



DRAFT

TRANSIT DEVELOPMENT PLAN

2024

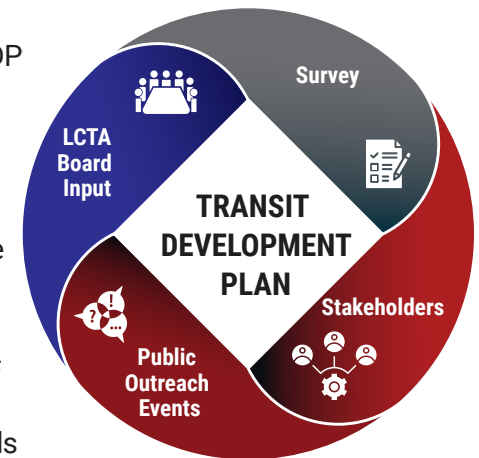
WWW.LCTABUS.COM

1 Executive Summary

The Transit Development Plan (TDP) reviews the state of the existing service and provides a strategic blueprint for improvements to transit service in Luzerne County. Beyond evaluating current conditions, the TDP identifies future public transportation needs and makes recommendations to better meet the community's mobility needs. The Luzerne County Transportation Authority (LCTA) partnered with the Pennsylvania Department of Transportation (PennDOT) to undertake the planning process starting in March 2023.

LCTA provides public transit service in the city of Wilkes-Barre and the surrounding Luzerne County. LCTA operates a fleet of buses that operate on both fixed routes and as on-demand shared-ride paratransit service throughout the county.

The TDP was developed through analysis of existing transit service performance and the market for transit in Luzerne County and included input from members of the community, stakeholders, and the LCTA Board of Directors. The vision, mission, service goals and objectives that guided the planning process were based on LCTA's Strategic Business Plan and input from the community. The TDP aims to align with these service goals and support LCTA's vision: **Five years from now, LCTA will be considered the premier public-transit agency in Northeastern PA.**



TDP SERVICE GOALS

- **Reliability**
Provide convenient and reliable service
- **Quality**
Improve community mobility and assure high quality customer service
- **Growth**
Support economic growth and a vibrant built environment

Improvements were identified based on an analysis of existing service performance, community demographics, projected growth areas, and travel patterns. Community feedback from the public survey and input from LCTA management and staff, were also incorporated. The community's highest priority improvements were for transit availability: longer service hours, more frequent buses, and more options to connect .



48% of respondents travel via LCTA services.



65% of respondents use transit because they do not have access to a car or are unable to drive.



39% of respondents use transit to go shopping.



25% of respondents use transit to run errands.



61% of respondents use transit more than once per week.



61% of respondents rated Luzerne transit as "excellent" or "good."

Among respondents, the three highest priorities were:



