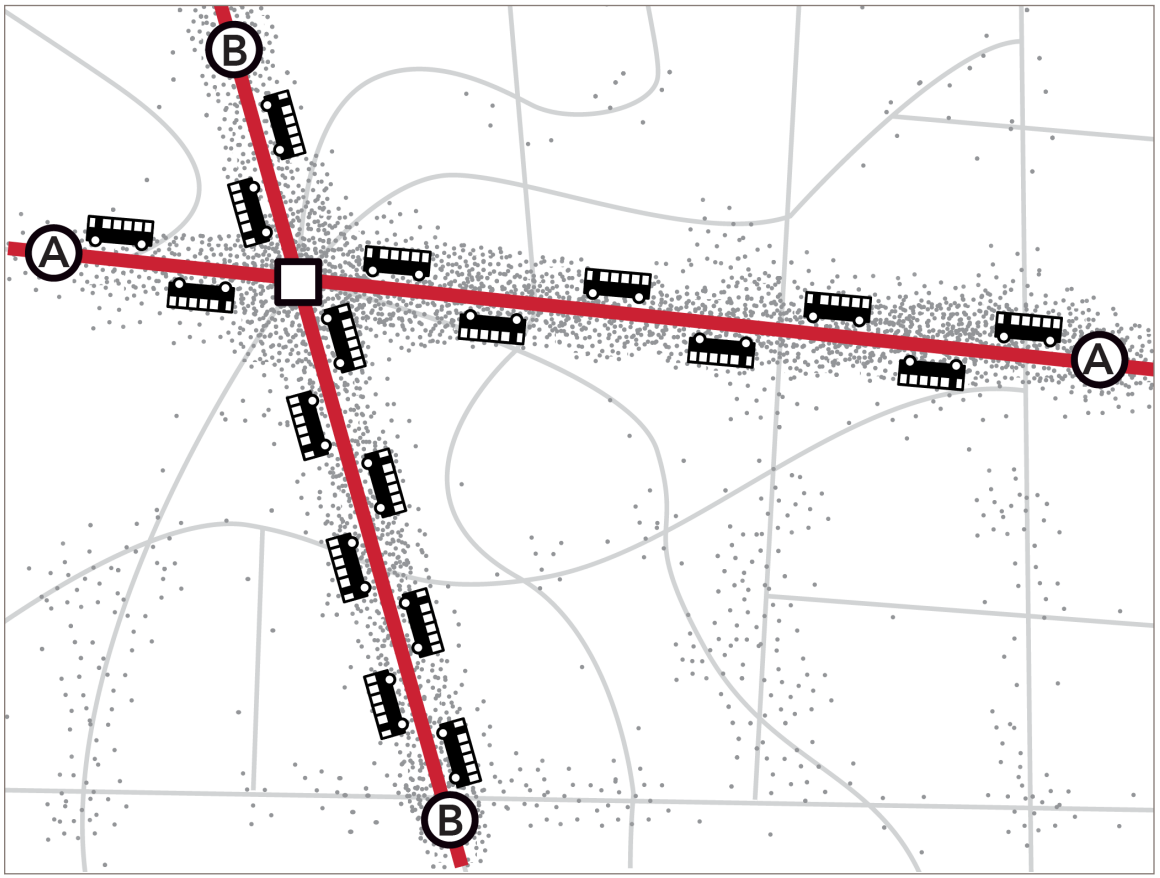


Figure 22: A simple bus network designed to maximize ridership.

Coverage Goals

If the goal is high coverage, you would spread out the 18 buses so that every street has a route. Everyone lives near a bus stop, but every route is infrequent, so waits for service are long. Routes are looping and circuitous, so people spend a lot of time on the bus even when going a short distance. Only a few people can bear to wait or ride for so long, so ridership is low.

Performance Measure: ***Coverage***
Percentage of people near service

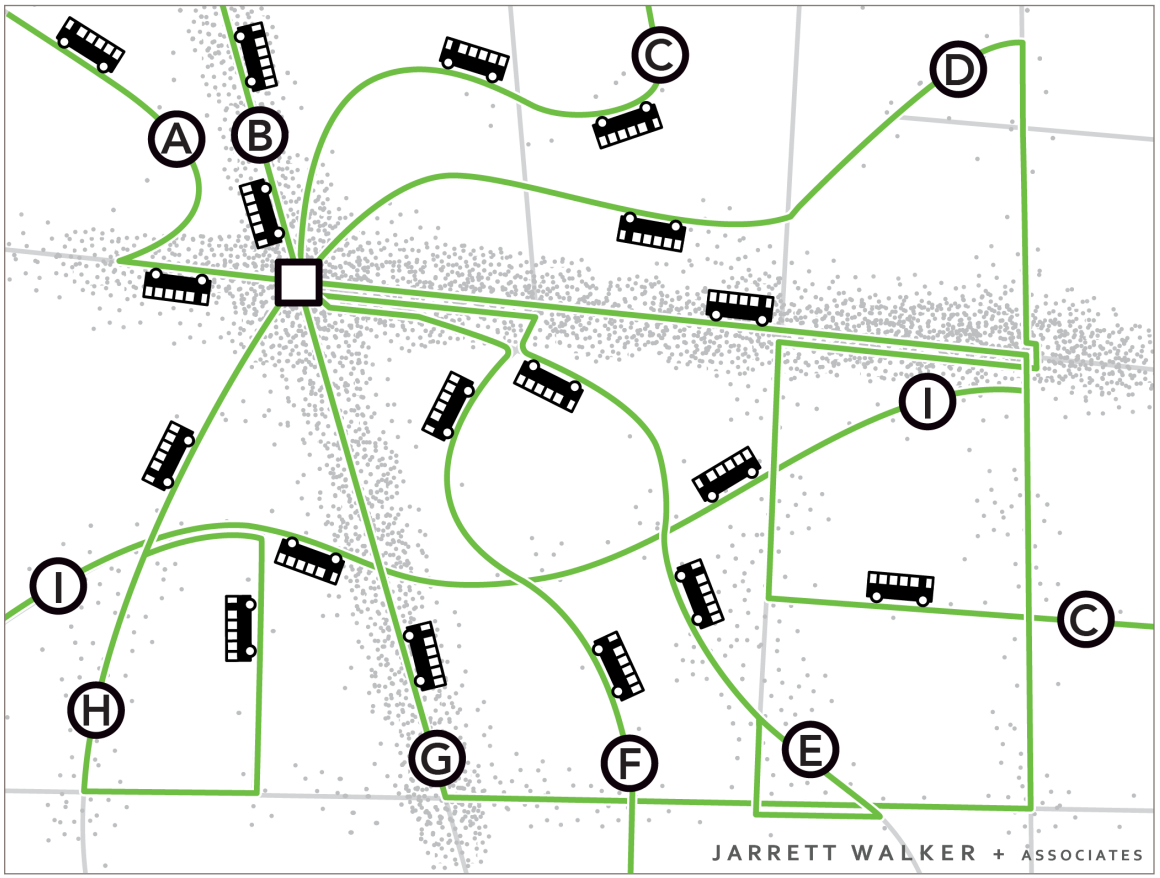


Figure 23: A simple bus network designed to maximize coverage.

Conflicting Goals - Ridership vs. Coverage

All transit agencies must balance the competing goals of high ridership and high coverage. Within a limited budget, if an agency wants to do more of one, it must do less of the other. Ridership and coverage goals conflict with one another due to geometry and geography.

On a fixed budget, each bus that the transit agency runs down a main road, to provide more frequent and competitive service in that market, is not running on the neighborhood streets, providing coverage. While an agency can pursue ridership and provide coverage within the same budget, it cannot do both with the same dollar. The more it does of one, the less it does of the other.

A particularly clear way for transit agencies to set a policy balancing ridership and coverage 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.

Ridership Goal

If the goal is to get **high ridership**, you would put most routes in places that are dense, linear and walkable, as described by the indicators of high ridership on pages 19-22.

In a network designed for ridership, dense areas get very good service, with the next bus always coming soon. But when an agency focuses on making the high-ridership routes as useful as possible, it means it can't afford to run to a lot of other places.

Reasons to pursue a ridership goal include:

- Getting more riders
- Reduced traffic from vehicle trips,
- Reduced emissions
- Less subsidy per ride
- Economic benefits

Coverage Goal

If the goal is **high coverage**, you would spread service out so that there's some service everywhere. But spreading it out means spreading it thin. Since there is such a huge area to serve, none of the buses can come very often, which means that fewer people find them useful. Some people who do use coverage services really need them, and will defend them. Other people may value having service available "just in case", even though they don't use it most of the time.

Reasons to pursue a coverage goal include:

- "Access for all."
- Service for people with severe needs for transit, no matter where they live.
- Service to every member community.



Figure 24: The Ridership vs. Coverage Spectrum

Microtransit

You may have heard about taxi-like services that pick you up when and where you request them, rather than running on fixed routes like buses. You may have even seen Citilink running a similar type of service with its deviated route service on Routes 21 and 22.

Microtransit is a type of demand response service that doesn't have fixed routes and can pick customers up in different locations based on their requests. Other variations of demand response are called "dial-a-ride," "flex-route," or "on demand" service. In this report, we'll refer to those services as "microtransit." Citilink has recently received a federal grant to pilot a microtransit service, but the agency is still evaluating where and how the service will be run.

These graphics show how microtransit (blue box) differs from fixed route transit. In fixed-route transit, people walk to bus stops and buses arrive based on a predetermined schedule. Microtransit service can pick up riders where and when they request it. Demand response service can vary from a route that provides some limited deviations on request like Route 21 and 22, to a microtansit area with several fixed stops or door-to-door service anywhere within a zone.

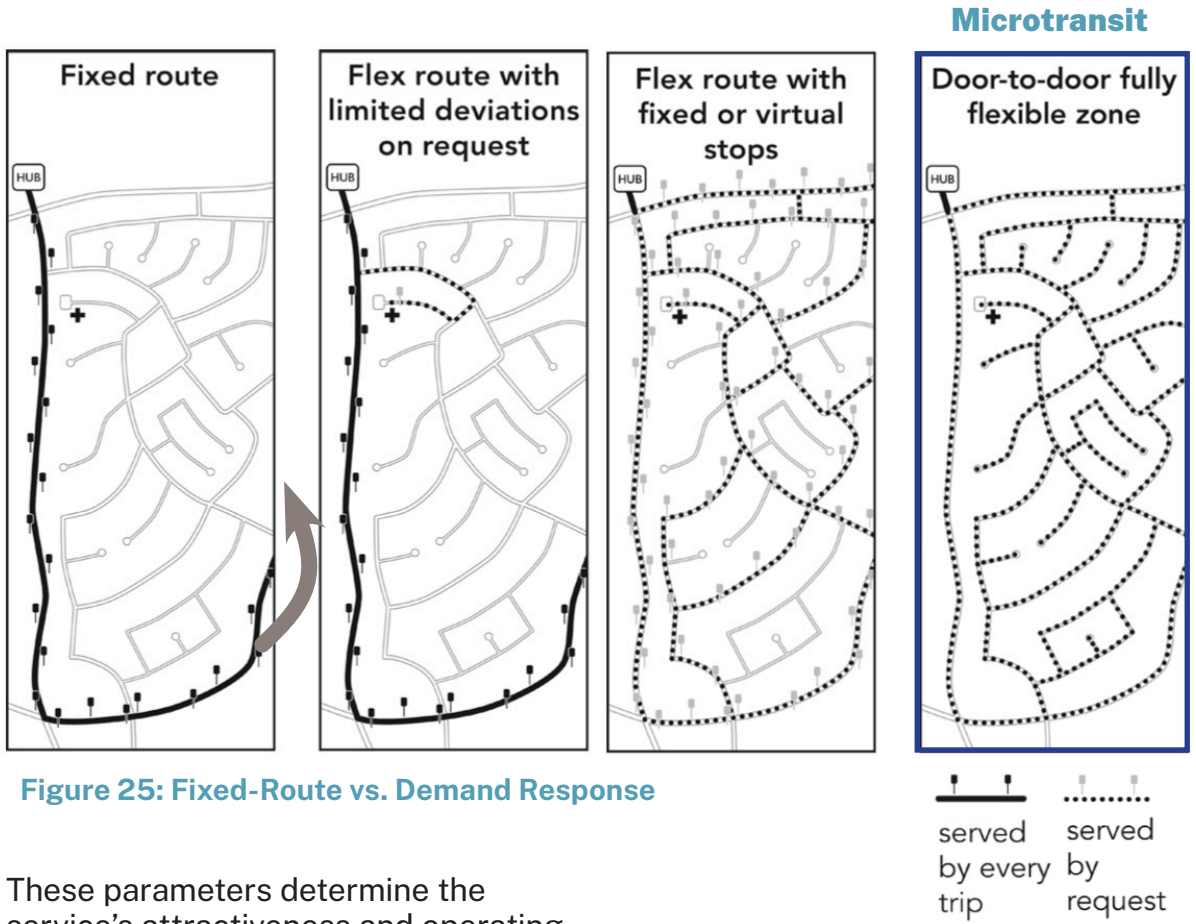


Figure 25: Fixed-Route vs. Demand Response

These parameters determine the service's attractiveness and operating cost.

On demand service is convenient for riders because it doesn't ask them to walk to a bus stop, and it lets them travel at the time they prefer. But these features don't come free.

Inefficient paths mean more driver effort into serving each passenger, so it tends to be less efficient than fixed routes but can be a useful coverage-style service in areas that arent dense enough for fixed-route service.

Microtransit (continued)

Microtransit can be useful for certain types of areas, but are usually more expensive and less productive than fixed route service. This is why transit agencies are careful and thoughtful about where they offer microtransit service and how they control its costs.

The cost of a fixed route is steady over time. It does not go up immediately when more people ride it. As a result, when more people ride, it becomes less expensive to provide each ride.

In contrast, the costs of microtransit can rise quickly as more people request trips. There is a low ceiling on how many rides per hour an on demand vehicle can serve before an additional vehicle and driver need to be deployed. **Almost no microtransit services are able to average more than 3-4 boardings per vehicle, per hour.** If you think about what the vehicle has to do – driving around to each person's requested pick-up spot, then their requested drop-off spot – xthen it's clear why it would be so hard to do this very many times in an hour.

This scatterplot shows data for each route type at a real mid-sized transit agency. Each dot is a route, and its height on the graph shows its average number of boardings per hour, per vehicle. Microtransit service (all the way to the right) handles fewer rides per hour than even the lowest-ridership fixed routes.

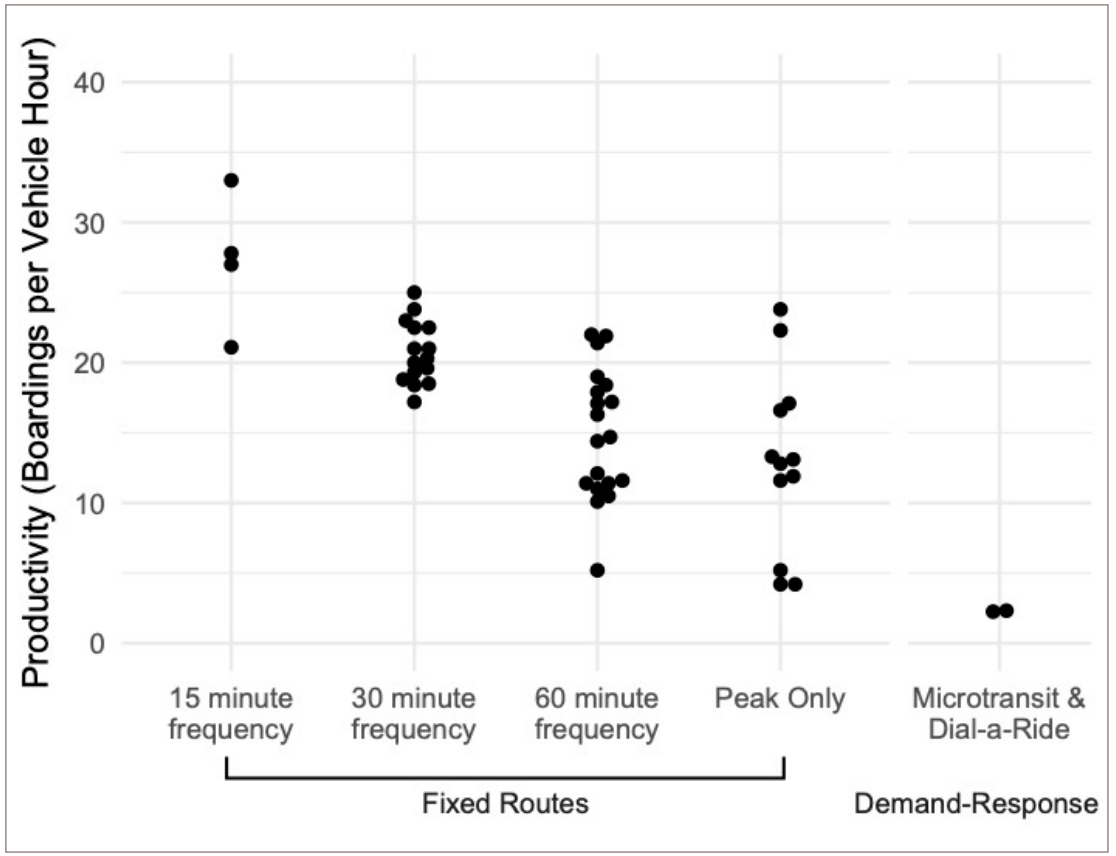


Figure 26: Productivity for Various Transit Services (Not Citilink Data)

This difference in potential ridership per vehicle, when comparing fixed routes to microtransit, is quite typical, because of the basic math of how the two types of services work. This means that microtransit is often more useful for providing coverage in places with low ridership, like low density areas that are hard to serve by fixed route.

3 Market & Needs

Market & Needs Assessment

In this chapter, we present and discuss data that inform two different types of considerations in transit planning:

- Where are the strongest markets for transit, where ridership is likely to be high relative to cost?
- Where are there moderate or severe needs for transit, regardless of potential ridership and cost?

The first of these helps us plan for high ridership. The second helps us to think about where coverage services are most important for the community.

Market Assessment

The transit market is mostly defined by **WHERE** people are, and **HOW MANY** of them are there, rather than by **WHO** they are.

On the following pages, these maps help us visualize the transit market:

- Residential density
- Job density
- Activity density (residents + jobs)
- Walkability
- Travel Patterns

All else being equal, density matters more than income and age if you are trying to predict where transit will get high ridership.

This is not to say that who people are is not important. It is extremely important, especially when designing transit services to achieve a coverage goal.

Need Assessment

We learn about transit needs by examining **WHO** people are and what life situation they are in.

On the following pages, these maps help us visualize transit needs:

- Density of low-income residents
- Density of zero-vehicle households
- Density of seniors
- Density of youths

These measures cannot by themselves tell us that a person has a severe need for transit. For example, some people in a zero-vehicle household can afford to use Uber/Lyft. We must consider these measures to understand where people's needs for transit are likely to be severe.

Civil Rights

Another important map in this chapter is not strictly related to need but rather to civil rights. This map shows **where people of color live**.

Unequal treatment on the basis of race, ethnicity, or national origin is prohibited by the Civil Rights Act of 1964. Regulations by the Federal Transit Administration require that DART considers the benefits and burdens that people of color and people in poverty experience from transit service and in the process of planning for transit and transportation projects.

While a person's race or ethnicity does not tell us directly if they need transit, or if they have a propensity to use transit, we know that there is a correlation between race and ethnicity and income and wealth. People of color in Fort Wayne make up a higher proportion of a population that is low-income and doesn't own a car than the overall population.

Market: Residential Density

Most trips start or end at home so it is important to understand where people live within the Fort Wayne region. Furthermore, places with many households are also destinations for other people, whether for visiting, worship, caring for family or home-based work.

This map shows the distribution of residential density in Greater Fort Wayne. The areas with the highest residential density are:

- Downtown Fort Wayne;
- southeast of Downtown, especially west of South Anthony Boulevard;
- Fairfield Avenue;
- north of Downtown along portions of Spring Street and State Boulevard; and
- along St. Joe Center Road, just west of St. Joe Road.

There are also other dense areas scattered across the region, including,

- areas northeast of Downtown, north of State Boulevard and east of Hobson Road.
- large suburban neighborhoods west of I-69 between Bass Road and Liberty Mills Road;
- the Coldwater Road corridor, north of I-69; and
- The City of New Haven.

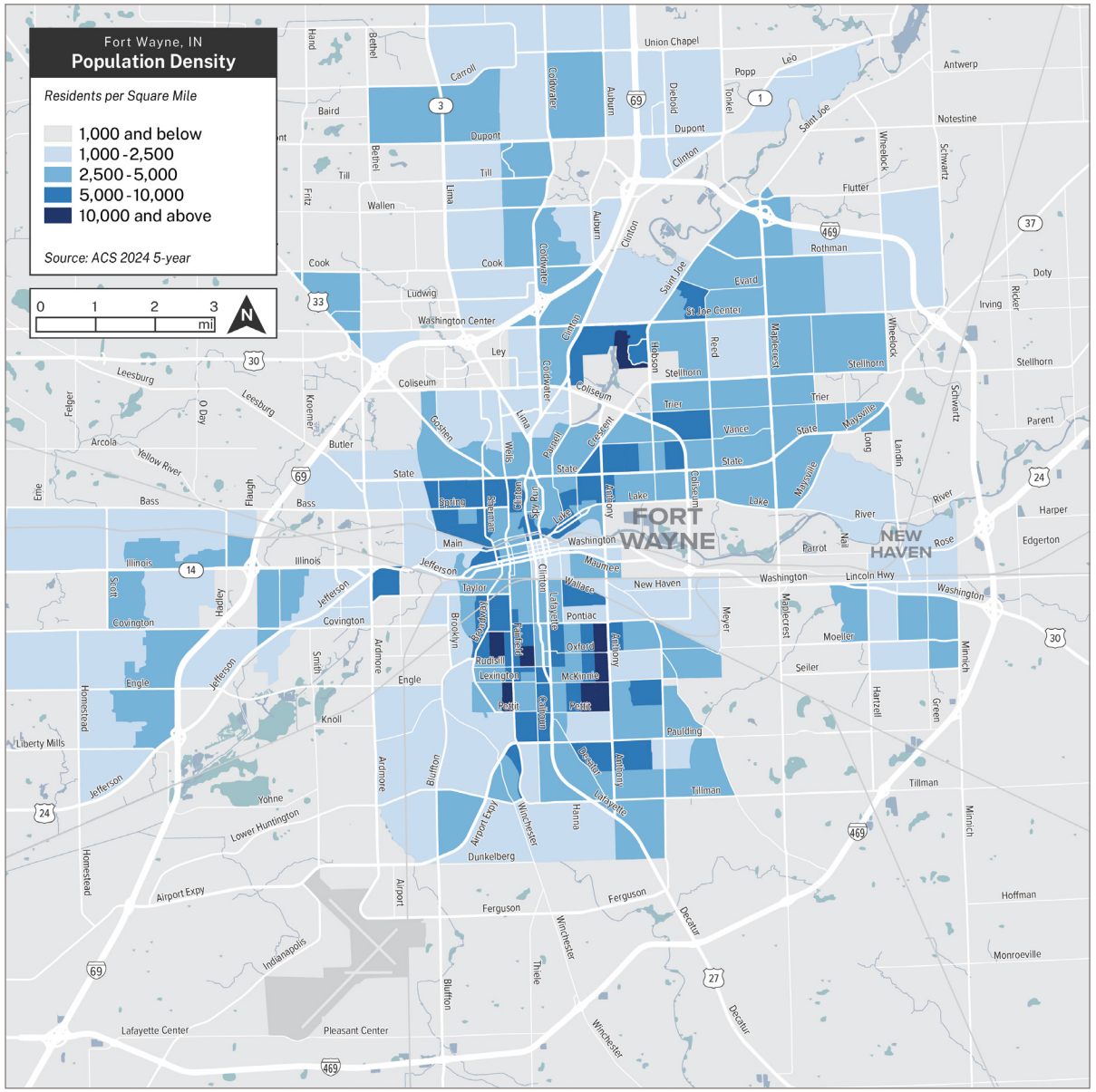


Figure 27: Population Density Map of Fort Wayne (U.S. Census, 2024 ACS Survey)

Market: Job Density

A map of job density shows us not only the places people travel for work, but also places people go for services, shopping, community, health care, and more. A person's workplace may be a destination for dozens or even hundreds of people on a typical day. For this reason, job density is often an even better predictor of transit ridership than residential density.

This map shows the distribution of job density in Greater Fort Wayne. The area with the highest concentration of jobs is in and near **Downtown Fort Wayne**.

Additionally, there are a lot of jobs to the north and west of Downtown in places that are not very walkable and difficult to get to. This includes:

- Commercial areas along Coliseum Boulevard and Lima Road I-69;
- Parkview Regional Medical Center / Dupont Hospital; and
- Jefferson Pointe Shopping Center, Lutheran Hospital and other medical and retail centers along Jefferson Boulevard;

Other dense job centers include the Indiana Tech campus, industrial areas north of the Fort Wayne Airport and the VA and Parkview Hospitals, east of Downtown.

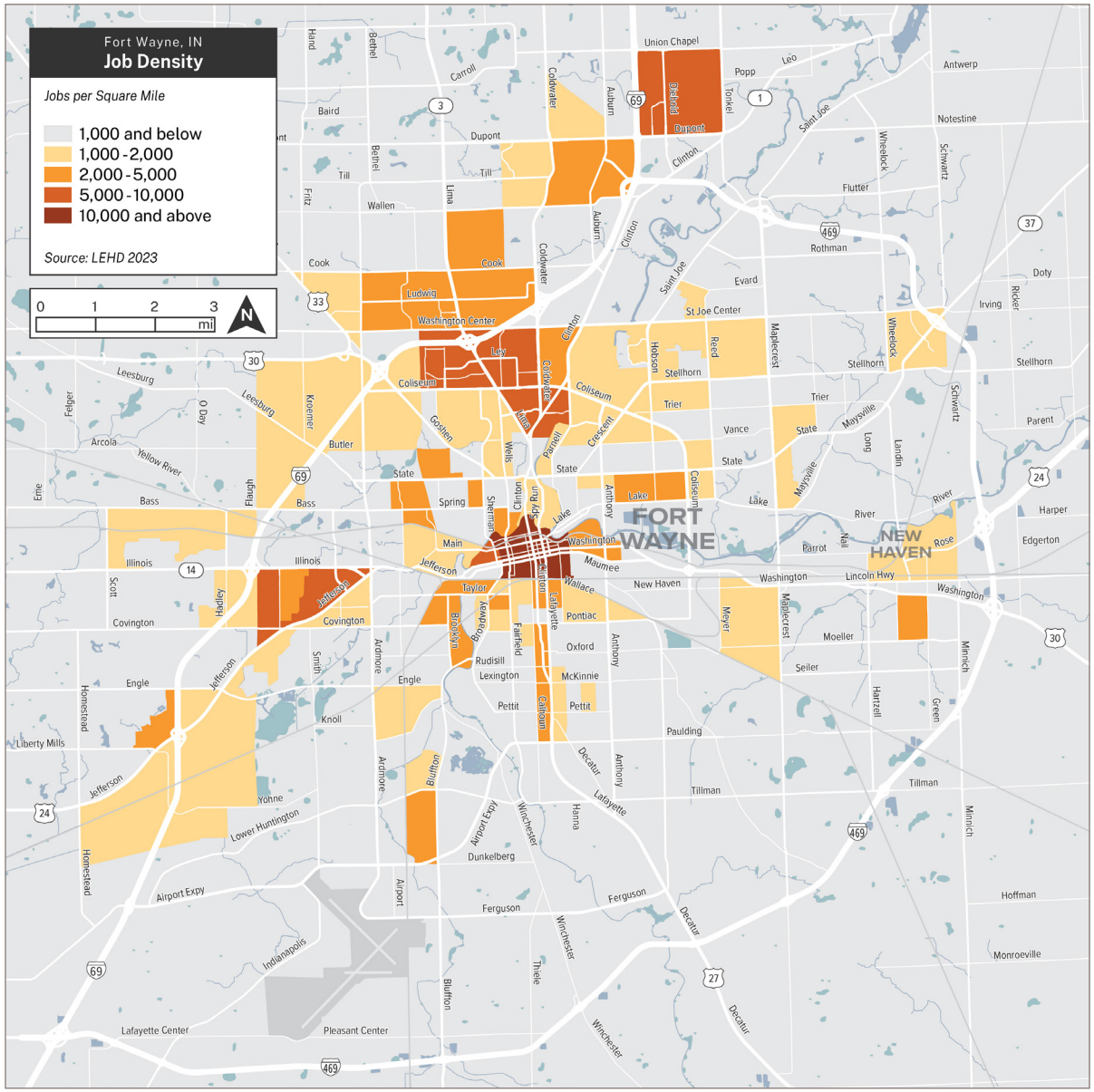


Figure 28: Job Density Map of Fort Wayne (2023 LEHD Data)

Market: Activity Density

Resident and jobs density are both critical measures of a place's potential transit market relative to other parts of the service area. Those two measures can be combined in a single map that shows the activity density—the density of both jobs and residents. Activity density helps visualize the overall potential transit market of an area. The map on the right shows activity density in Greater Fort Wayne.

Places with more residential density are shown in increasingly brighter shades of blue; areas of high employment density, in brighter shades of yellow. The areas shown with red, purple and orange are places where there are high densities of both jobs and residents, and where there is likely to be a strong market for transit for most or all of the day. This is because an area with a mix of uses tends to generate more even demand for transit in both directions, whereas transit serving purely residential areas of employment centers tends to be used in mostly one direction and mostly during rush hours.

In Fort Wayne, there are only a few areas outside of Downtown that have a significant mix of residential and commercial uses.

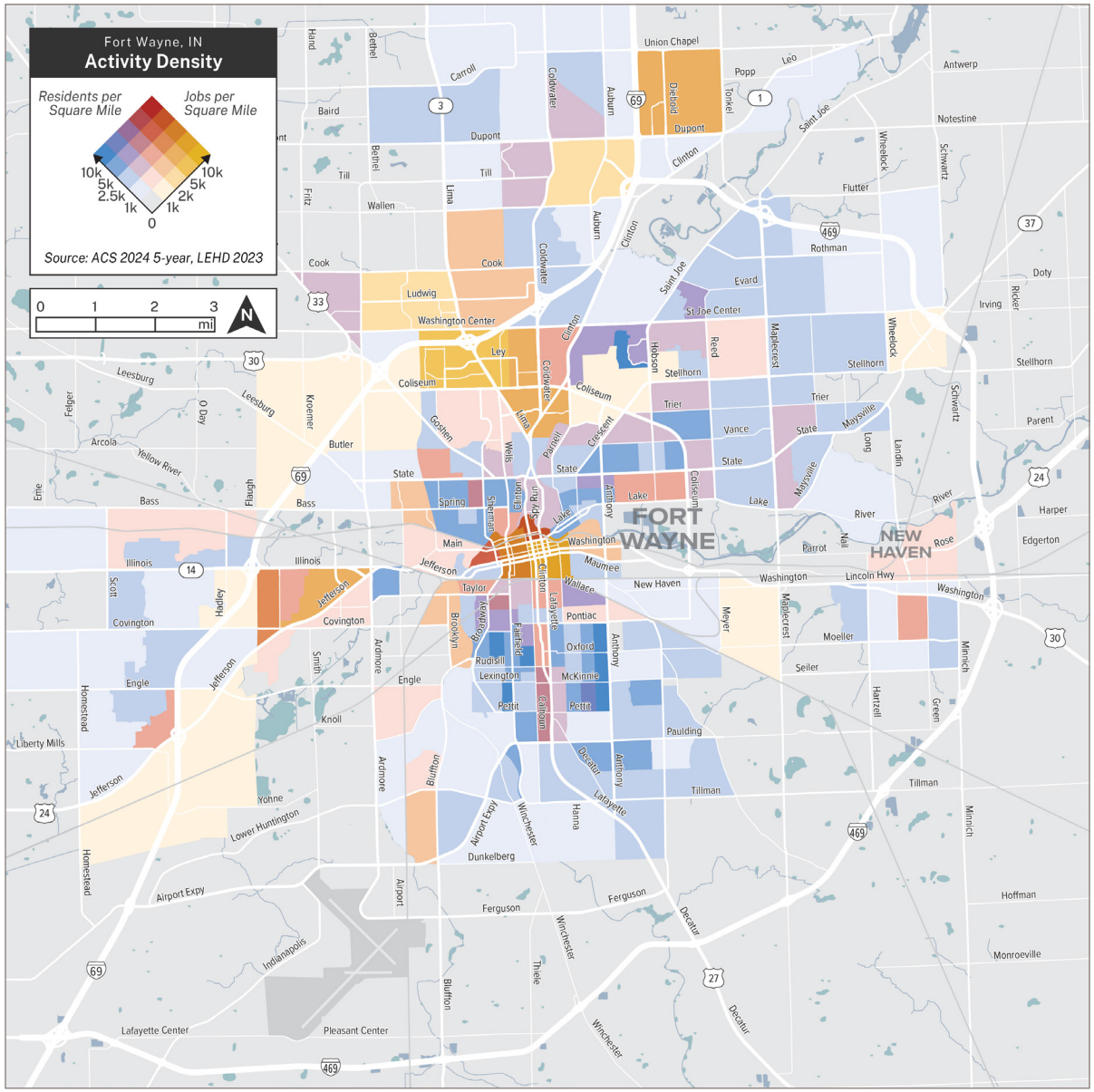


Figure 29: Activity Density Map of Fort Wayne (2023 LEHD, 2024 ACS Survey Data)

Market: Walkability (Street Connectivity)

In most cases, transit trips begin and end by walking. Therefore, the ability to walk to transit is very important.

Street patterns and the pedestrian infrastructure determine how much of the area around a bus stop is truly within a short walking distance. Areas with highly-connected street patterns provide short and direct paths between any two locations. Areas with poorly-connected street patterns force long and circuitous paths and discourage walking. A lack of sidewalks and safe crossings can also mean that fewer people and jobs are within a short walk of transit.

The map on the right shows the proportion of area within a one-mile radius of locations that is accessible through the street grid in that location. Darker areas correspond to contiguous grid-like layouts with strong connectivity, while lighter areas represent barriers to walkability, including restrictive street patterns. In some cases, the lack of street connectivity and limited walkability is a combination of both development pattern and natural topography that limits the ability to create more connected street networks.

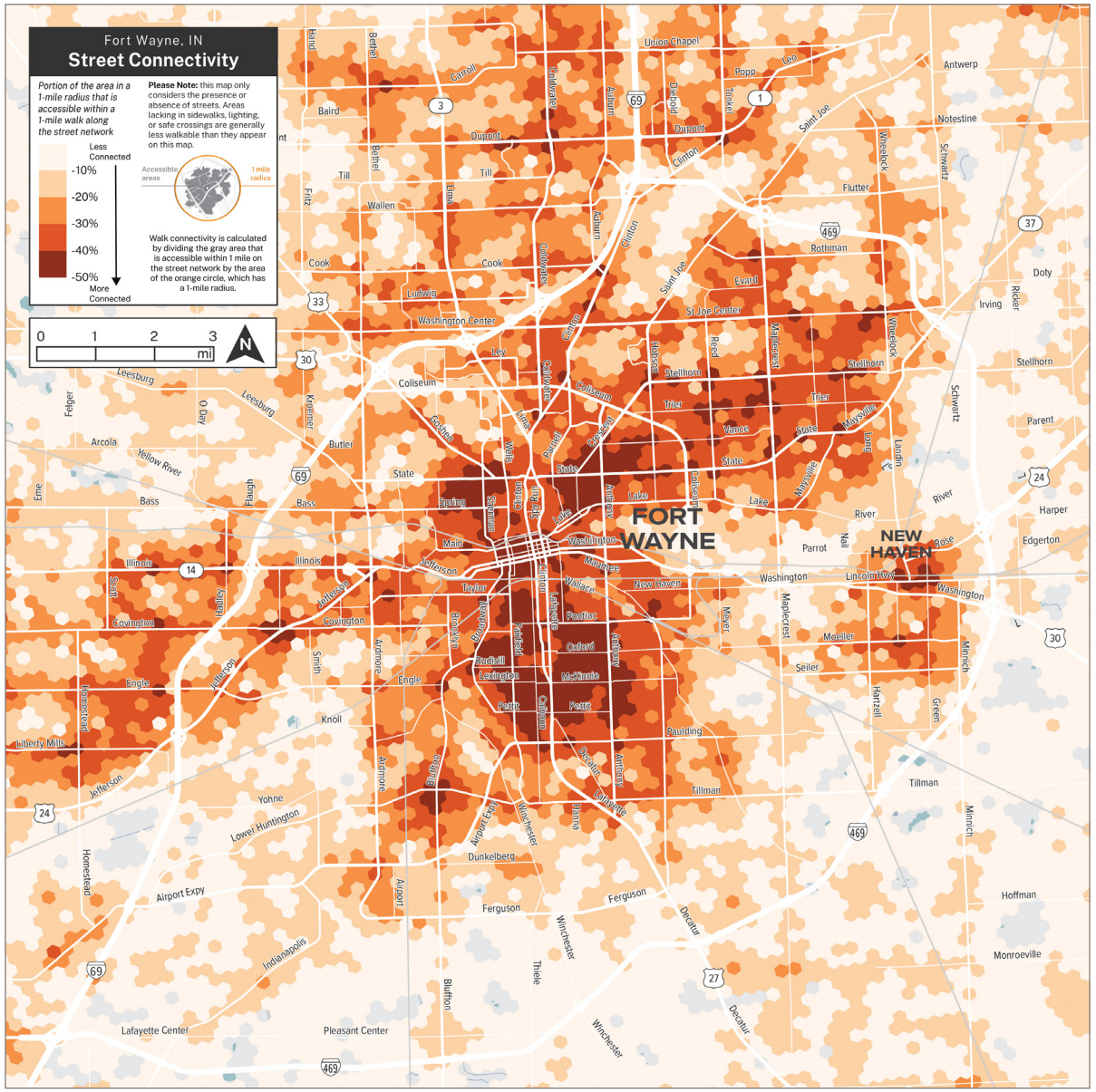


Figure 30: Street Connectivity Map of Fort Wayne

Market: Bike & Pedestrian Infrastructure

In addition to connectivity, the presence of sidewalks, trails and bike lanes also make it easier to access bus stops. The map to the right shows all of the bicycle, trail and pedestrian infrastructure in the City of Fort Wayne.

Similar to the street connectivity map on the previous page, this map shows the presence of an urban street grid with good sidewalks in Downtown Fort Wayne and the areas to the immediate south, northeast and northwest. In both maps, the areas with good walkability extend from Downtown Fort Wayne south to Pettit Avenue. The presence of bike lanes in downtown also provide additional travel options.

North of Downtown, the strong connectivity extends up to State Boulevard, but a major gap can be seen along the Coliseum Boulevard, particularly west of Coldwater Road.

In outlying areas, sidewalks are much more sparse and may influence where new bus service can be provided. Large gaps are also visible to the east and west of Downtown.

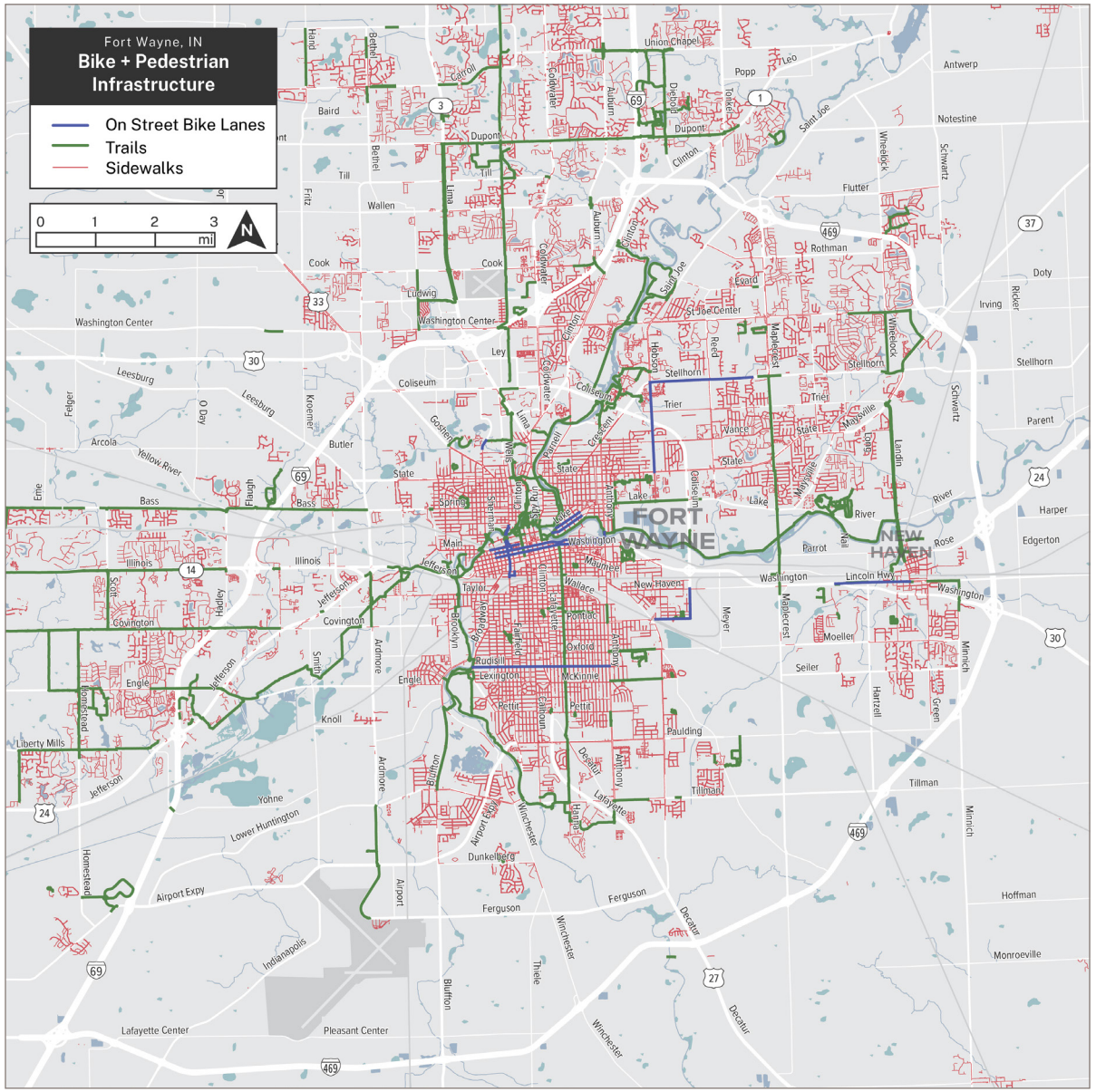


Figure 31: Bike & Pedestrian Infrastructure in Fort Wayne (Source: NIRCC Data)

Walkability In Higher Density Areas

High Density & High Walkability

The West Central neighborhood, immediately west of downtown is among the denser parts in the region. Adjacent to Downtown, it features many residents and moderate number of jobs. It has a traditional street grid, many crosswalks, and sidewalks on both sides of the street, making it more walkable than other parts of the region.