extended service hours

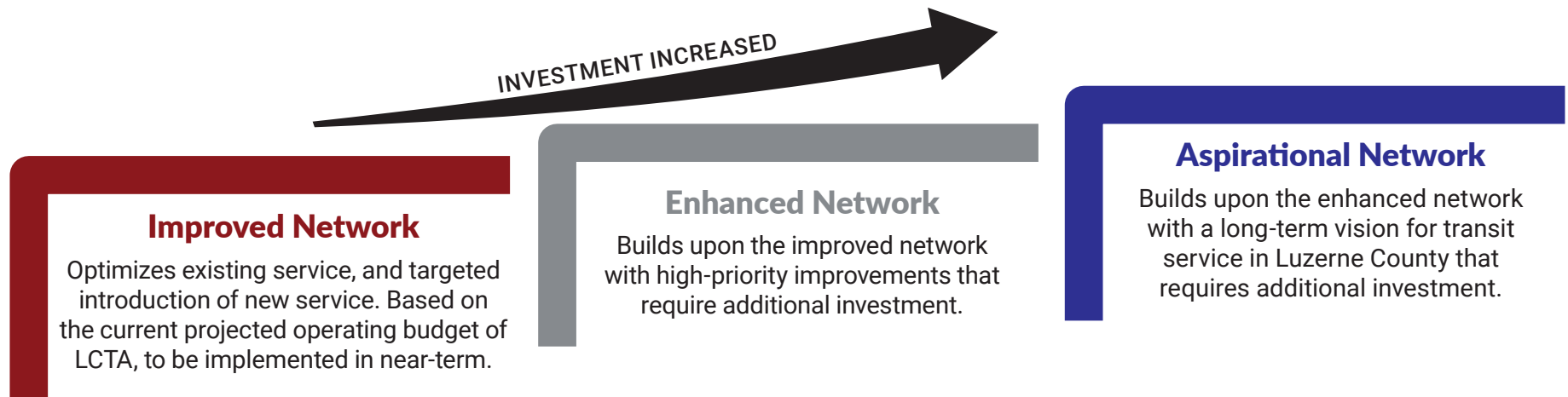


more frequent buses



more connections

Three service plan alternatives, which represent increasing levels of investment, were developed to group improvements together:



The improved network includes recommendations for adjustments to all bus routes and the introduction of a new on-demand service type called microtransit in specific areas. The route changes will make service easier to understand, more consistent throughout the day, more direct, and align service with demand.

The enhanced and aspirational networks build on the improved network and are meant to guide LCTA's future development if additional funding is identified. Recommendations for these two networks include longer service hours, more frequent buses, and additional fixed route connections.

A financial and implementation plan for the improved network was developed to guide LCTA as it begins to implement improvements over the next several years.

Overall, the TDP centers the community's needs and input to develop a strategic roadmap for improvements to Luzerne County public transit.

2 Introduction

WHAT IS A TRANSIT DEVELOPMENT PLAN?

The Transit Development Plan (TDP) serves as the strategic blueprint for improvements to transit service for Luzerne County over the next several years. This plan evaluates current public transportation conditions, identifies future public transportation needs, and makes recommendations to connect our thriving communities and residents to the places they want to go.

The Luzerne County Transportation Authority (LCTA) partnered with the Pennsylvania Department of Transportation (PennDOT) to undertake the planning process starting in early 2023. The development of the TDP followed the process and steps shown in Figure 1.