High Density & Low Walkability

Coliseum Boulevard near Glenbrook Square is a six-lane arterial serving an array of shopping centers, big box stores, college campuses, and event centers. Most buildings in this area are surrounded by large parking lots making it very inconvenient to walk or use transit. Several major intersections do not have crosswalks or pedestrian signals so pedestrians are forced to race across six lanes of traffic. Many segments of the road lack sidewalks and dirt paths have been worn along the shoulders of the road where people have been walking in the grass.

In response to these conditions on Colisseum Boulevard, the City of Fort Wayne has initiated several pedestrian improvement projects, including the Pufferbelly Trail Pedestrian Bridge.



Figure 32: Examples of places with High Density

Walkability In Lower Density Areas

Low Density & High Walkability

Areas like McCormick Place, east of downtown, have street grids and adequate sidewalks that make them easier to walk in. New Haven Road and Chestnut Road run parallel to each other in this neighborhood and both have sidewalks and crosswalks that make it easier to walk to the adjacent bus stops. The density in this part of the city, however, is relatively low so transit is less likely to draw high ridership in these types of areas without additional redevelopment.

Low Density & Low Walkability

Many areas on the outer fringes of Fort Wayne are characterized by low density residential development that is not conducive to transit service. The example shown to the right is along St. Joe Road in the northeast part of Fort Wayne, but many other areas would look very similar. It has relatively low density and the street network outside of the main arterials is mostly winding neighborhood streets and cul-de-sacs. These ares are very difficult and costly for transit to serve and do not typically draw much ridership.



Figure 33: Examples of places with Low Density

Market: Travel Patterns (All Trips)

Looking at how people are traveling today can tell us a lot about demand and potential markets for transit service. The map on the right shows the destinations of all trips taken today using any mode, including personal automobiles. The source for this map is Replica.

Replica uses cell phone location data to feed its model and determine travel patterns. Replica only uses de-identified mobile location data.

This map shows the density of destinations of all trips during a weekday. Darker blue shades indicate more trips per square mile that end at home. Darker shades of yellow indicate destinations for non-home trips (e.g. work, shopping, education, health care, etc) . Red, orange or purple cells have a high density of both types of trips.

This map shows a clear contrast between the areas north and south of downtown. The areas south are primarily residential while the areas to the north of downtown have developed with much more commercial activity and therefore more jobs. These maps suggest a strong demand for north-south travel to and through Downtown.

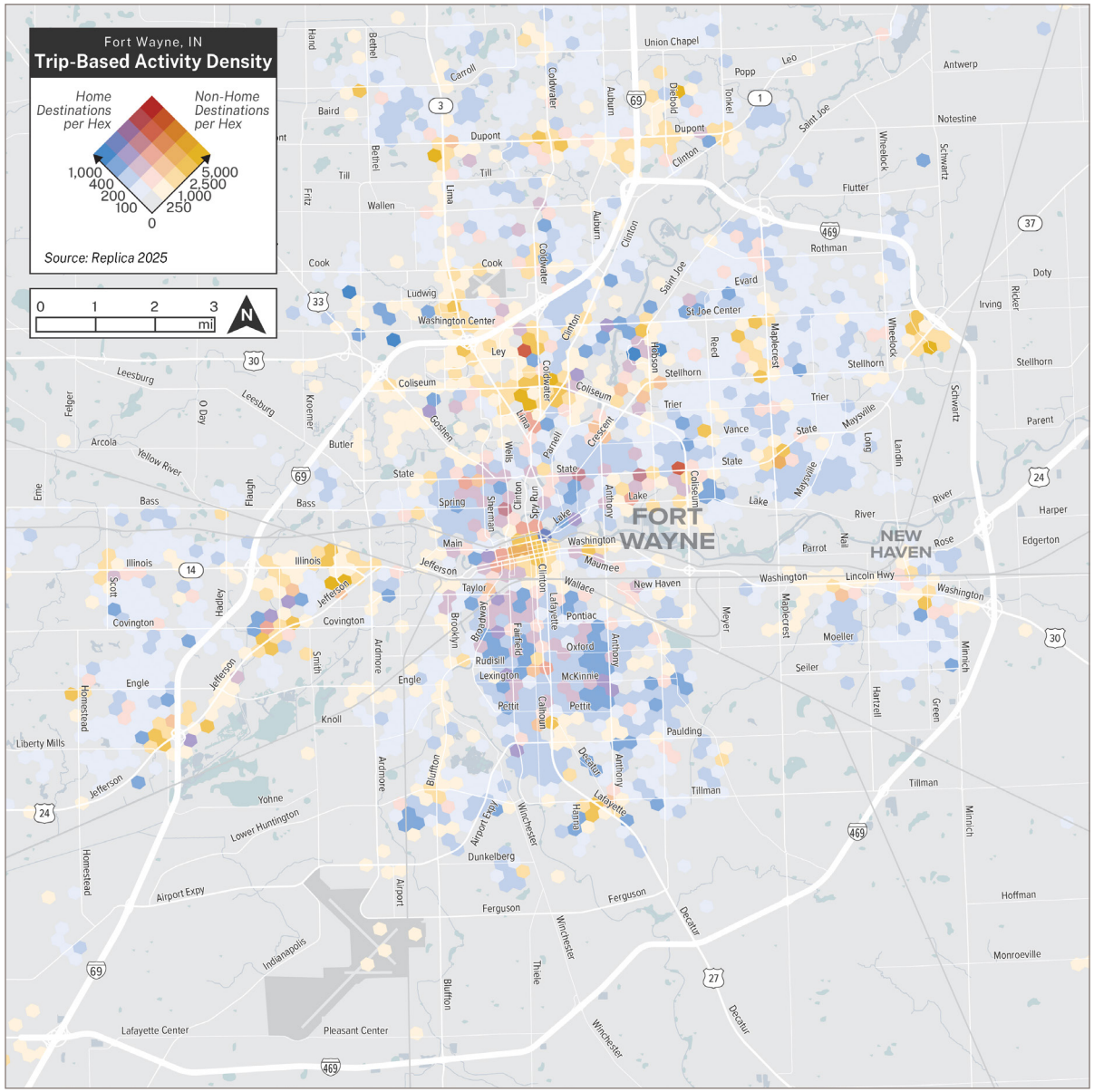


Figure 34: Trip-Based Activity Density Map (Source: Replica Trip Data)

Market: Travel Patterns (Non-Home Trips)

By using the same Replica dataset, we can look more specifically at the density of destinations for non-home trips. The areas shown in darker shades of green are where the largest number of non-home trips are ending. These maps highlight the most common places where people want to go.

Typically, this map will feature a dark cluster of density around a city's downtown or central business district as well as other major employment areas. While Fort Wayne does show some density for non-home trips in Downtown, it is clear that other areas north and west of town are attracting just as many non-home trips, if not more.

These areas include Jefferson Point Shopping Center, Glenbrook Square, Northcrest Shopping Center, the Walmart on Lima Road, Parkview Regional Medical Center and the Chapel Ridge Shopping Center on the farthest eastern edge of the city limits The biggest single employers that show up on this map are Parkview Health and Lutheran Health.

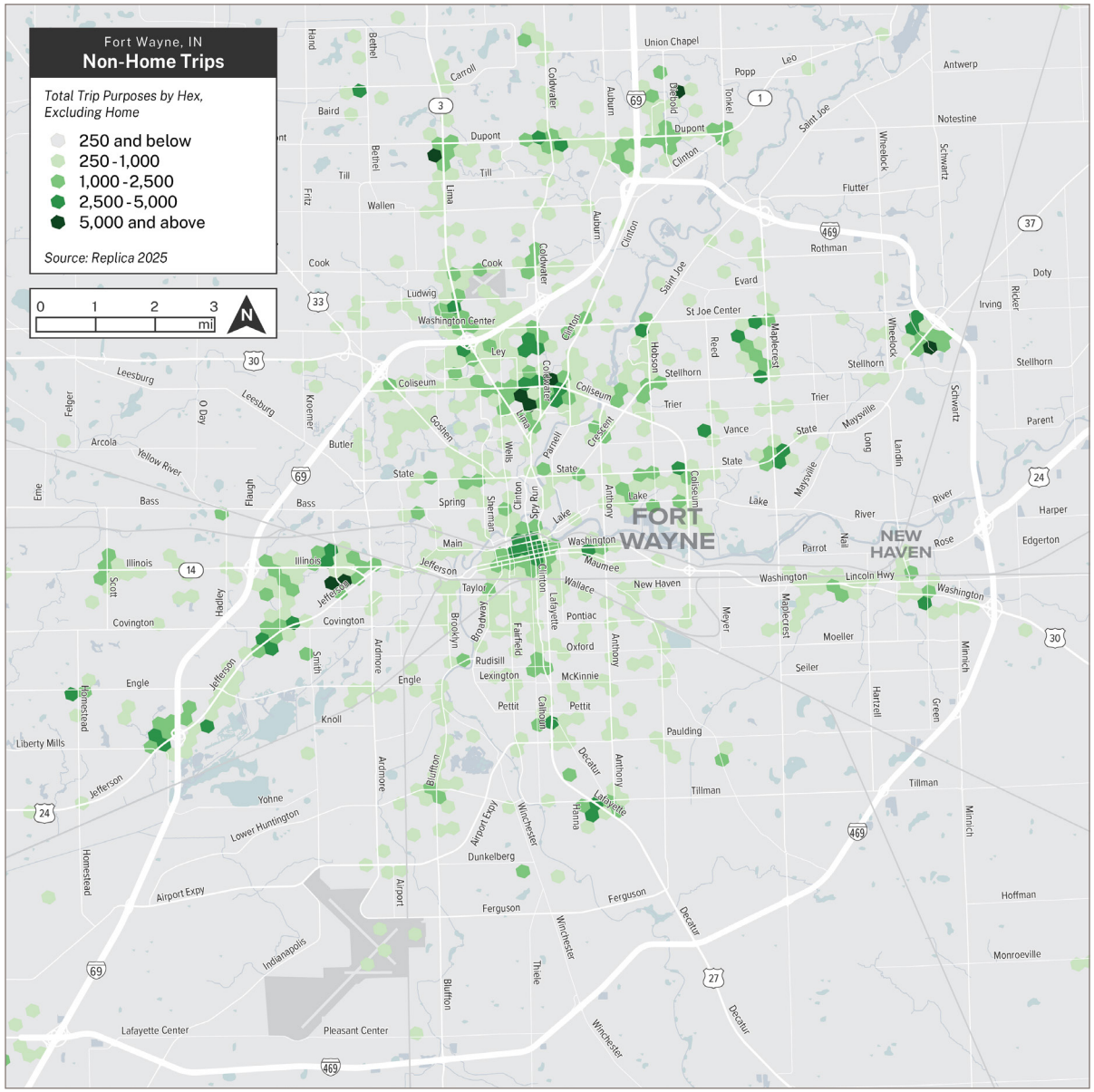


Figure 35: Trip-Based Activity Densities for Non-Home Trips (Source: Replica Data)

Market & Need: Low-Income Residents

This map shows the density of residents with family incomes below the federal poverty level. A frequently-cited goal for transit service is to provide affordable transportation for lower-income people. Understanding where low-income populations are located is also a key civil rights requirement.

As shown in the map at right, most of the low-income neighborhoods in Fort Wayne are south of downtown. The Anthony Street corridor is one of the densest parts of the city, and also has the highest concentration of low-income households. The Broadway and Fairfield Avenue corridors southeast of downtown also stand out for their high density of low-income households. There are fewer low-income households north of downtown, however, there are clusters along Spring Street, near Sherman Boulevard and Wells Street

Areas with medium to high low-income density, in walkable neighborhoods, can produce high ridership. However, if transit doesn't allow people to make the trips they need in a reasonable amount of time, even lower-income people won't use it. They'll seek other options like buying a used car or getting a ride from a friend.

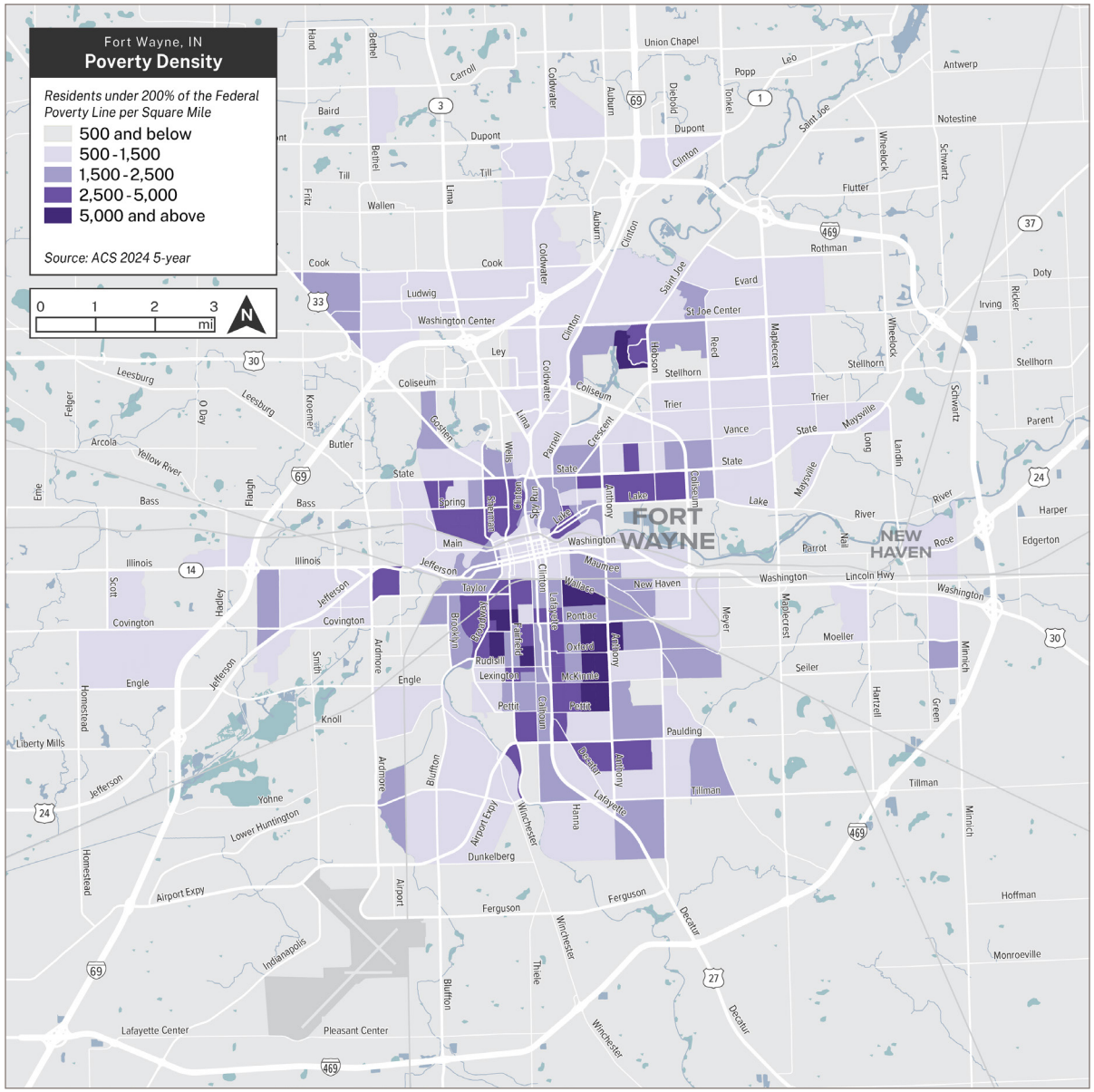


Figure 36: Low-Income Residents in Fort Wayne (US Census Data, 2024 ACS Survey)

Market & Need: Households Without Cars

Another factor affecting transit's competitiveness and need is the availability of personal cars. A recent Citilink survey found that 86% of riders do not have access to a car. This is a major increase from the 67% and 56% of riders who reported not having a car in 2018 and 2011, respectively.

People in households without vehicles are not necessarily "transit-dependent" but do have a greater inclination toward transit use. If transit is not a realistic travel option, people without cars must either: (1) build their daily life around infrequent bus schedules and lengthy trips; (2) find other ways to reach the places they need to go which may be more expensive or physically challenging; or (3) choose not travel, thereby limiting their access to the economic, social, and other opportunities in the region.

The map on the right shows the density of households without cars. In Fort Wayne, the corridors with high concentrations of zero-vehicle households tend to correspond with areas of higher poverty. The two dark green rectangles on State Boulevard, northeast of downtown, represent the senior housing near the VA Hospital and Parkview Hospital.

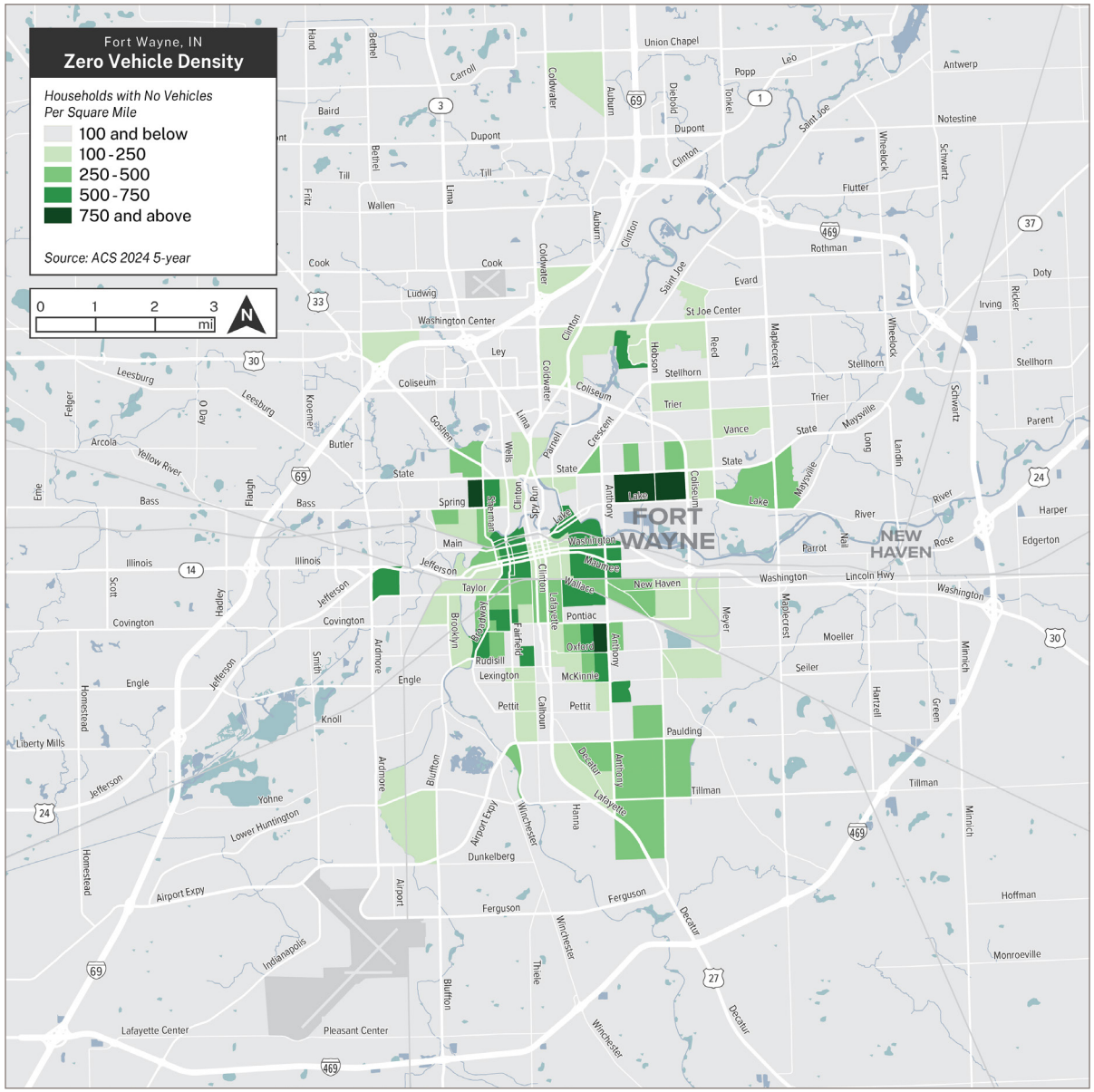


Figure 37: Zero-Vehicle Households (US Census Data, 2024 ACS Survey)

Need: Seniors

Seniors (65 years of age and older) are an important group for transit because transit coverage is designed to serve people who cannot drive, no matter where they live.

Seniors tend to have different preferences for transit. On average, they are more sensitive to walking distance due to reduced mobility. Retirees may care less about long waits due to flexible schedules, but they still need have medical appointments and are less likely to wait in hot, cold or rainy weather.

Transit service designed to meet the needs of seniors rarely attracts high ridership relative to cost. Thus, agencies must carefully balance the needs of seniors with the needs and desires of the rest of the community.

This map shows the density of senior residents, which are scattered across the region but concentrated in areas to the northeast and south of downtown. The State Boulevard corridor stands out due to the senior living complexes near the VA Hospital. A recent Citilink survey also found that 14% of riders are 65 years or older, which is more than double the 7% that was reported in 2018. Citilink offers half-price fares for all riders who are 60 years of age or older.

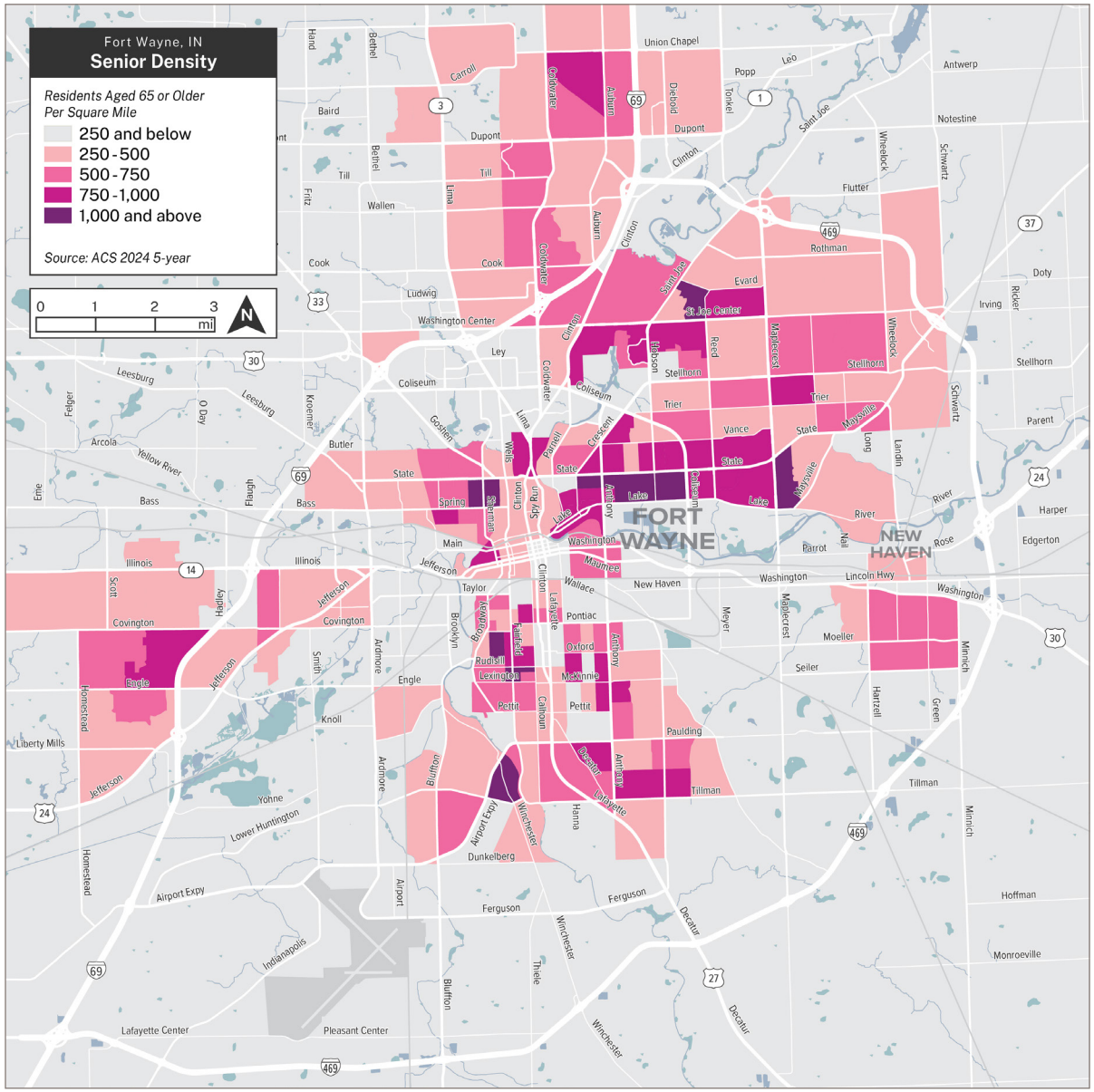


Figure 38: Senior Density Map (US Census Data, 2024 ACS Survey)

Need: Youth

Just as coverage can meet the needs of seniors who cannot or choose not to drive, transit coverage can also meet the needs of children and teenagers who are too young to drive.

Young people are like seniors in that they often live on a tighter budget than people of working age. For this reason, both are very sensitive to transit fares, and parents are sensitive to paying a fare for each child.

However, young people and seniors are very different in their ability and willingness to walk to transit service. Most young people can and will walk farther to reach service than seniors. Whatever effect an increase in price has on ridership among working age people, it will have an even stronger effect on ridership among young and old people. This is why many transit agencies, along with movie theaters and other for-profit businesses, offer a discounts for seniors and children.

The map at right shows the highest densities of residents under 18 years old are south of downtown. Onboard survey data shows that the percentage of young riders (15 to 24 years old) has decreased from 21% to 9% since 2018, further underscoring the shift towards older riders that was noted on the previous page.

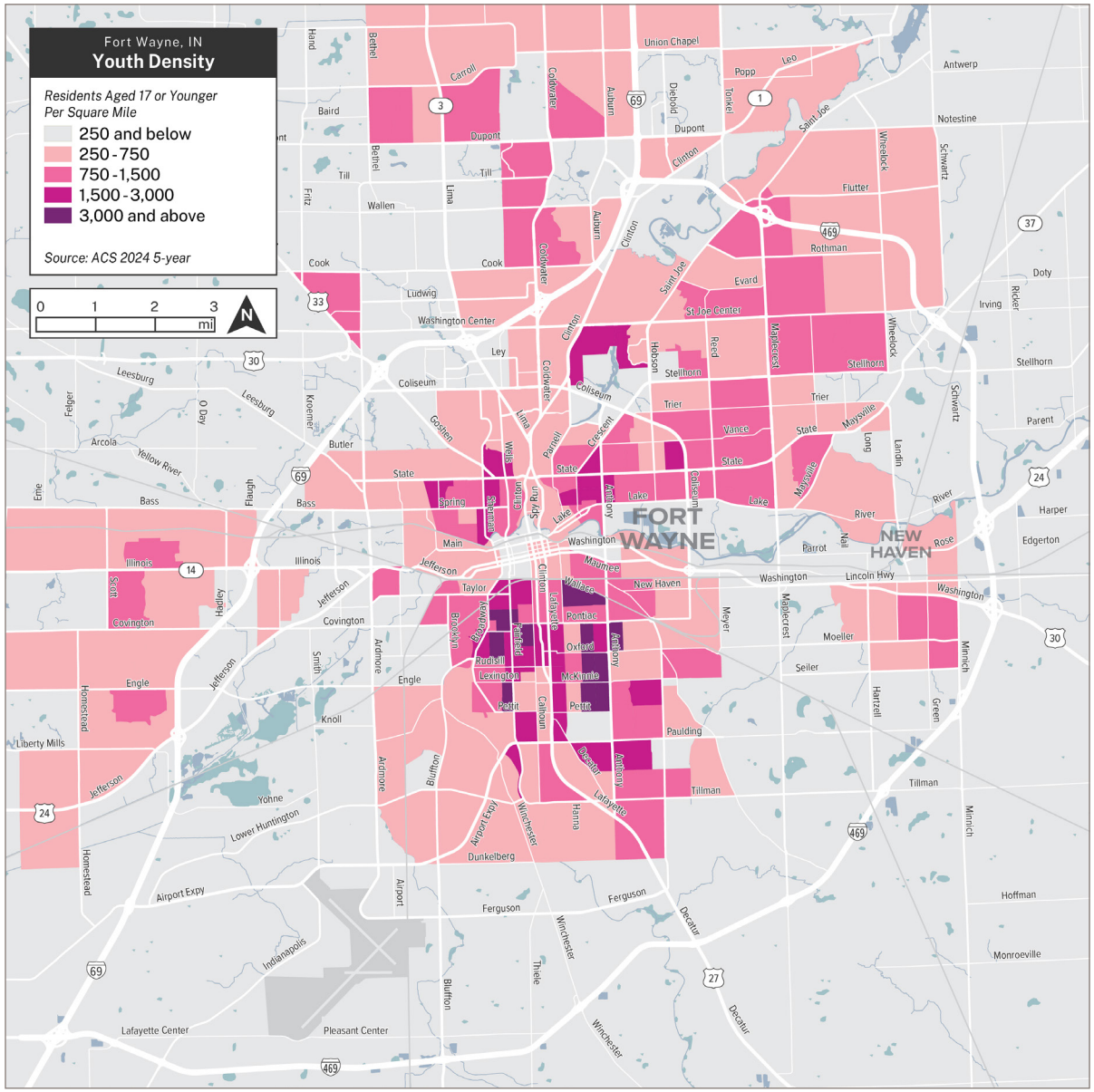


Figure 39: Youth Density Map (US Census Data, 2024 ACS Survey)

Need: Persons with Disabilities

Some persons with disabilities cannot drive and may be more likely to use transit. But similar to households without vehicles, this does not necessarily make them "transit-dependent." If transit is not a realistic travel option for them, they may find other ways to reach the places they need to go, or they may choose not to travel at all.

The map at right shows the parts of Fort Wayne with the highest densities of households that have one or more persons with a disability.

In addition to the fixed-route transit service open to everyone, Citilink also provides Citilink Access and Access Plus paratransit services for persons with disabilities. Paratransit service is door-to-door and wheelchair accessible transportation for persons that are eligible and verified by a medical provider. Additional information on Citilink paratransit services is included on page 63.

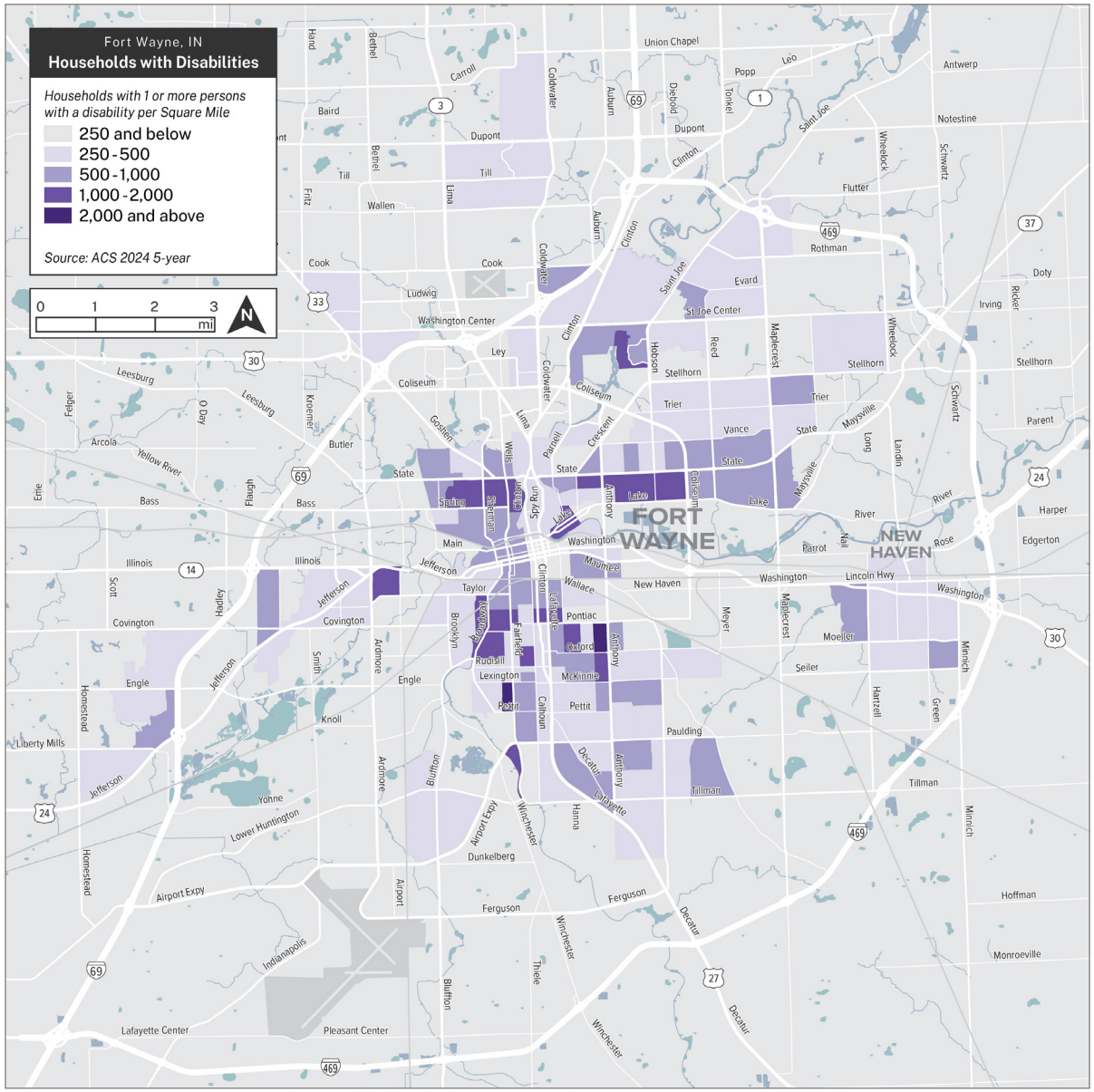


Figure 40: Households with Disabilities (US Census Data, 2024 ACS Survey)

Civil Rights: People of Color

Data about ethnicity or race do not alone tell us how likely someone is to use transit. However, avoiding placing disproportionate burdens on people of color is essential to the transit planning process. Transit agencies are also required by Title VI of the Civil Rights Act of 1964 to ensure that services they provide do not discriminate on the basis of race, color or national origin.

This map shows the distribution of people by race and ethnicity. Each dot represents 10 residents. Where dots are close together, the overall density of residents is higher. Where dots of a single color predominate, people of a particular race or ethnicity make up most of that area's residents.

As a whole, the region is predominantly white with few minorities living in the suburbs west of downtown or in areas like New Haven. There is a high concentration of African American residents in the neighborhoods to the south and east of downtown, though a large Latino population also lives in those areas. Fort Wayne also has a large communities of residents from southeast Asia, which are visible in areas like Paulding Road, Wayne Terrace and Vance Avenue.

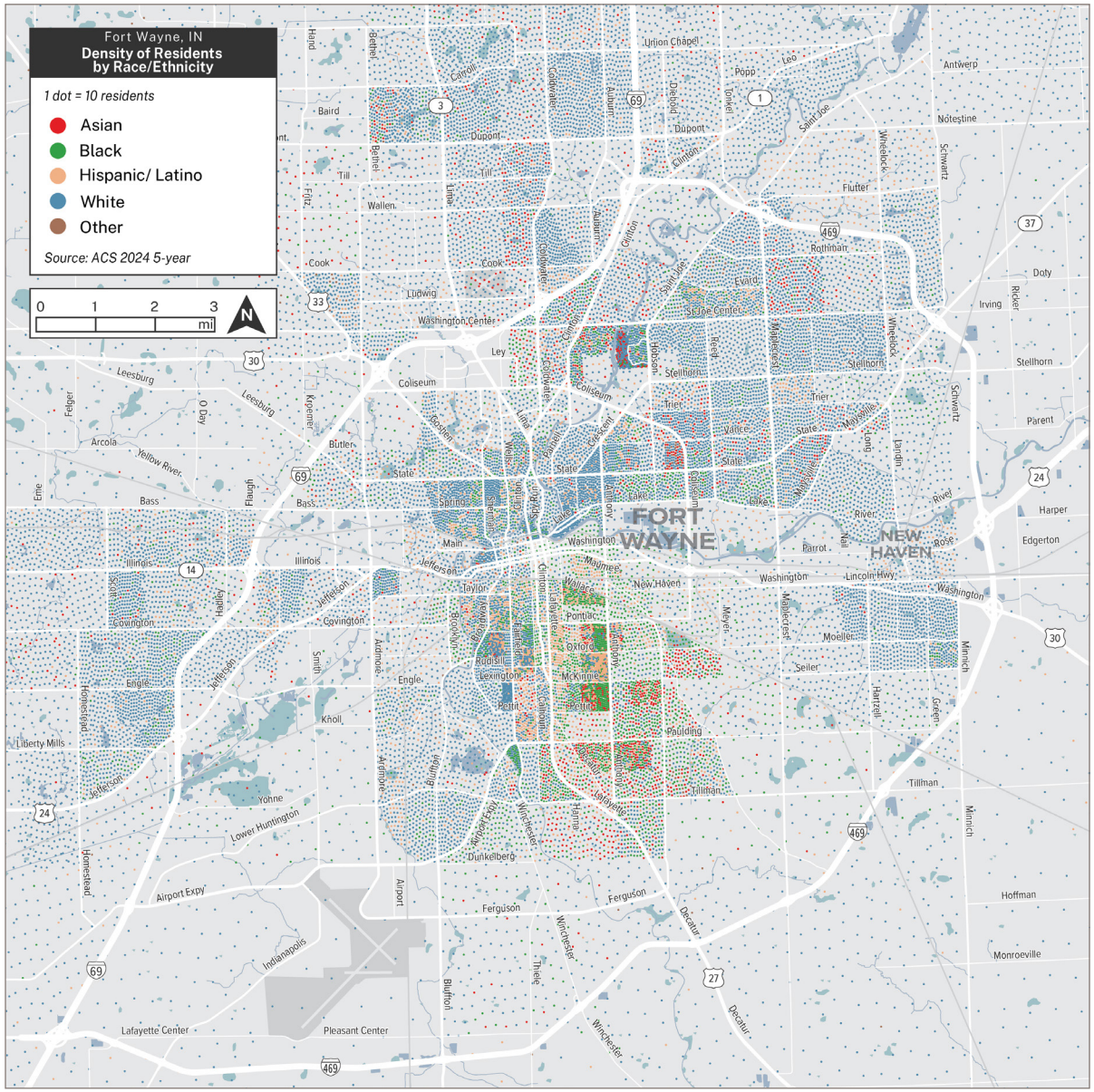


Figure 41: Race/Ethnicity Density in Fort Wayne (US Census Data, 2024 ACS Survey)

4 Existing Transit Network

Where is service available?

A map of the current Citilink bus network is provided to the right. The system serves most of the City of Fort Wayne with one route that connects to New Haven. The network operates with "hub-and-spoke" structure such that most routes start at Central Station in Downtown Fort Wayne and spread out into the outlying areas.

Many conversations about transit focus on where services are provided, but often not enough on how often the buses are coming. Waiting time is usually the most important component of any transit trip, so it is essential to think about frequency when looking at a bus network. The routes in this map are colored by frequency on weekdays at 12:00 PM.

- **Blue lines** run every 30 minutes,
- **Green lines** run every 60 minutes, and
- **Brown lines** are routes that run less frequently, usually once every 120 minutes.

Most routes today run every 60 minutes, and only four corridors running every 30 minutes.

More details about the existing bus network in Downtown Fort Wayne are shown on page 64.

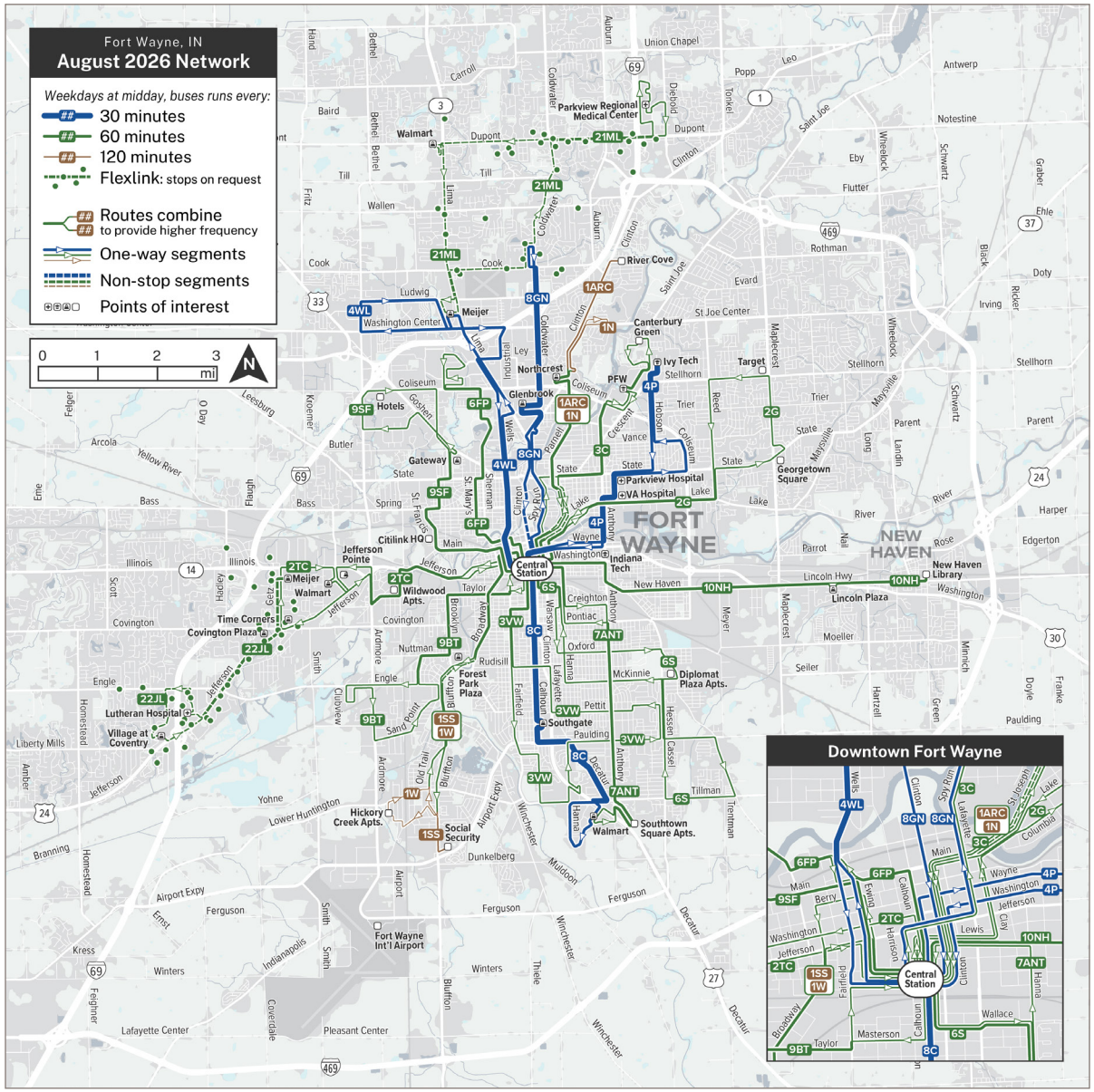


Figure 42: Existing Citilink Bus Network Map (August 2026)

Is service available near people and jobs?