Figure 1: Planning Process

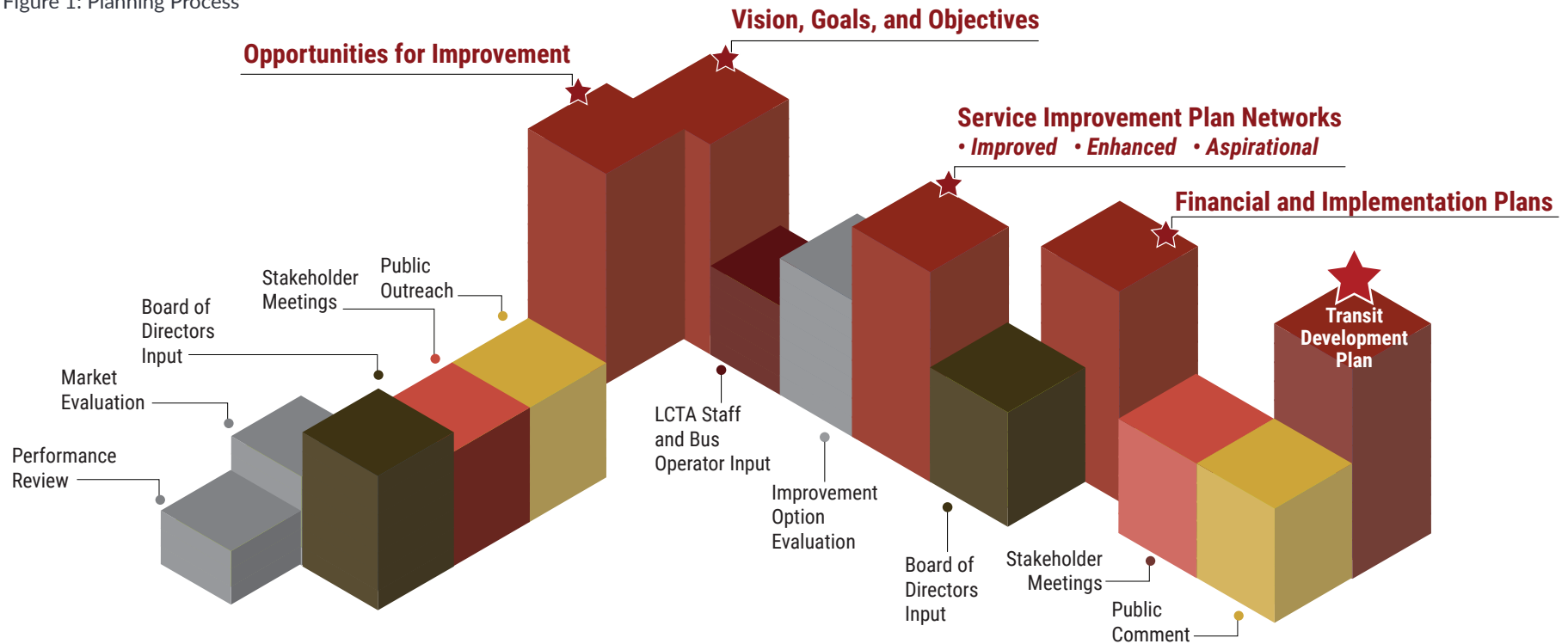
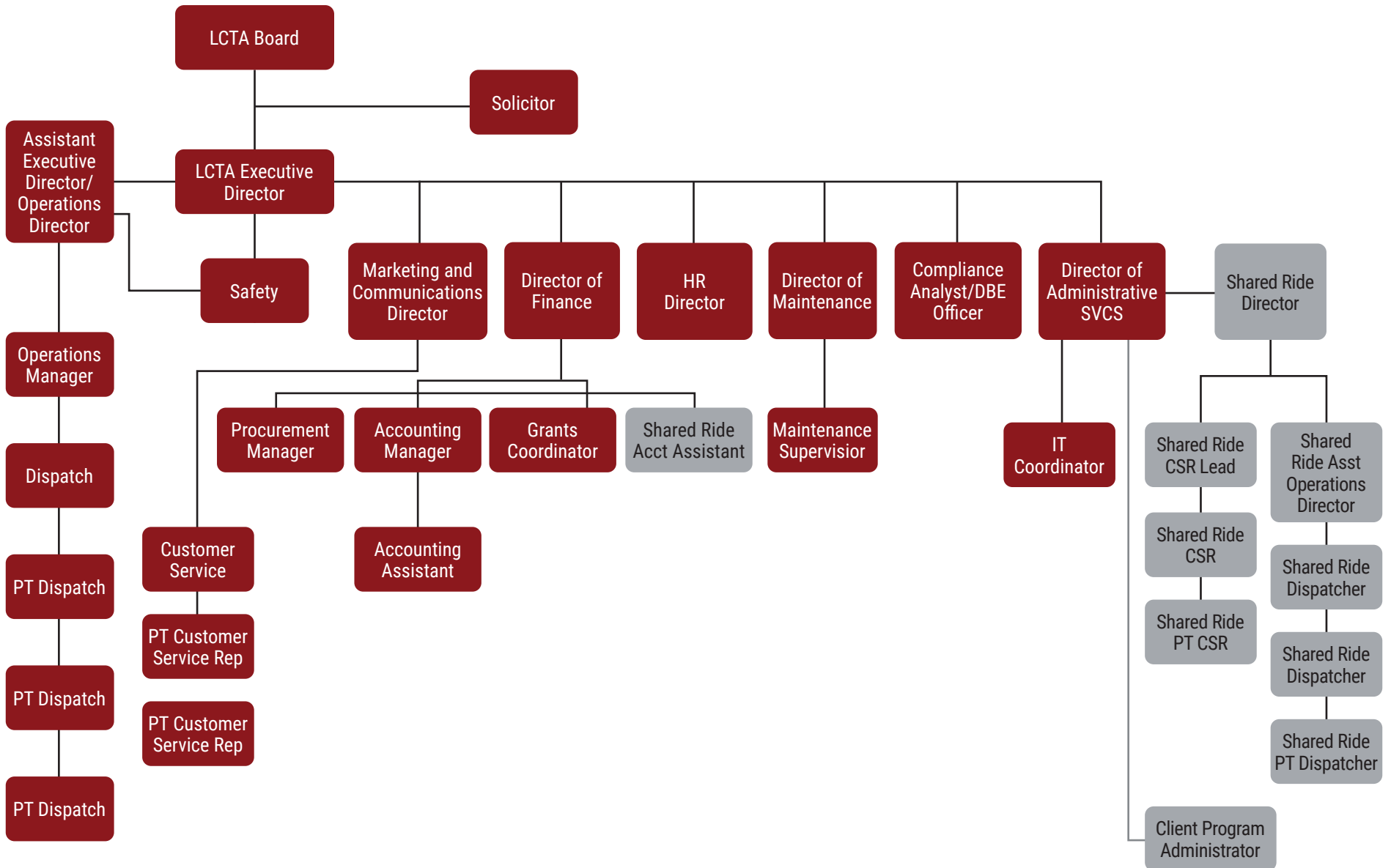