A transit network must provide service near people and jobs to be useful. "Service Availability" can measure how many residents and jobs are within reasonable walking distance - usually 1/2 mile - of a bus stop. Not everyone can walk 1/2 mile to a bus stop, but that is the distance that is typically used for how far the average bus rider may be willing to walk.

Service Availability can show the number of residents and jobs that are near service relative to its frequency, and can also be used to determine if a network is serving low income and minority communities.

The proximity metrics for the existing Citilink network are shown in the chart at right. Key findings include:

- Roughly 57% of Fort Wayne and New Haven residents are within 1/2 mile walking distance of a bus stop today;
- 50% of residents are near a route that runs at least once per hour; and
- 20% of people are near a route that runs every 30 minutes (Routes 4 & 8).

The current agency standard for Service Availability is: "to have fixed route service available...within 1/2 mile of most households," so that threshold is currently being met.

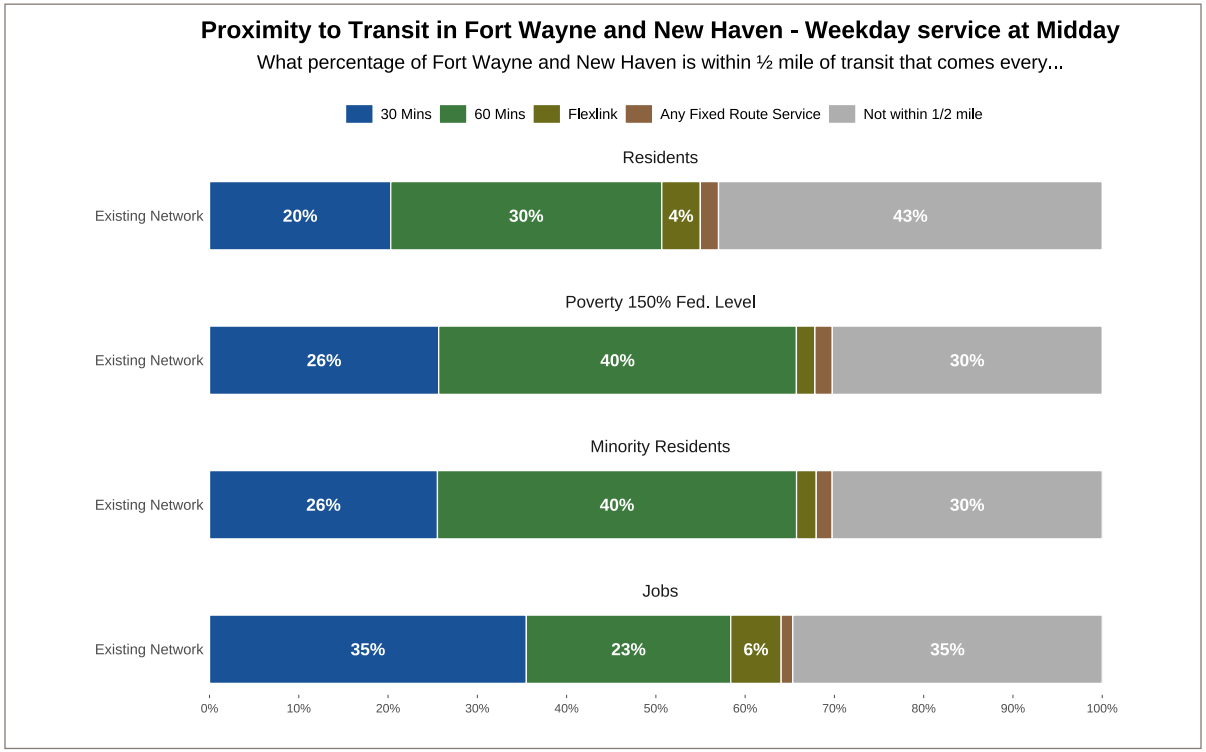


Figure 43: Service Proximity to Residents & Jobs

The existing system is also serving communities with higher proportions of low income and minority residents. The majority of both groups (70%) live near near Citilink service and 26% of these residents live near routes that run every 30 minutes.

The concentration of jobs near 30-minute transit service is 35%, likely due to the abundance of service in Downtown Fort Wayne and other key job centers to its north and west; however, more than one-third of jobs are not accessible by bus.

These metrics provide insights into the current network, and will be used throughout this project to help us compare outcomes with potential future bus networks.

When is service available?

The chart on the following page summarizes each bus route's frequency and span of service on weekdays and Saturdays. Every row represents a route and every column is an hour of the day. The color of each block is the frequency of that route at that hour, based on trip start times.

Citilink core operating hours are from 6:00 AM to 6:00 PM on weekdays and 9:00 AM to 5:00 PM on Saturdays. Citilink does not operate on Sundays or most major federal holidays. All but three of the 18 existing routes run on both weekdays and Saturdays. Citilink service is mostly concentrated during daylight hours, so customers must find other options during evenings. On weekdays, most buses are off the streets by 9:00 PM and Saturday service is not available after 6:00 PM.

The majority of Citilink bus routes run once per hour throughout the day on both weekdays and Saturdays. Routes 4 and 8 are the only lines that operate more frequently than once per hour. Both routes run every 30 minutes on weekdays between 8:00 AM and 4:00 PM, but every 60 minutes at all other times. Four segments on the Route 1 alignment - Routes 1A, 1N, 1SS and 1W - are served by route-branching so buses only come once every two hours on weekdays.

Citilink also runs two "Flexlink" deviated-route services where riders can call in to request pickups on weekdays. Route 21 provides hourly service to the Parkview Regional Medical Center in north Fort Wayne, while Route 22 serves the Lutheran Hospital and several major shopping center west of downtown.

As part of previous service plans and Title VI requirements, Citilink has set minimum sevice frequency standards of 30 minutes during peak periods and 60 minutes during off-peak periods. The frequency chart on the following page shows that 16 of the 20 existing routes are not meeting this service design standard.

Bus routes that run all-day, 7 days per week tend to draw the most ridership. If a person with a retail or service sector job has to be at work before or after service is provided, they are not as likely to use transit.



Figure 44: Image of Citilink's Central Station at night (Credit: Visit Fort Wayne)

When is service available?

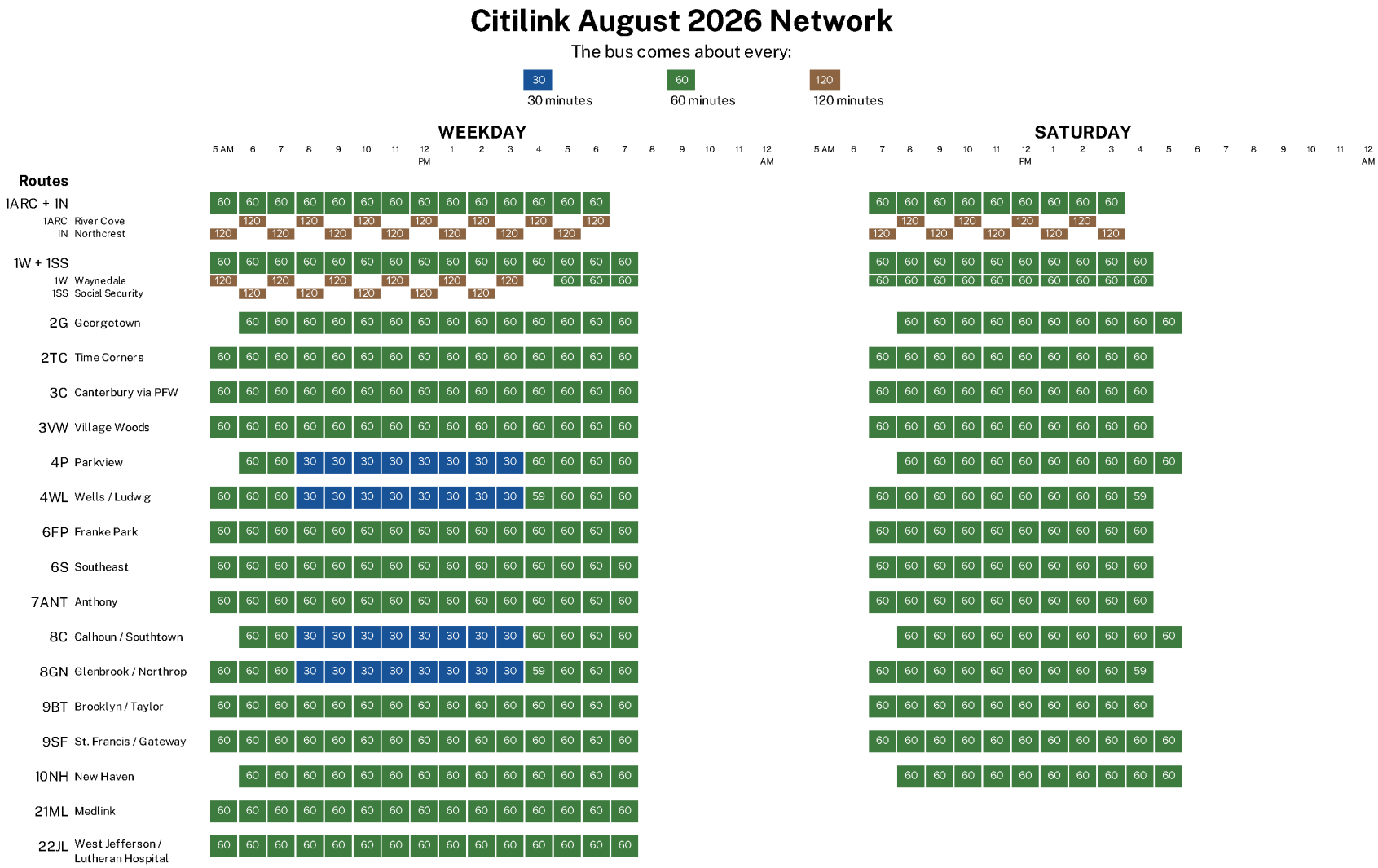


Figure 45: Existing Citilink Bus Service by Frequency (August 2026)

Where are people riding transit?

One measure of transit performance is the sheer amount of ridership it attracts. This can be made visible with a map of boardings at each transit stop, as shown on this map.

High ridership routes can appear in two ways on this map: either as large dots or as multiple medium-sized dots that are very closely spaced. Looking for those patterns we can observe that the highest boardings occur in the following locations:

- Central Station;
- Downtown, especially Clinton Street, Calhoun Street, Main Street, and Washington Boulevard;
- South Calhoun Street between downtown and Paulding Street;
- Glenbrook Square and points north on Coldwater Road;
- Jefferson Point Shopping Center and Getz Road retail areas;
- Southtown Crossing retail area; and
- Along denser outlying corridors like South Anthony Boulevard, State Boulevard, and New Haven Avenue.

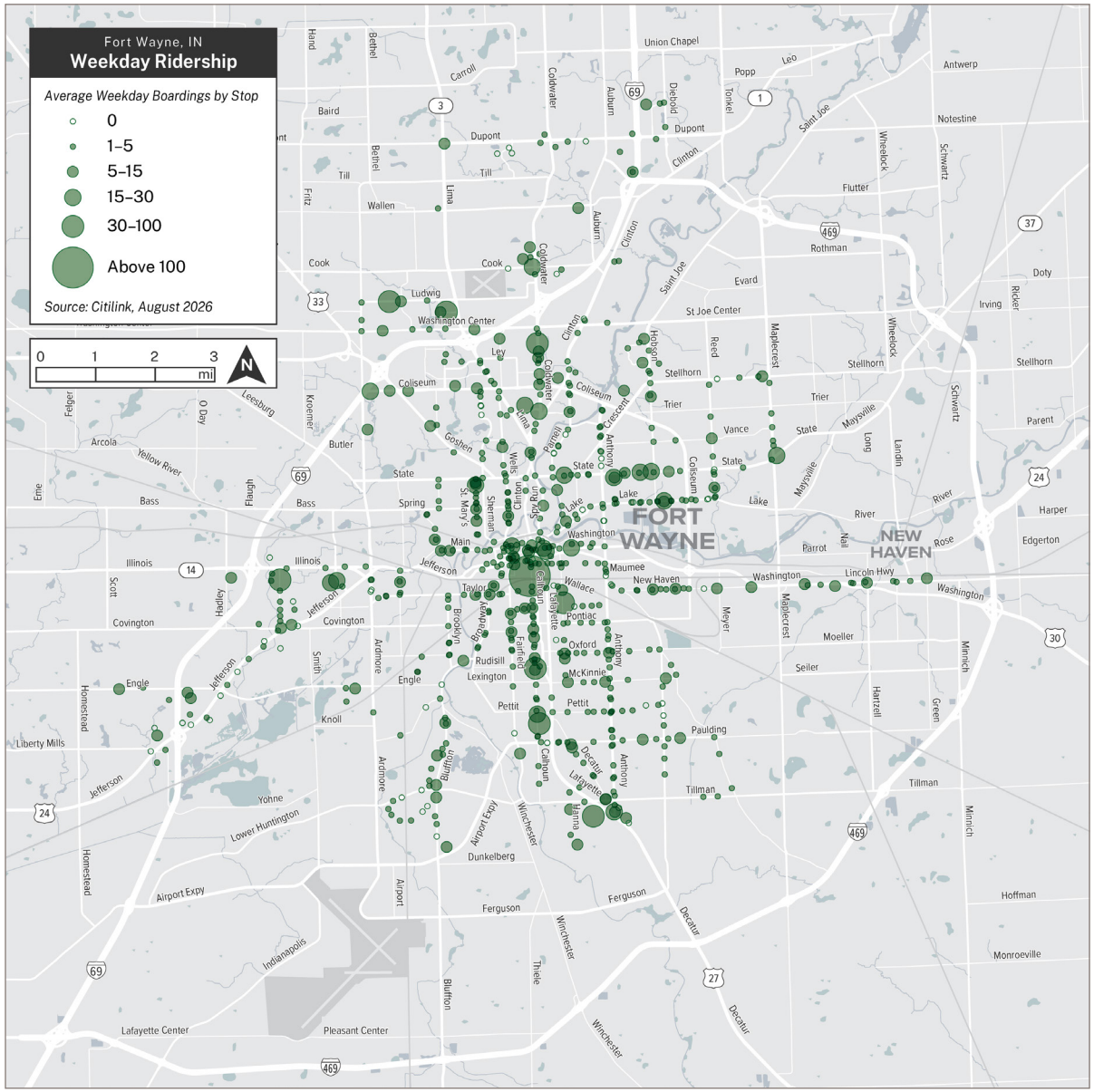


Figure 46: Average Weekday Boardings by Stop (August 2026)

Where are people riding transit on Saturdays?

Over the last five years, Citilink has averaged about 5,000 systemwide boardings on weekdays, and 2,800 boardings on Saturdays. This decrease in utilization on Saturdays is most likely due to the lower frequency of service on the two busiest routes (Routes 4 and 8), and shorter overall spans of service across all routes.

Average Saturday boardings by stop are shown in the map to the right. While overall ridership levels are lower, the distribution of ridership is very similar to weekdays. In both maps, the high ridership stops outside of downtown are visible along Coldwater Road north of the city, Calhoun Street south of the city, and major shopping centers like Glenbrook Square, Jefferson Point, and Southtown Crossing.

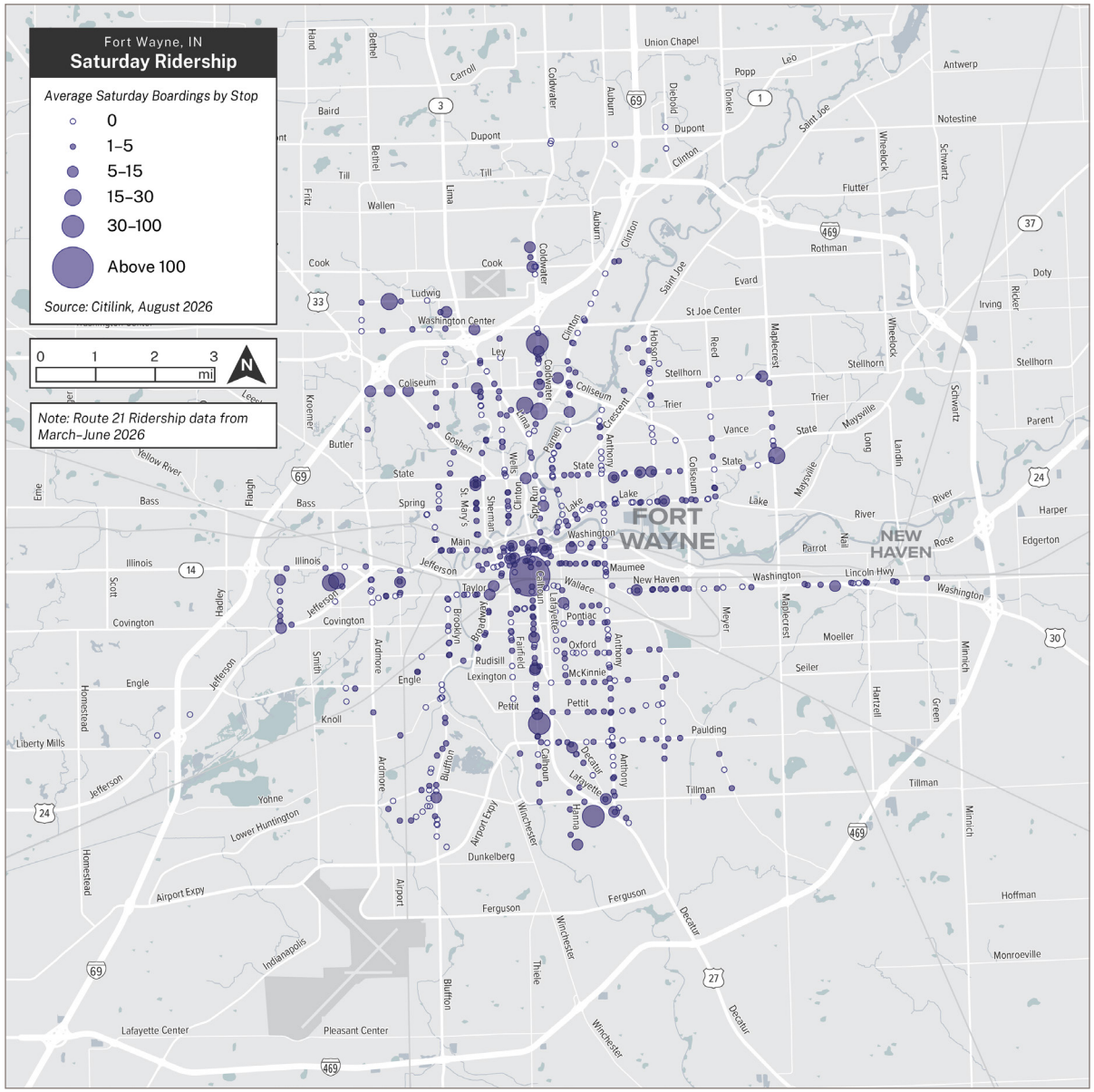


Figure 47: Average Weekday Boardings by Stop (August 2026)

Productivity & Frequency

In addition to ridership, we can look at **ridership relative to cost.** Ridership relative to cost is called "productivity." The chart to the right shows the productivity (Y axis) of individual Citilink routes plotted against their weekday midday frequency (X axis).

The chart shows that 30-minute routes (i.e. Routes 4 and 8) are generally more productive than 60-minute routes, which are usually more productive than 120-minute routes. Almost all routes meet or exceed the previous agency standard of 12.1 boardings per revenue hour.

Since infrequent routes require fewer revenue hours, it might make sense for their productivity to be higher than more frequent routes; however, the numbers usually show that the opposite is true because frequency has a multiplicative impact on ridership.Higher frequency services often tend to have not just higher overall ridership, but also, higher overall productivity.

Routes with high ridership productivity sometimes experience overcrowding, especially when demand occurs all at once (e.g. school dismissals or shift changes). To ensure that buses are not too crowded and that no riders are being left behind, Citilink monitors passenger loads using a Vehicle Load Factor (VLF). This metric divides the maximum average passenger load for each trip by the average number of seats with a maximum load factor of 1.2 (120%) during peaks and 1.0 (100%) during off-peaks.

Citilink has reviewed ridership and load data for all existing routes and trips and has determined that there are no routes or trips that come close to the maximum standards for peak load factors.

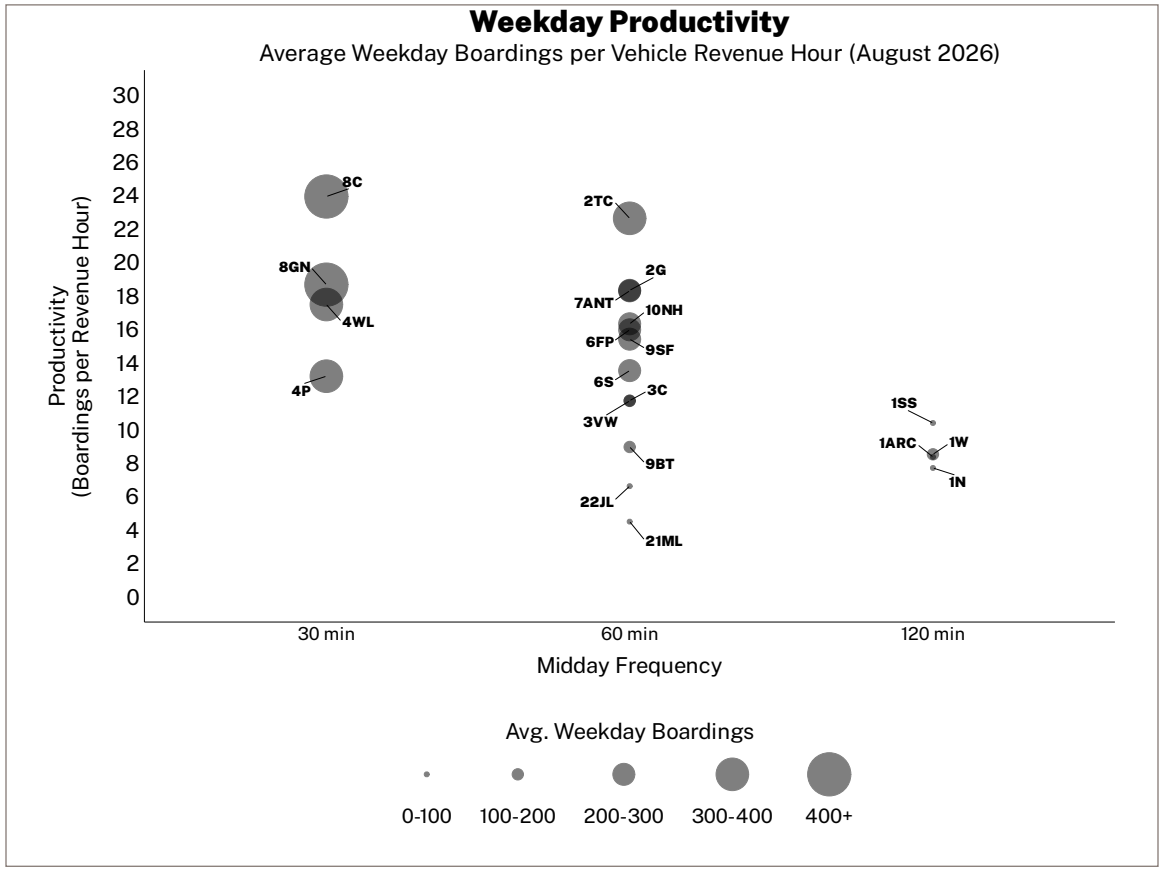


Figure 48: Citilink Route Productivity by Frequency (August 2026)

Ridership & Service by Time of Day

The chart to the right shows the amounts of service, ridership and productivity by hour for a typical weekday in August 2026. All values are shown as a percentage of the daily average so that they can be compared on the same scale.

Ridership by hour, shown in green, is generally low in the mornings with no discernible AM peak period. Weekday afternoons are generally the busiest time of day for Citilink buses with an extended peak from 12:00 PM to 5:00 PM. This supports a staff observation that many of the routes that only run every 60 minutes are starting to get more crowded during middays.

The amount of service remains flat throughout the day with peak service hours running from 9:00 AM to 5:00 PM. The drop off in both service and ridership after 5:00 PM is also notable.

Saturdays has a similar profile, with service level flat from 8:00 AM to 5:00 PM, and a ridership plateau from 12:00 PM to 4:00 PM.

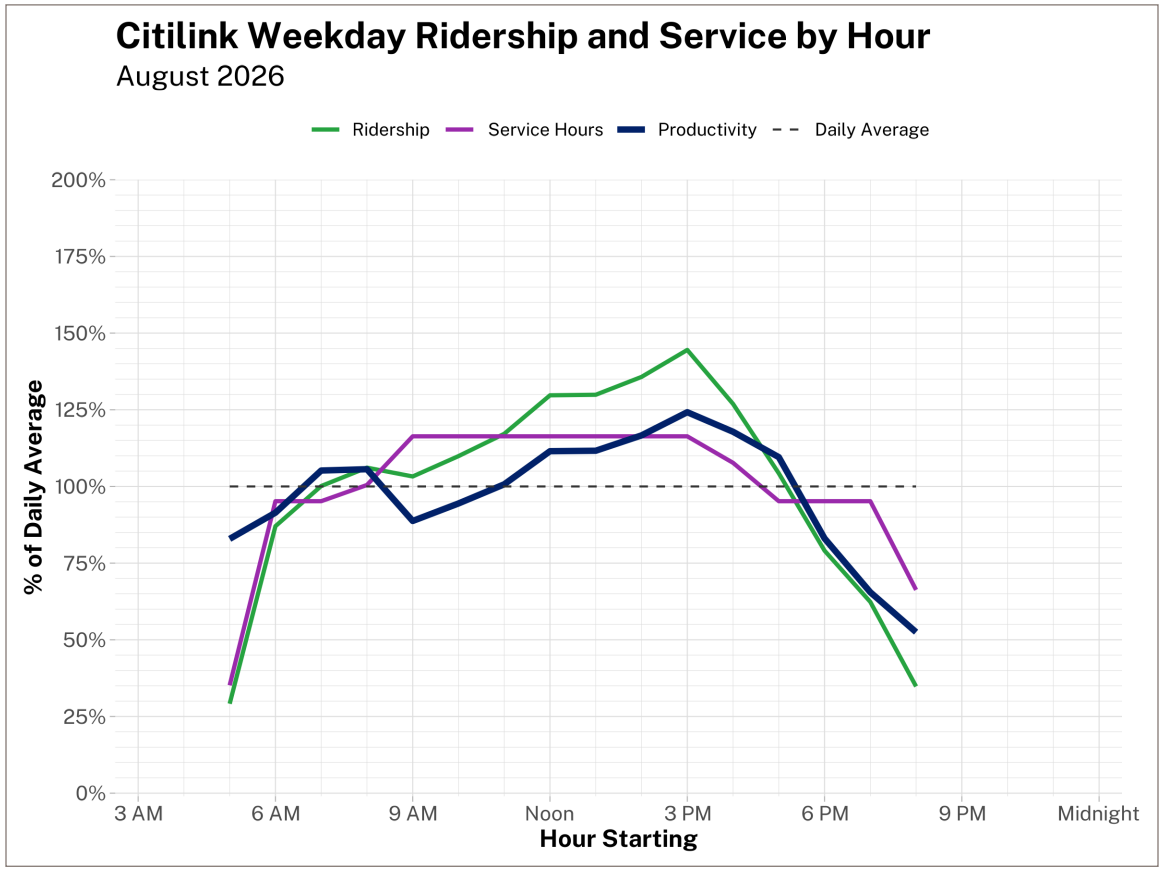


Figure 49: Weekday Ridership & Service by Hour (August 2026)

Network Structure

Like many small- and medium-sized urban transit networks, the Citilink system is laid out in a radial or “hub and spoke” pattern emanating from Downtown with Central Station as the central nexus. All of the core bus routes start and end at Central Station tobenefit from the timed transfers that are described in more detail on the following page.

Outside of Downtown Fort Wayne, the area that is served by each existing route is dictated in part by how far a bus can travel into the outlying areas of the city while still making it back to Central Station within 30 or 60 minutes for the next pulse.

The two most frequent routes (Routes 4 & 8) that form the backbone of the network include one segment south of downtown on Calhoun Street to Southtown Crossing, two segments north of downtown on Wells Road/ Lima Road and Clinton Street/ Coldwater Road. The fourth segment (Route 4P) zig zags northeast from downtown to serve the two major hospitals on State Boulevard and terminates near Ivy Tech and Purdue Fort Wayne.

Most of the other routes travel out from downtown to serve trip generators in outlying areasx. Many of the routes terminate with one-way loops that allow buses to turn around but can be less useful for local riders. One-way loops are discussed more on page 62.

Because of the radial design of the network, most passengers have to travel to Central Station, regardless of where there final destination may be. Passengers traveling between places like New Haven and Glenbrook Square could benefit from the presence of orbital routes so that they wouldn’t need to go through Downtown.

While orbital routes can be helpful for certain trips, they only work well if they are frequent enough to be faster than transferring through downtown. Given the size of Fort Wayne and the limited resources that Citilink has to spend, the need for frequent orbital route(s) should be weighed against other priorities during the network design process.

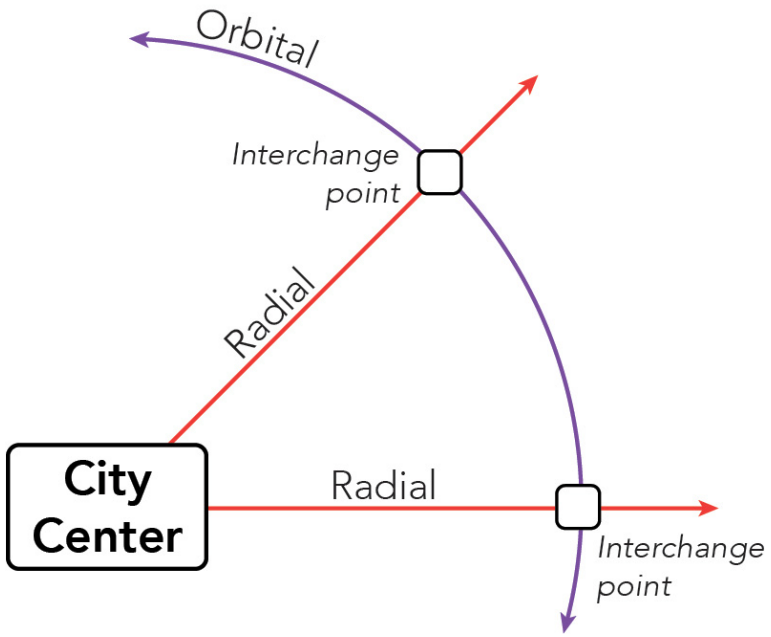


Figure 50: Radial & Orbital Routes

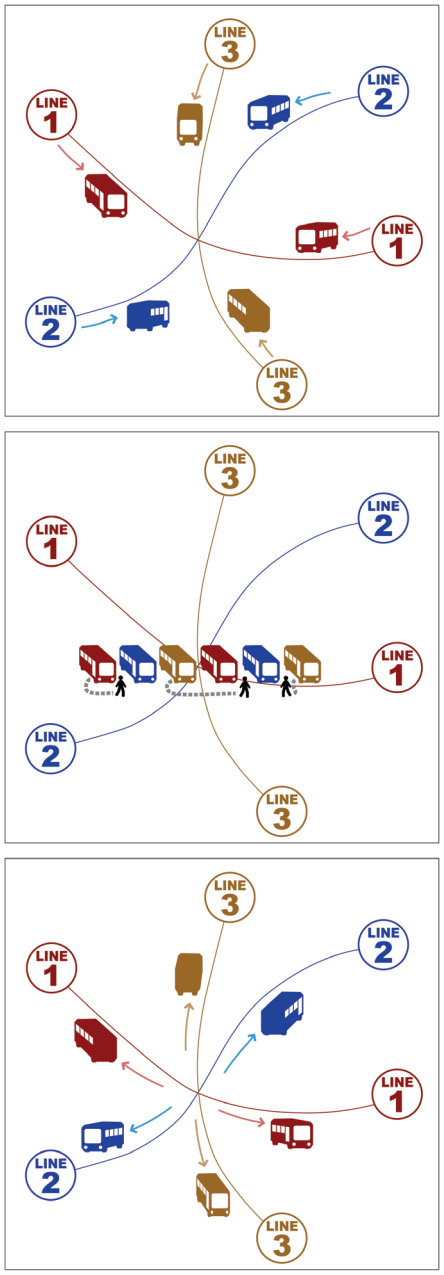
Timed Connections

It's unlikely that all the places you might want to go will be located on the bus line nearest to your home. Connections allow people to travel in many directions to reach more destinations. To facilitate easier connections between routes, a transit network can have a timed transfer, also called a "pulse". **The Citilink bus network is an outstanding example of a pulse-based bus network.**

Normally, the amount of time a transfer takes depends largely on the frequency of the connecting routes. For an un-timed connection, transferring to a route that comes every 60 minutes requires a 30-minute wait, on average, and in the worst case a 59-minute wait.

With a timed connection like the Citilink pulse at Central Station, many routes can come together at the same time and depart 5-10 minutes later. This practice allows passengers to connect between routes very easily for travel across the region.

Timed transfers work well in networks like Fort Wayne where routes only run every 30 or 60 minutes; however, they are susceptible to systemic reliability issues and missed connections if one or more routes is taking significanly longer to get back to the pulse point.



Routes are designed to come together at one central location. Buses can terminate here or simply stop along their route.

Buses come together and wait for 5 minutes allowing people to transfer from one bus to another.

After 5 minutes, buses depart at the same time and continue their trip.

Figure 51: Timed Connections

On-Time Performance (Weekday)

On-time performance (OTP) compares scheduled and actual bus departure times from stops. OTP and reliability are particularly critical for a network like Citilink's with infrequent service and timed transfers. If buses don't run on time, riders will have long waits or miss connections at Central Station.

On infrequent routes, early departures can be much worse than a late ones. If a route that comes every 60-minutes is 5 minutes late, someone might be 5 minutes late to work, and that is bad. But if it is 5 minutes early, they probably weren't at the bus stop in time to catch it, and they have to wait a full hour to catch the next one.

Citilink defines "on-time" as departing a timepoint less than 1 minute before - and less than 5 minutes after - the scheduled departure time. **Citilink has a systemwide on-time performance of 67% on weekdays which is well below its standard of 85%.** Routes 1SS, 2TC, 10NH and 21GC all have on-time performance of 60 percent or lower on weekdays.

On-time performance is particularly low on weekday afternoons with 19% of inbound trips arriving 10+ minutes late to Central Station. This means that all other buses must be held or riders are missing their connections.

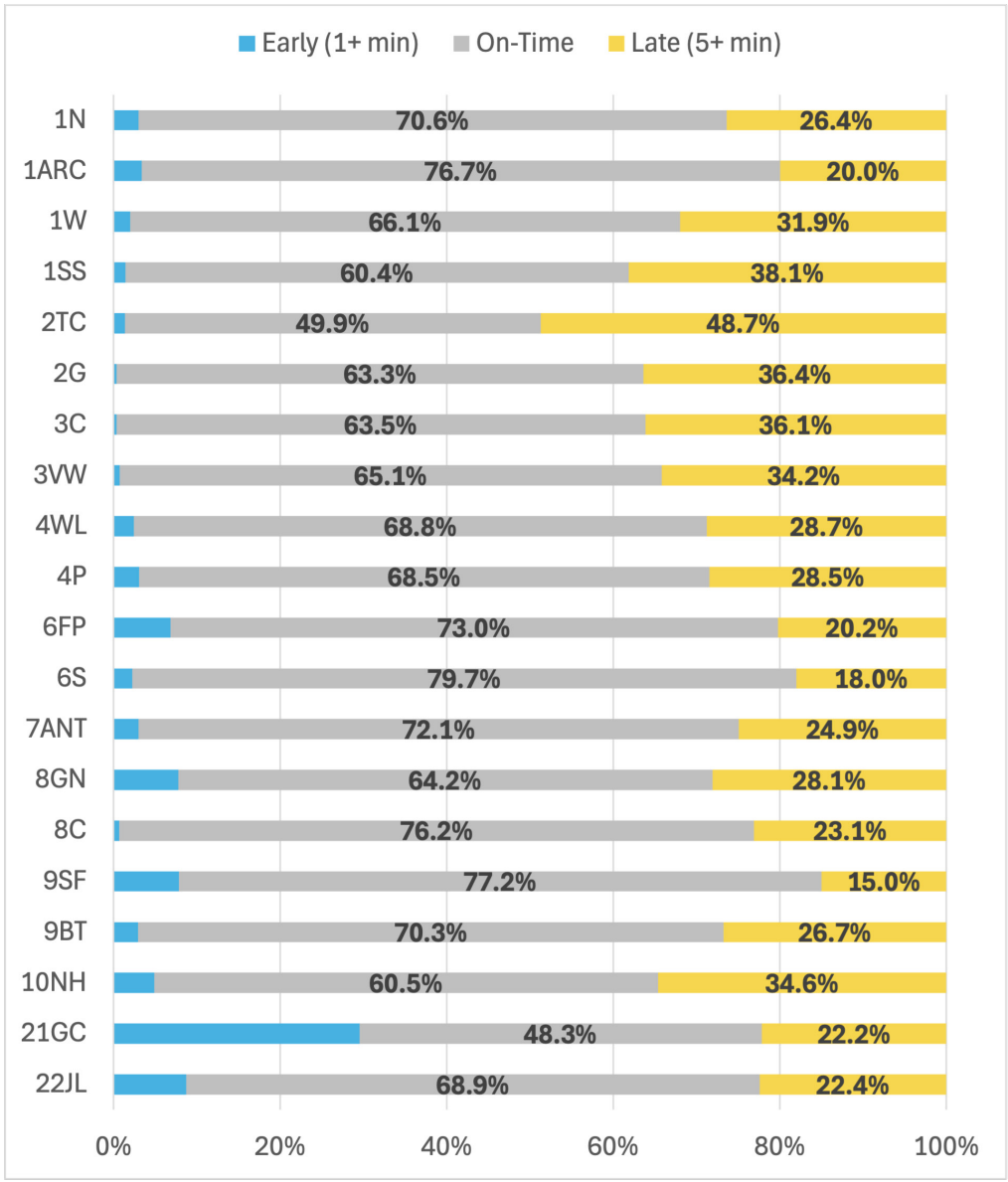


Figure 52: Weekday On-Time Performance by Route (September 2026)

On-Time Performance (Saturday)

On Saturdays, there is usually less traffic congestion than on weekdays, so buses can move faster and operate with more reliable service.

At a systemwide level, Citilink recorded a Saturday OTP of 79% in September 2026, which is 12% higher than weekdays but still below the 85% target. As shown in the graph to the right, five of the 17 routes are meeting or exceeding the 85% OTP target. Less reliable routes on Saturdays include Routes 2TC, 8GN and 10NH, with on-time performances of 46 percent, 57 percent and 51 percent, respectively.

Over time, traffic in the region has increased and driving speeds have gone down. That means that each bus can cover less distance in the same amount of time. As a result, buses arrive later than scheduled at each stop, hence the high percentage of late trips. To keep the same frequency and improve on-time performance, Citilink must either add a bus (which costs more) or find a way to increase speeds. Citilink schedules also do not adjust running times during peak periods or on weekends to reflect actual traffic delays. This is something that could be adjusted in the future for better OTP.

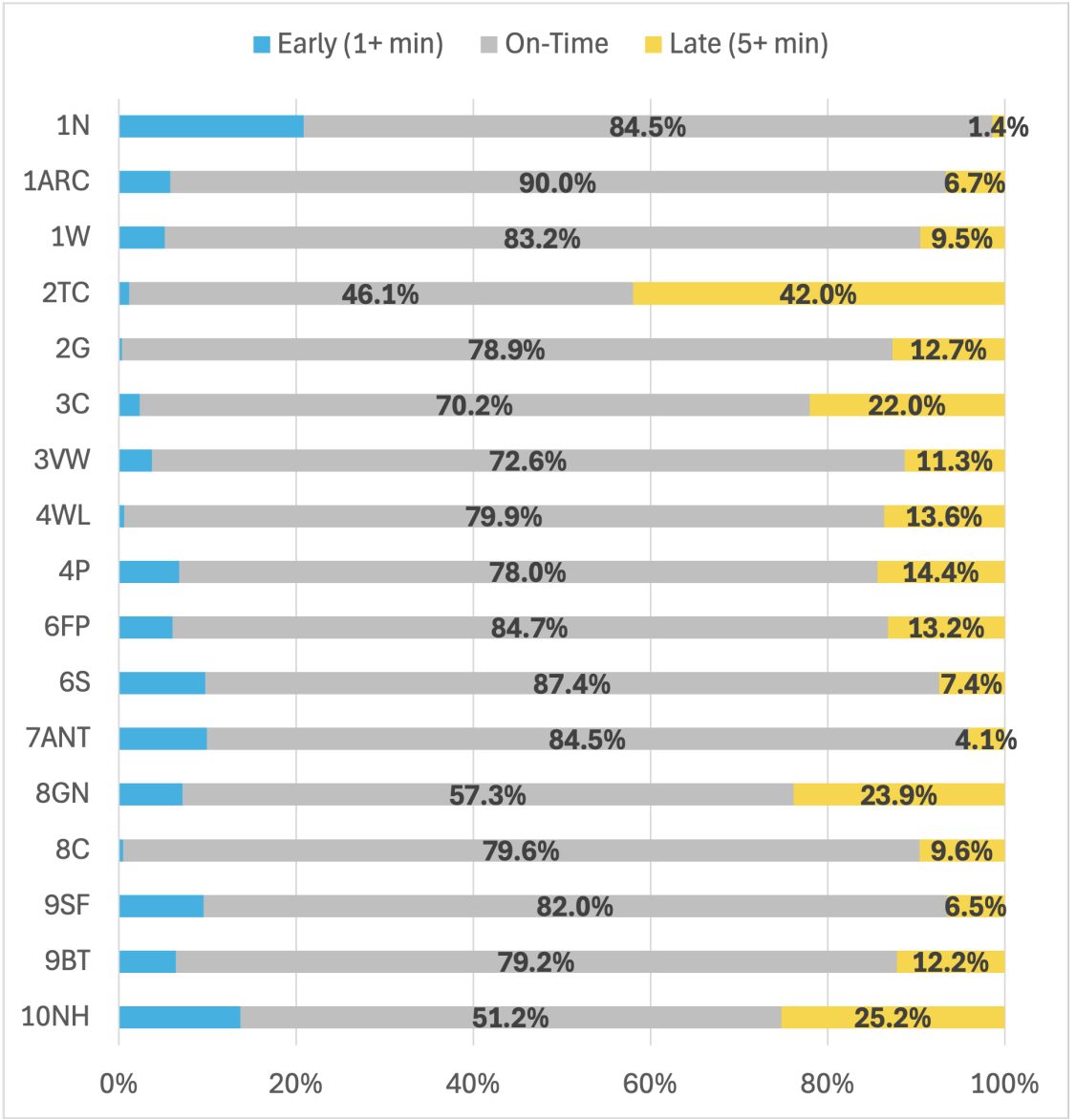


Figure 53: Saturday On-Time Performance by Route (September 2026)

Stop Spacing

There is a geometric trade-off between closer stop spacing and faster bus speeds. The figure at right shows the basic trade-off in conceptual terms. Stops placed farther apart allow buses to travel faster and cover more distance more quickly. Much of the time lost when stopping for passengers is the time to slow down, open the door, and pull back out into traffic. This extra time is the same for every stop, whether its one rider or 50 boarding at the stop.