Figure 2: LCTA Organizational Structure 2023



VISION, MISSION, AND SERVICE GOALS

The vision, mission, service goals and objectives established for the TDP were created based on priorities previously outlined by LCTA through its 2022 Strategic Business Plan, public feedback obtained through surveys and in-person open-house events, and regional stakeholder feedback gathered from virtual meetings. The vision, mission, service goal and objectives were presented to the LCTA Board of Directors for their and confirmation during the planning process.

Vision Statement

The vision statement is a clear and shared picture of the future an organization seeks to create. The TDP will retain the vision statement outlined in the 2022 Strategic Business Plan.

Mission Statement

The mission statement communicates the purpose of the organization to external stakeholders, system users, and agency employees. The TDP will retain the mission statement outlined in the 2022 Strategic Business Plan.



LCTA VISION

Five years from now, LCTA will be considered the premier public-transit agency in Northeastern PA, with an outstanding reputation built on:



Serving community transit needs



Ethical and proactive management



Efficient operations



Demonstrated high quality customer experience



LCTA MISSION

The mission of LCTA is to provide on-time accessible and affordable public fixed route bus and shared ride van service for regional passengers through efficient operations and well-maintained safe vehicles.

TDP SERVICE GOALS



Provide convenient and reliable service



Improve community mobility and assure high-quality customer service



Support economic growth and a vibrant built environment

Service Goals and Objectives

Goals break down the mission statement into achievable parts, and objectives offer specific ways those goals can be achieved. The 2022 Strategic Business plan outlined eight goals:

- Achieve safe and secure operations
- **Provide convenient and reliable service**
- Implement stable and sustainable finances
- Promote a high performing workforce for the future
- Provide value for money and strong public and policymaker support
- Promote environmental stewardship
- **Improve community mobility and assure high-quality customer service**
- **Support economic growth and a vibrant built environment**

The goals in bold were identified as being the most relevant for the TDP service development and were selected as TDP service goals. Based on the above and confirmed by public and stakeholder feedback, the future implementation of the TDP will strive to meet the goals and objectives shown in Table 1.

Table 1: LCTA Transit Service Goals and Objectives

TDP Service Goal	Objectives
Provide convenient and reliable service	<ul style="list-style-type: none"> • Emphasize customer service in operations and workforce training • Improve service speed and reliability • Emphasize planning and delivery of productive service
Improve community mobility and assure high-quality customer service	<ul style="list-style-type: none"> • Provide public transportation services that add value throughout Luzerne County and facilitate access to jobs, education, healthcare and other needs • Ensure equitable distribution of services and resources • Modernize and improve customer communication infrastructure • Pilot alternative service products • Integrate technology with LCTA services
Support economic growth and a vibrant built environment	<ul style="list-style-type: none"> • Support a strong, diverse, sustainable economy • Address the growing need for transportation services to industrial parks and job centers • Support economic development by using existing transportation infrastructure efficiently and effectively

3 Review of Existing System

OVERVIEW OF EXISTING SYSTEM

LCTA is a municipal authority that provides safe and reliable public transit service in Luzerne County. LCTA manages a fleet of buses that operate on fixed routes and a fleet of vans that operate as an on-demand shared-ride transportation service.

Services Provided

Fixed Route Bus Service

LCTA operates a series of fixed route regional and local bus services. Fixed route services follow a predetermined route with set schedules and stops. Regional fixed route bus services connect riders between municipalities in Luzerne County. Local fixed routes operate within cities, boroughs, and their surrounding neighborhoods.

Currently, LCTA runs the following fixed route services shown in Table 2.