When there are many stops, passengers spread themselves out among them, so the bus stops more for the same number of people. When passengers gather at fewer stops, stopping time is used more efficiently, resulting in faster operations.

The map to the right shows a series of Route 6S bus stops on Oxford Street, east of Warsaw Street. This segment has 7 bus stops within a 1/2 mile stretch. This section is not representative of most other Citilink routes but does show that there are areas of the system where the number of stops could be reduced to provide better service reliability. Additional information on stop spacing is provided on the following page.

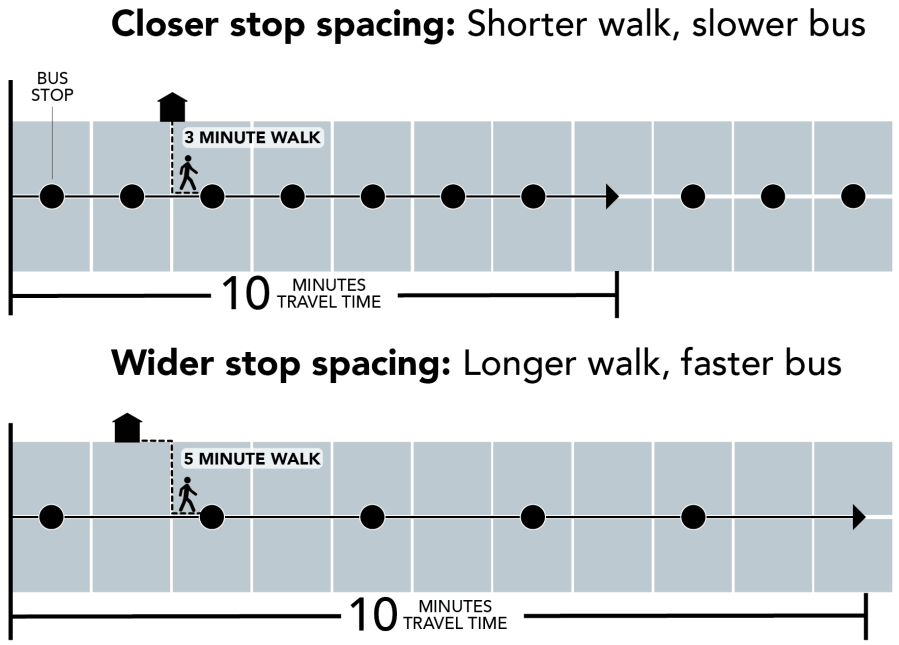


Figure 54: Wider stop spacing can increase bus speeds but more walking is required.

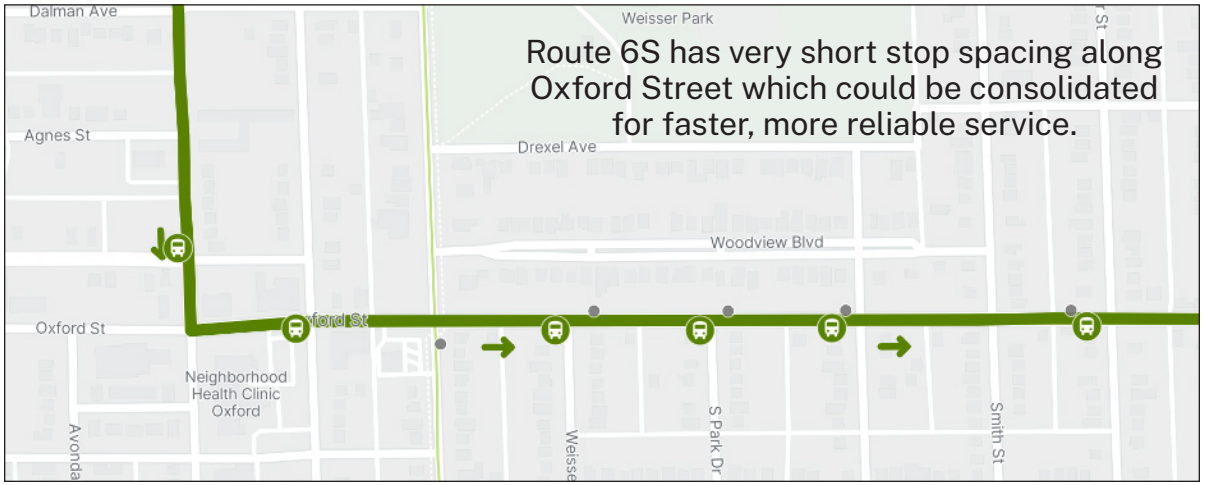


Figure 55: Current Stop Spacing for Route 6S on Oxford Street

Stop Spacing (continued)

The chart to the right shows the distribution of stop spacing distances for all existing Citilink bus stops, while the chart at the bottom of the page shows the distribution of stop spacing by route. The vertical dotted line at 0.22 miles in the first chart represents the median distance between stops, so more than half of existing Citilink bus stops are spaced less than 0.25 miles apart. This is about average for U.S. cities, but still shows that there are opportunities for stop consolidation, if desired.

The second chart at right shows the routes is descending order of median stop spacing distances. Routes 9SF and 1SS tend to have more distance between stops, while Routes 2G, 6FP and 7ANT have stops that are generally closer together and may benefit from bus stop consolidations.

When there are many stops, passengers spread themselves out among them, so the bus stops more for the same number of people. When passengers gather at fewer stops, stopping time is used more efficiently, resulting in faster operations.

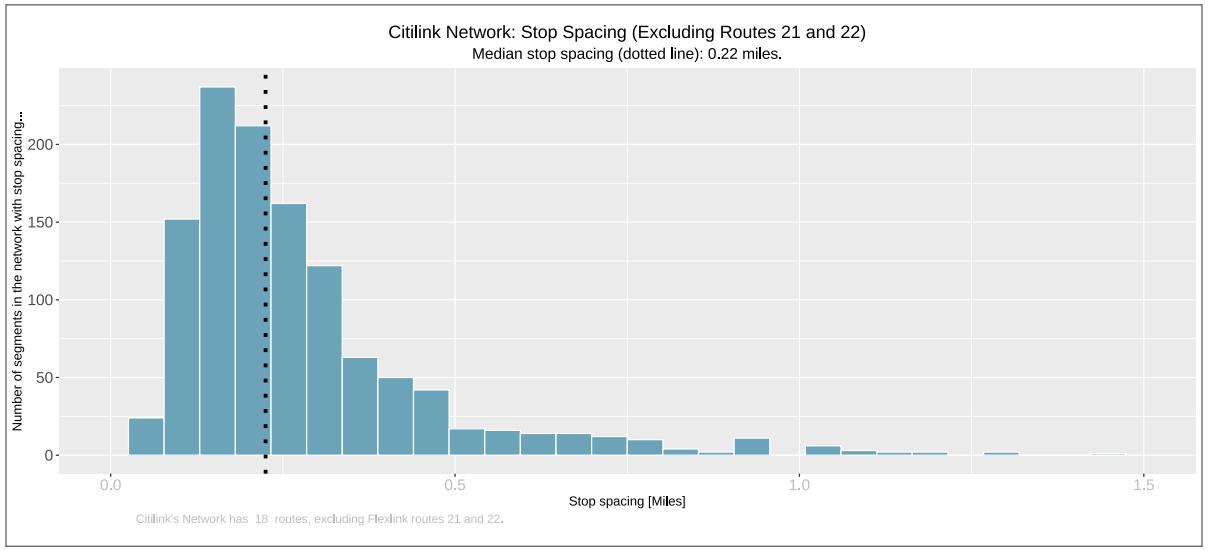


Figure 56: Distribution of Bus Stop Spacing (All Stops)

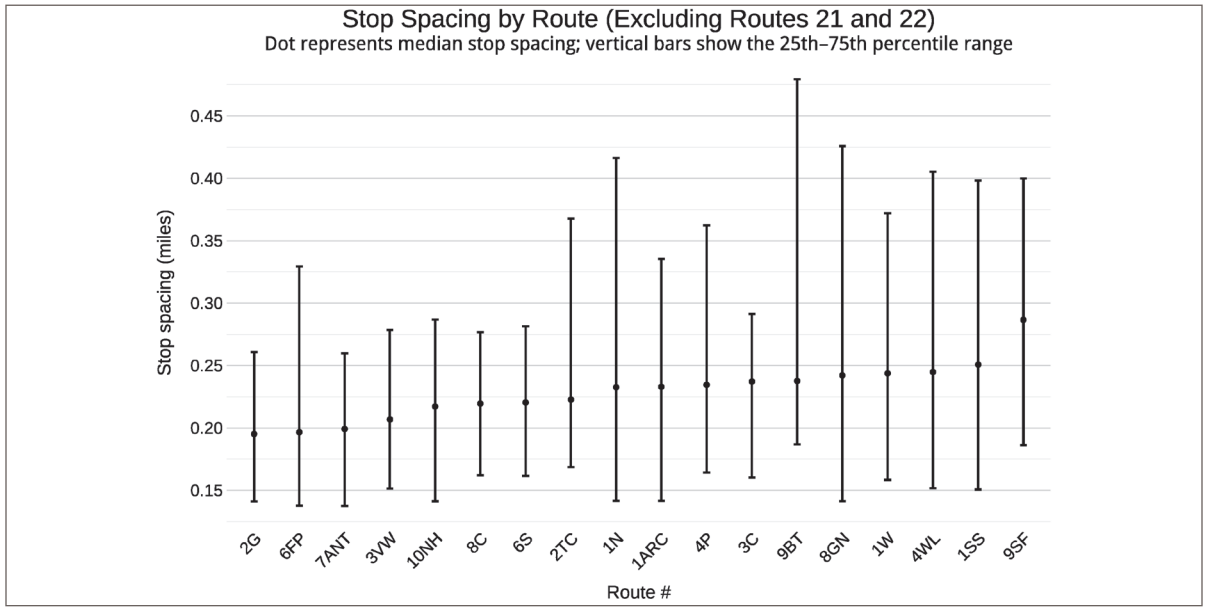


Figure 57: Bus Stop Spacing by Route

Downtown Fort Wayne

Downtown Fort Wayne is the central hub of activity in Allen County and has the strongest transit service in the region. All but two of the 20 Citilink routes come into Central Station to provide an opportunity for customers to connect from one route to another during a timed transfer. Central Station attracts nearly 2,000 boardings on a typical weekday, more than 20 times the next closest destination.

The network of routes in Downtown is designed to bring buses to Central Station while serving major arterials like Clinton Street, Calhoun Street, Jefferson Boulevard, Washington Boulevard, Wayne Street and Main Street.

Although Central Station is the main transit hub, it is situated more than 1/2 mile south from the Allen County Courthouse, often considered as the anchor of Downtown. As a result, some passengers - especially those coming from points south - must either make a transfer at Central Station or walk 15 minutes to reach the some parts of the downtown core. This is not something that can be easily fixed but is important to consider as part of the future design of the downtown bus network.



Figure 58: Existing Citilink Bus Network in Downtown Fort Wayne (August 2026)

Central Station

The most visible and important part of the existing Citilink bus network is Central Station. This major transit hub was constructed in 2012 on a 2,700 square foot lot south of Downtown Fort Wayne at the intersection of South Calhoun Street and West Baker Street. The facility is comprised of 18 sawtooth bus bays, covered seating areas at each bay, restrooms, customer service kiosk, an indoor waiting area, administrative offices and an operator break room.

Aside from serving nearly 2,000 passengers per day, Central Station is also critical for bus operations as a terminal for 18 of the 20 existing routes. The centralized location provides a place where operators can take their breaks, use the restroom, and turn buses around. As noted on page 56, Central Station also allows Citilink to operate with pulse scheduling to facilitate quick transfers between routes traveling to and from different parts of the city.



Figure 59: Citilink Central Station in Downtown Fort Wayne

Any future bus network will need to continue utilizing Central Station to the maximum extent possible.

Implications of Central Station for the new network include:

- **Bus Bay Capacity.** Bus network redesigns need to be mindful of any restrictions on the number of bus routes that can serve a single location or transit facility. If any new service is added to Central Station, the impact on how the existing 18 bays are utilized must be considered.
- **Operator Restrooms.** Any new routes must include operator restrooms on one or both ends of the route. Routes that start or end at Central Station may have more flexibility in terms of where their opposite terminal can be located.
- **Public Outreach.** With nearly 2,000 boardings each weekday, Central Station provides a great opportunity to reach large numbers of Citilink riders in one central location. Project outreach will emphasize in-person events, materials and announcements at Central Station.

Shorter Walks or Shorter Waits?

Transit service being divided among more streets inevitably leads to lower frequencies on each street, and therefore longer waits. This is used as a coverage tool to get buses as close to people as possible. However, if someone misses their bus, the wait is quite long.

If two routes on parallel streets come every 60 minutes, then they can be combined onto the same street to arrive exactly 30 minutes apart, and someone traveling a short distance could wait at a single stop for either bus.

In Fort Wayne, there are a few small examples of this parallel service design, but most routes on adjacent corridors appear to be spaced by at least 1/2 mile. Some routes appear closer to one another due to parallel one-way streets. These streets make it more challenging to provide useful transit service because longer walks are required in one direction or the other.

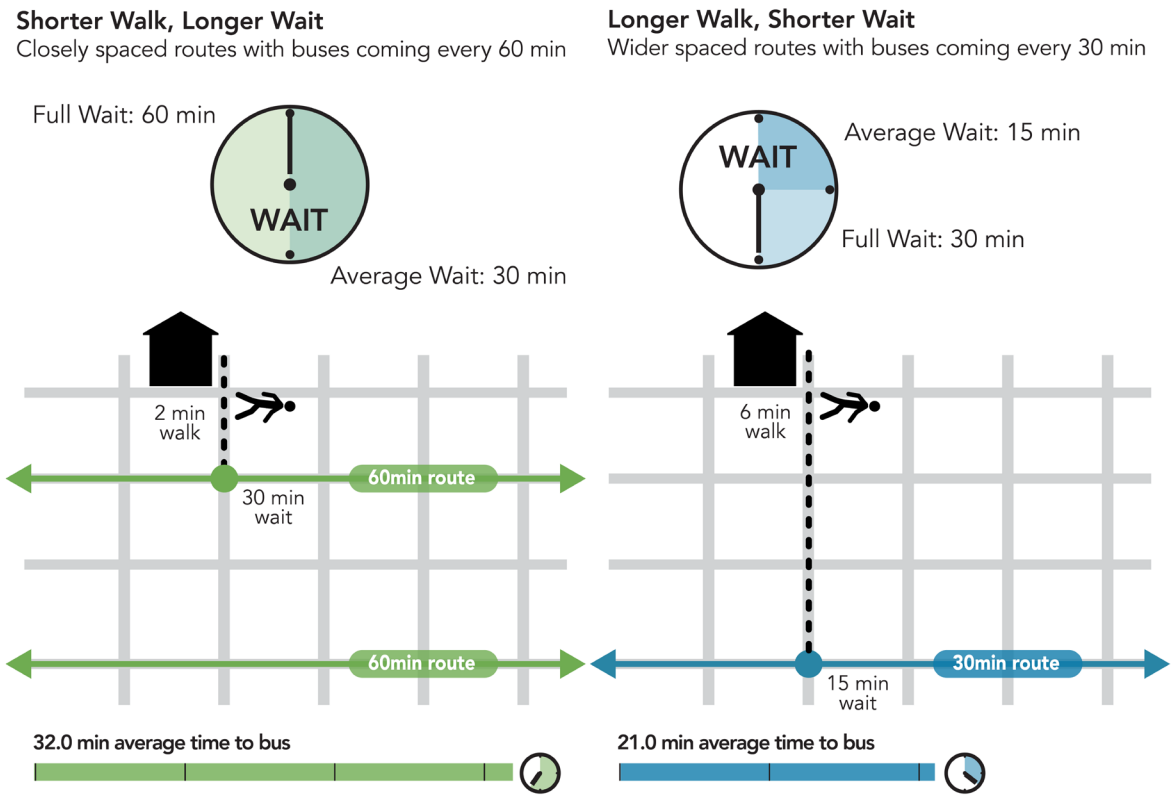


Figure 60: Walking Distance & Service Frequency

One-Way Loops

One-way loops are sometimes used at the end of long routes because they are easy ways to turn around a bus. At the end of a long route, buses tend to be empty, so very few people end up riding around the loop.

But sometimes one-way loops are used to provide coverage: access to service that doesn't result in much ridership.

One-way loops sacrifice directness and travel time in order to cover a larger geographic area.

Route 3VW is an example of a large one-way loop that is designed to provide coverage across a wider area. A resident living at the Courts of Woodhurst Condominiums (Fairfield Avenue & West Paulding Road) would have hard time using Route 3VW to travel to a job in Downtown Fort Wayne. The trip home from downtown is very easy and direct, but because of the one-way loop, the trip into downtown would require an extremely long detour via Pauling Road and Pettit Street, as shown on the map at right.

Route 3VW is the biggest example of a one-way loop, but Routes 2G, 2TC, 6S, 9BT, and 21ML have smaller loops as well.

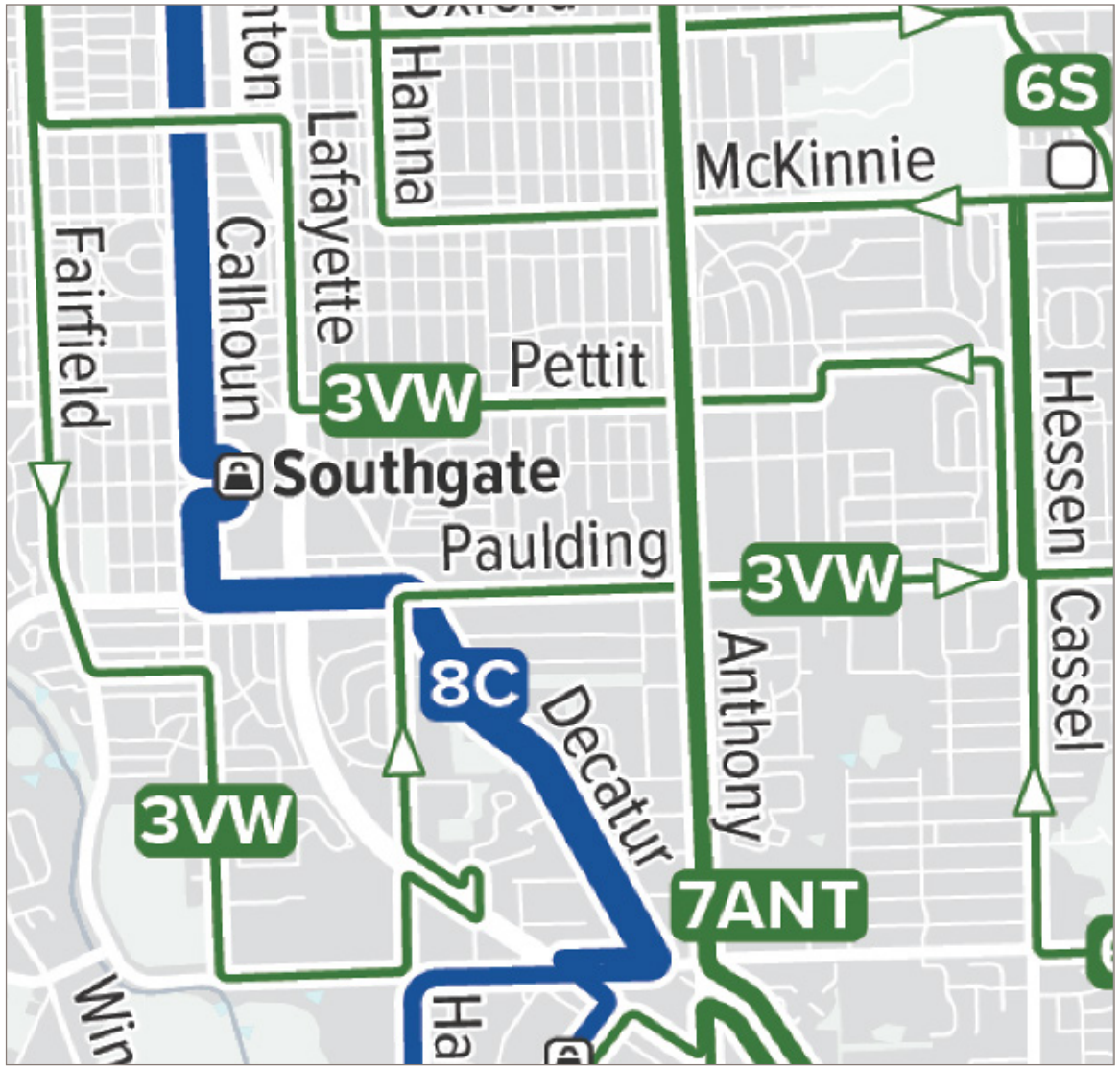


Figure 62: One-Way Loop on Route 3VW

Paratransit Service (Citilink Access)

Citilink is also responsible for providing paratransit service for individuals who are not able to use traditional fixed-route bus service. Citilink Access provides curb-to-curb paratransit service within 3/4 mile of Citilink fixed-route service, as required by the Americans with Disabilities Act (ADA). Citilink Access Plus provides paratransit service for all areas within the City of Fort Wayne. Both services are contracted by Via Transportation and managed by Citilink.