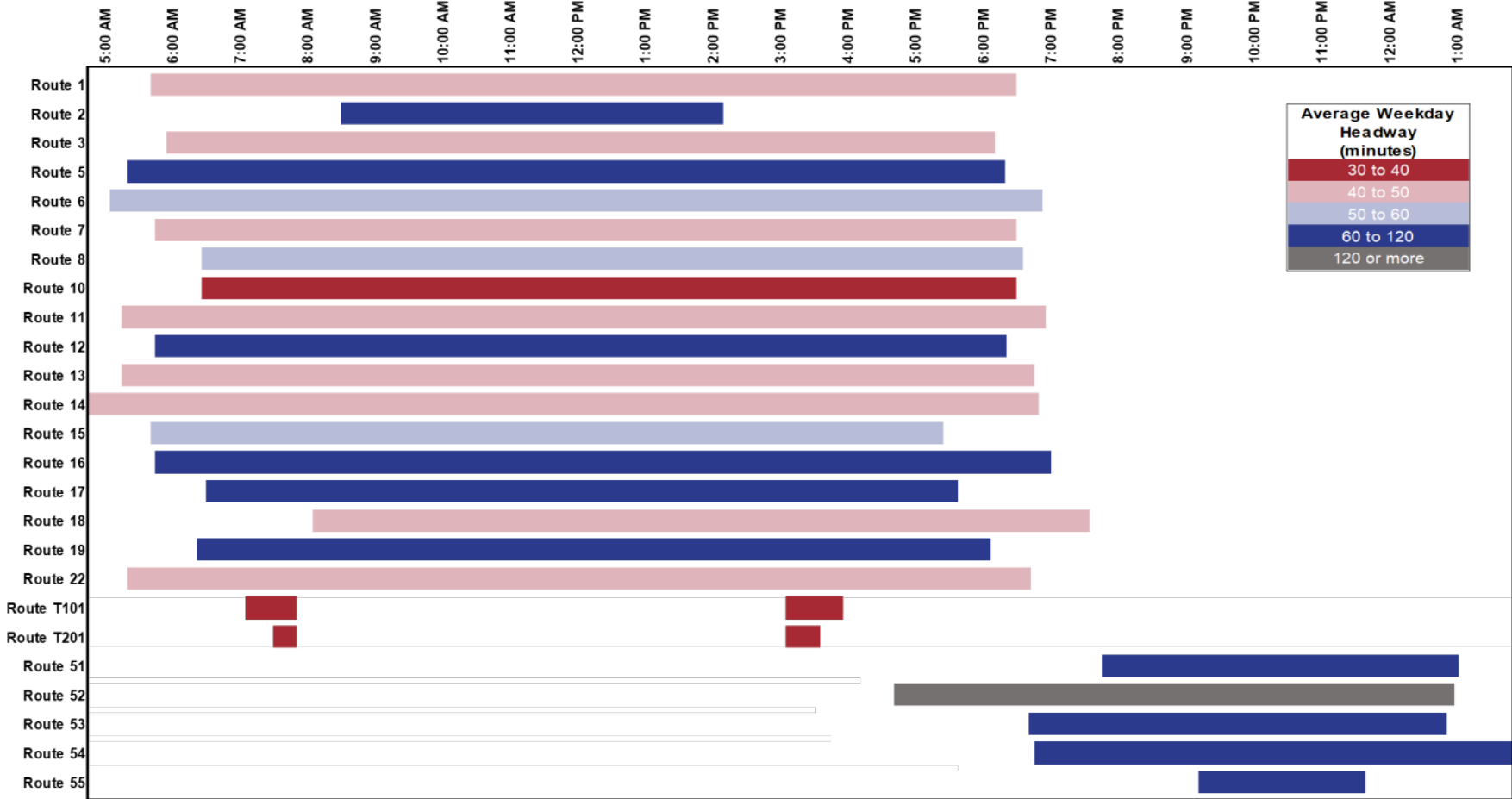
Table 2: Existing LCTA Routes

Route	Weekday Service	Saturday Service
Regular Routes		
Route 1: Miners Mills - Hudson	Yes	Yes
Route 2: Pittston Circulator	Yes	
Route 3: Grove & Brown Heights	Yes	Yes
Route 5: Parsons	Yes	Yes
Route 6: Dallas	Yes	Yes
Route 7: Georgetown	Yes	Yes
Route 8: Swoyersville	Yes	Yes
Route 10: Wyoming Valley Mall	Yes	Yes
Route 11: West Pittston	Yes	Yes
Route 12: Larksville	Yes	Yes
Route 13: Ashley – Sugar Notch	Yes	Yes
Route 14: Nanticoke – Glen Lyon	Yes	Yes
Route 15: Nanticoke – Middle Road	Yes	Yes
Route 16: Old Forge	Yes	Yes
Route 17: Scranton	Yes	Yes
Route 18: Shopper's Delight	Yes	Yes
Route 19: CenterPoint	Yes	Yes
Route 22: Plymouth – Old River Road	Yes	Yes
Tripper Service (T101 and T102)	Yes	
Night Service		
Route 51: Kingston - Pittston	Yes	
Route 52: Mall – Casino	Yes	