Eligibility

Eligibility for all paratransit service is determined via an application and verification form filled out by a qualified medical professional; once approved, users must re-certify their eligibility every three years. Access and Access Plus services are extended to ADA eligible visitors for up to 21 days per year.

Bookings and Cancellations

Reservations for Access and Access Plus service must be made one day in advance of the requested pick-up time but can be made as many as 14 days in advance. Upon arrival, drivers will wait up to five minutes beyond the scheduled pick-up time and will assist passengers with mobility needs between the building and the vehicle. Service may be canceled up to two hours before scheduled pickup. Cancellations within two hours of scheduled service or failure to appear at the pick-up location are considered no-shows, and repeated no-shows may result in suspension of service eligibility.

Service Span

Citilink Access paratransit service is operated during the same hours as fixed-route service, which are generally 5:30 AM to 8:30 PM on weekdays and 7:30 AM to 5:30 PM on Saturdays. Citilink Access paratransit service is not available on Sundays.

Fares

Fares for Citilink Access regular service are $3.00 per trip, while Access Plus service costs $4.50 per trip. Payment can be made using cash, credit/debit cards or the Token Transit mobile app. Citilink has recently introduced the Citilink Access/Access Plus app to streamline the booking and payment experience.

Citilink Access customers may ride regular Citilink bus routes free of charge. This policy encourages paratransit customers to use standard buses whenver possible since Citilink Access costs $58 per passenger trip to operate and fixed-route buses are only $10 per passenger trip. For this reason, a new fixed-route bus network that is useful for more Citilink Access customers could create long-term savings for the agency's paratransit program.

Finally, the availability of Access paratransit service is based on areas served by current fixed-route service. As part of this bus network redesign, Citilink will need to consider the impact of any proposed route changes on existing paratransit customers.



Figure 63: Citilink Access

5 Key Choices

Key Choice: Ridership vs Coverage

This project is a unique opportunity for the region to help Citilink find the right balance between desirable but competing goals for transit. The most difficult choice for the public, stakeholders, and the Board of Directors will be between providing **high ridership** and providing **wide coverage**. This tradeoff is explained in detail starting on page 23.

Recall that high ridership serves several popular goals for transit, including:

- Competing more effectively with cars, so that the region can grow without increasing traffic congestion.
- Collecting more fare revenue, increasing the budget paid by fares.
- Making more efficient use of tax dollars by reducing the cost per ride.
- Improving air quality by replacing vehicle trips with transit trips.
- Supporting dense and walkable development and redevelopment.
- Extending the most useful and frequent services to more people.

On the other hand, many transit goals are achieved not by ridership but by providing higher coverage, including:

- Ensuring that as many people as possible in the service area have access to some transit service, no matter where they live.
- Providing basic transit access for people who cannot use personal vehicles.
- Serving newly developing places, even if they don't yet have the size or density to constitute a large transit market.

Previous Citilink service standards have focused on coverage metrics (i.e. the number of residents near transit) instead of typical ridership metrics.

This choice is not binary. A transit agency can pursue high ridership and extensive coverage at the same time, but the more it pursues one, the less it can provide of the other. Every dollar spent on high frequency service on a dense mixed-use corridor is a dollar that cannot be spent bringing transit deeper into low-density residential areas, and vice versa.



Figure 64: Caption

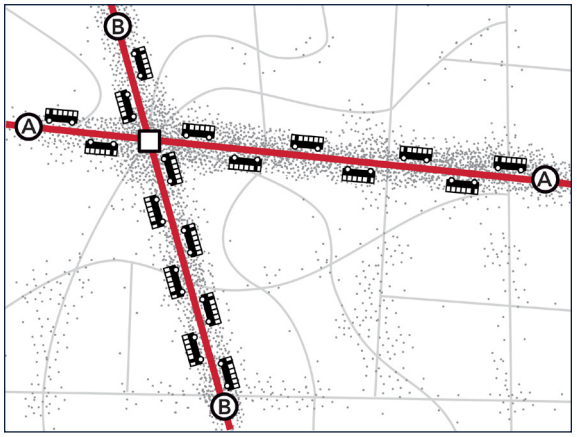


Figure 65: Ridership Network

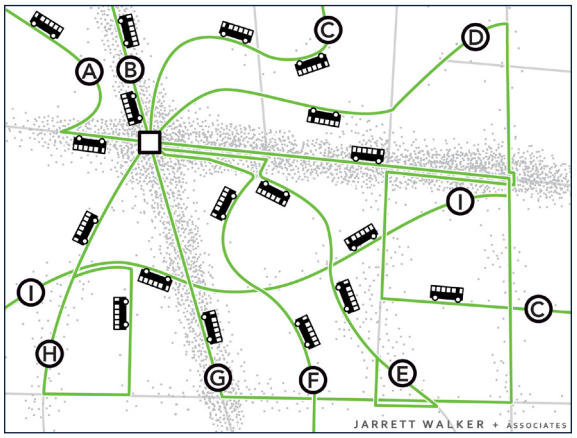


Figure 66: Coverage Network

Key Choice: Walking vs Waiting

Another way to think about the question of ridership and coverage is to think specifically about how far a person should have to walk to reach a bus stop, and how long they should have to wait, on average, before the next bus comes.

Walking and waiting are important to consider on their own, because both of these activities add time and inconvenience to any transit trip, and different people have different preferences regarding each.

The Citilink network includes a few areas with bus service operating on parallel streets. If parallel routes can be consolidated onto a single corridor, service frequency can be improved for shorter waits without any additional cost, but longer walks will be required. This is why walking distance and waiting time are linked and trade-off against one another. The graphic to the right provides two different possibilities for designing parallel routes - one that minimizes walking and another that minimizes wait times for a shorter overall trip.

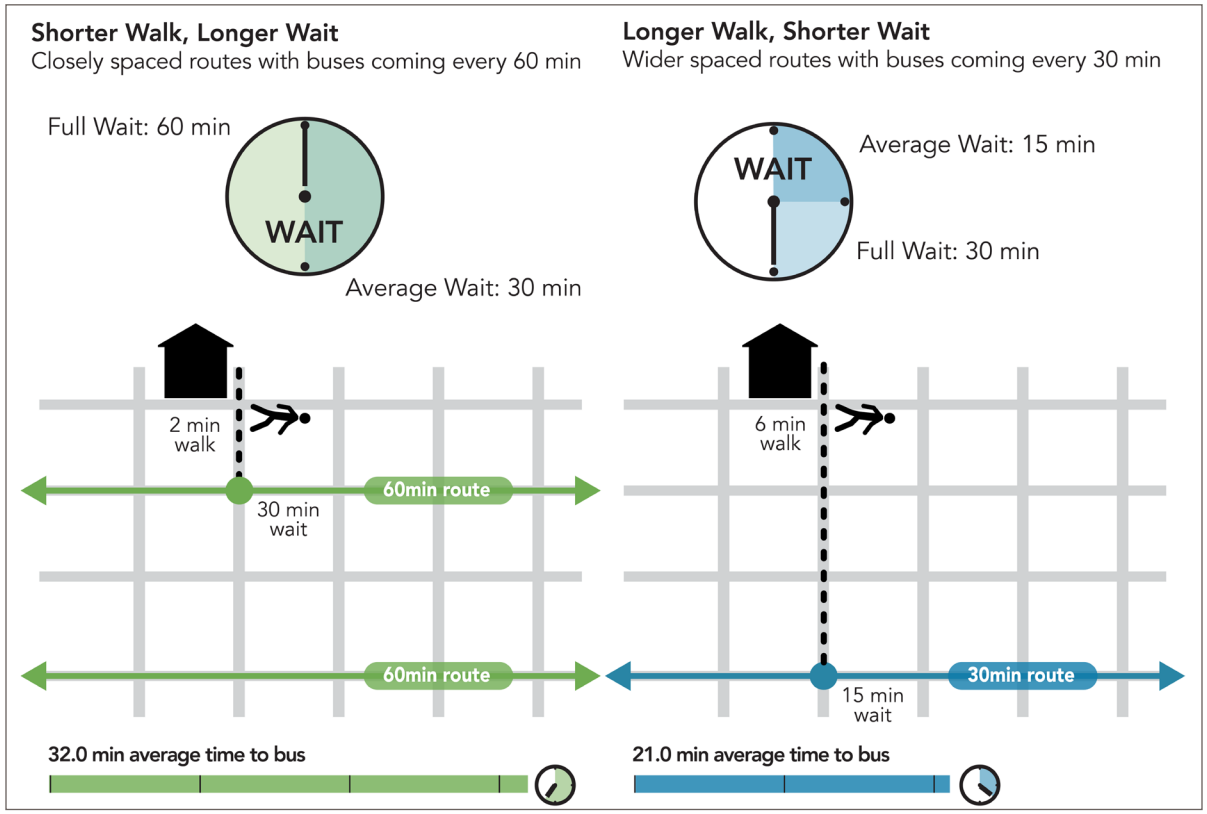


Figure 67: Walking vs. Waiting

Does the community want people to have a short walk to transit but a long wait, or a longer walk for a shorter wait and shorter overall trip?

Key Choice: Stop Spacing

There is a geometric trade-off between stop spacing and bus speeds. As stops are placed farther apart, buses can travel faster and cover more distance in the same time. **The median distance between Citilink bus stops is 0.22 miles, which could be increased to improve bus speeds and reliability.**

Increased speed has two benefits. First, riders can get farther faster and reach their destinations sooner. Second, as speeds increase across the entire transit system, more service can be provided for the same cost. This can help Citilink improve its reliability at no extra cost.

There are two major downsides to widening stop spacing. First, some people have difficulty walking and will be inconvenienced by a longer walk. Second, as stops are spaced farther apart, transit becomes less useful for very short trips because it may be faster to walk or bike.

One key to a successful revision of stop spacing is for it to be a consistent policy applied in all comparable circumstances, and tied to a clear system-wide benefit in travel times. Many transit agencies have successfully widened stop spacing where these benefits were clear.

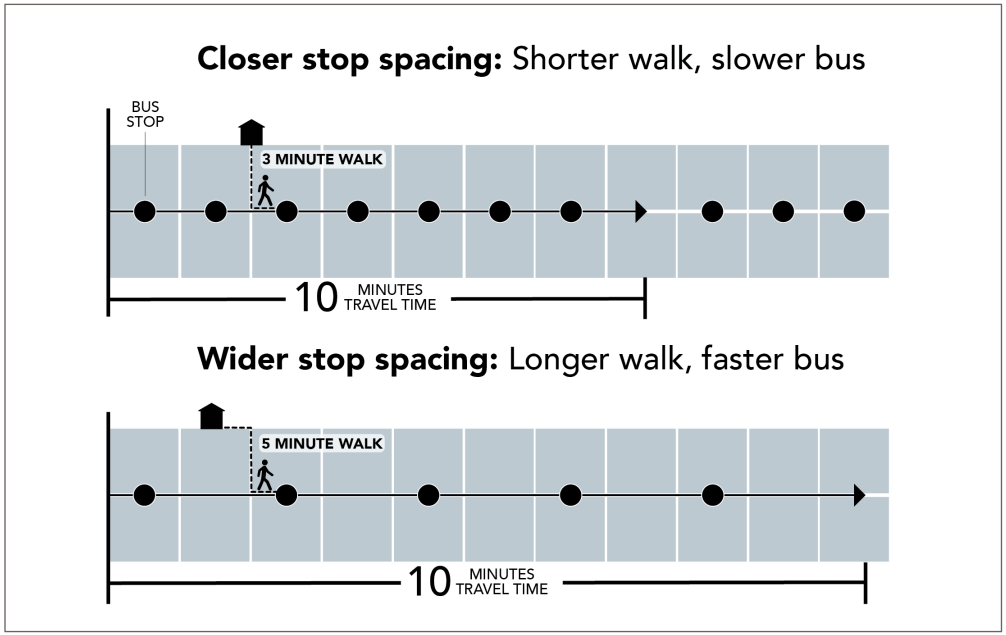


Figure 68: Stop Spacing Trade-Offs

Close stop spacing means:

- Shorter walks to a stop
- Slower bus speeds
- Longer travel time
- Less reliable service

Wider stop spacing means:

- Longer walks to a stop
- Faster bus speeds
- Shorter travel time
- More reliable service

Key Choice: Connections vs Complexity

Using the same resources, a bus network can be structured with many routes that provide direct service between many destinations. A network like this minimizes transfers, but increases complexity and can be difficult to remember. Alternatively, a bus network can be designed with fewer routes that provide connective service. This network would require people to transfer, but connections can be timed so that travel times are faster for many trips.

Whenever you try to provide direct service from every origin to every destination, the result is a more complicated and inefficient network. So many more route miles must be offered that the agency can't afford enough frequency, and the result tends to be less useful service. This is why most agencies at Citilink's scale plan around connections rather than trying to give people a single-seat ride from origin to destination, unless the destination is a very high-demand place like a central business district.

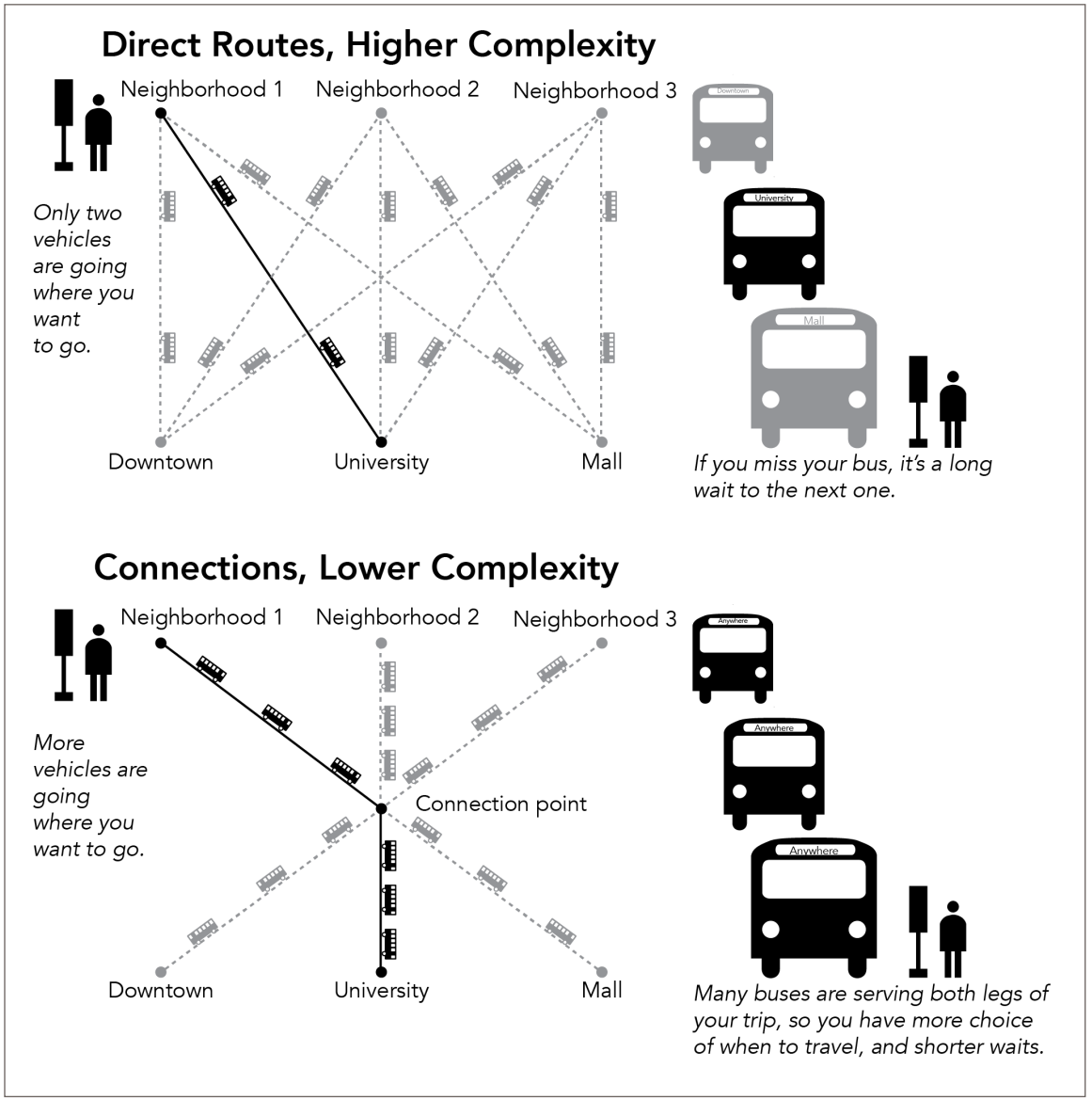


Figure 69: Connections vs. Complexity

Key Choice: Transit Supportive Land Use?

As discussed throughout this report, the built environment has a strong affect on transit's ability to succeed:

Density: How many people, jobs and activities are near each bus stop?

Walkability: How many of the people near the bus stop can actually walk to the bus stop?

Linearity: Can transit reach large numbers of people by traveling straight, direct paths?

Continuity: Can transit reach large numbers of people without crossing long, low-demand gaps?

Transit agencies are commonly placed in a very challenging position. They are expected to provide transit service but they have very little influence in how a city or region chooses to develop. Establishing a clear goal and direction for transit service, including a desired percentage balance of ridership and coverage services, and an agreement with the community on the level of service to provide, can allow a transit agency to more clearly communicate and work with partners in directing future development to be transit supportive.

Once clear direction on transit's goals are set, it becomes easier for the city agencies and regional partners to see how their land-use decisions will encourage or discourage transit's ability to succeed, business developers will have a clear message on where and how best to build if they want the best access to transit, and the community will have a clearer understanding about where and when their transit network is working best.

Finally, setting a permanent frequent transit network and a planned future frequent network can be a powerful tool for the transit agency and city to communicate to the public, developers, businesses and others about where transit is a priority and where people and business should locate and invest if they wish to have access to useful, frequent bus service.

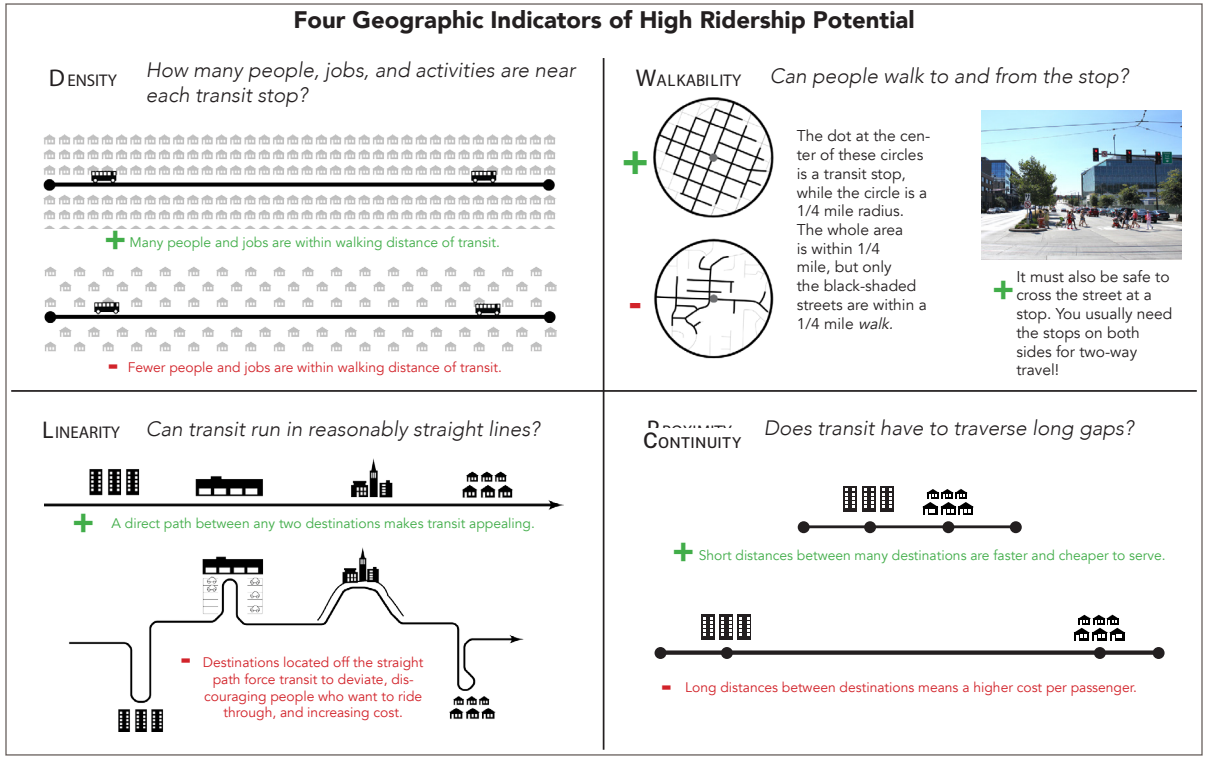


Figure 70: Geographic Indicators of Ridership Potential (see Page 19-22 for details)