Route 53: Westside – L.C.C.C	Yes	
Route 54: Ashley – Hanover – L.C.C.C.	Yes	
Route 55: Georgetown – Blackman Street	Yes	

Fixed route weekday operations begin at 5:00 am and continue to 1:00 am, although actual service time varies by route. The majority of fixed routes end operations by 7:00 pm and five routes provide night service (see Figure 3). Tripper Service are helper buses for Routes 1, 5, and 16 during the morning and afternoon peak periods intended to support trips to schools for both workers and students. Saturday operations begin at 9:00 am and continue to 6:00 pm and vary by route (see Figure 4). No service operates on Sundays.

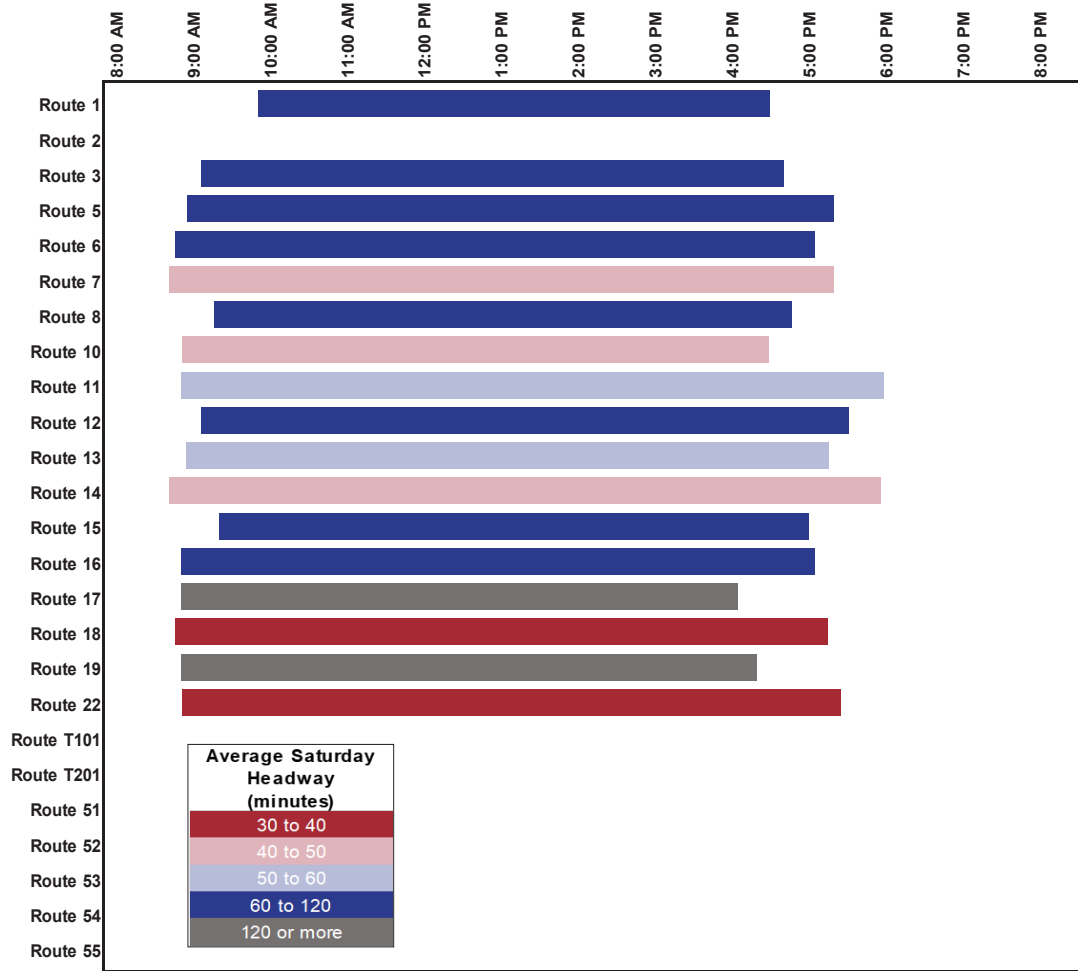
The following figures show the average headway or time between consecutive buses on a given route, which can be highly variable in the current system.

Figure 3: Existing Weekday Level of Service



Note: Color-coded headways are representative of daily average across the entire span of service. Actual headways may be shorter during certain times of the day.

Figure 4: Existing Saturday Level of Service



Note: Color-coded headways are representative of daily average across the entire span of service. Actual headways may be shorter during certain times of the day.

Shared-Ride

LCTA offers a shared-ride service for the general public. Residents enrolled in the following programs receive subsidized service:

Senior Citizen Transit Program

Provides reduced fare trips for residents over 65 within Luzerne County

Medical Assistance Transportation Program (MATP)

Offers transportation to and from medical providers at no cost to medical assistance recipients both within and outside of Luzerne County

Special Transportation Efforts Program (STEP)

Provides rides to residents with disabilities to and from destinations within ¾ -mile of LCTA bus routes

Persons with Disabilities Program (PwD)

Provides transportation to people with disabilities who live in areas without fixed-route bus service. Transportation is provided to and from destinations more than ¾ -mile away from LCTA bus routes.

The LCTA shared-ride program provides on-demand trips without predetermined schedules and stops. The rider may share the transit vehicle with others and may not be taken directly from their origin to their destination in order to accommodate the needs of all passengers. Riders must apply in advance to use the service. A reservation is required at least one business day in advance before 12:00 pm. Trips can be scheduled by calling the LCTA's Shared Ride Department between the hours of 8:00 am to 4:00 pm, Monday through Friday. STEP program reservations can be reserved until the end of the day prior to the appointment. Customers are given a 30-minute pickup window during which the driver will arrive.

LCTA's shared-ride service follows the hours shown in Table 3. The service area includes all of Luzerne County except for Medical Assistance and STEP program rides, which can also include limited destinations outside of Luzerne County.

Table 3: Existing LCTA Shared-Ride Service

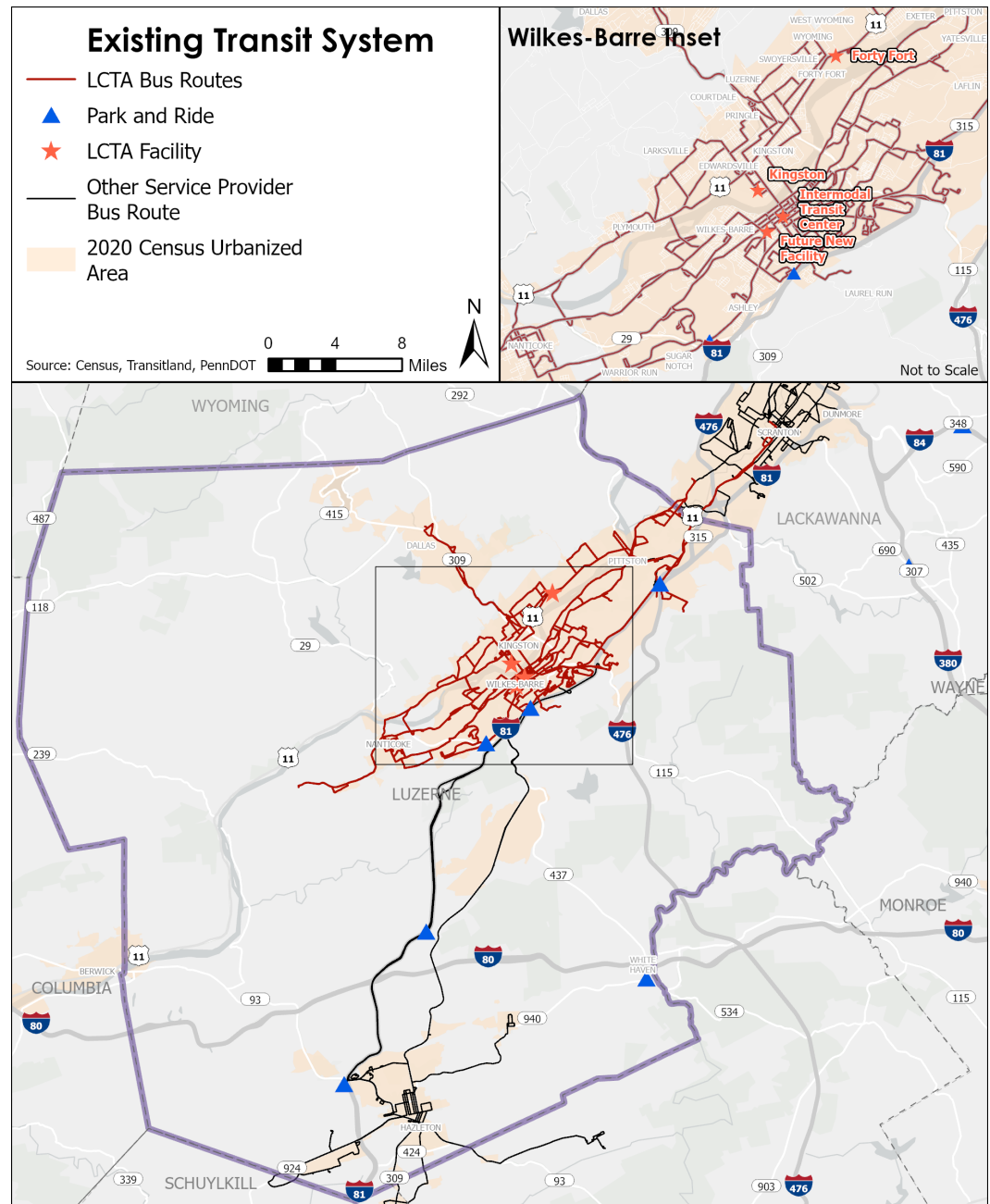
Service	Service Hours	Service Area
Monday through Friday Service		
Senior Citizen	8:30 am – 5:00 pm	Within Luzerne County to destinations within Luzerne County
Medical Assistance	9:00 am – 5:00 pm	Within Luzerne County to appointments covered by medical assistance, including limited destinations out of county
STEP	While fixed route buses are running	Within Luzerne County to destinations within Luzerne and Lackawanna Counties that are within ¾ mile from a bus route
Persons with Disabilities	8:30 am – 5:00 pm	Within Luzerne County to destinations within Luzerne County that are more than ¾-mile from a bus route
Saturday Service		
Senior Citizen	8:30 am – 5:00 pm	Same as above
STEP	While fixed route buses are running	Same as above
Persons with Disabilities	8:30 am – 5:00 pm	Same as above



Areas Served

LCTA serves 31 municipalities within the Wilkes-Barre urbanized area. This service area is 64 square miles and covers a population of 295,020 according to the most recent 2022 National Transit Database (NTD) report. This includes both urbanized and rural areas. Figure 5 shows existing transit service in and around the county.

Figure 5: Existing System Map



System Profile

Table 4 shows a snapshot of system-level metrics as reported in LCTA's 2022 NTD report.

Table 4: Luzerne County Transit System Profile

Metric	2022 Measure
Service Area	64 square miles
Service Area Population	295,020
Service Types	Bus (Fixed Route) Demand Response (Shared-Ride)
Service Days Operated	Monday – Saturday
Active Vehicles / Operated in Maximum Service	
Fixed Route	40 / 32
Shared-Ride	49 / 30
Unlinked Passenger Trips (Fixed Route)	
Average Weekday	2,400
Average Saturday	908
Annual Total	671,209
Unlinked Passenger Trips (Shared-Ride)	
Average Weekday	398
Average Saturday	64
Annual Total	105,900
Total Actual Vehicle Revenue Hours	
Fixed Route	87,838
Shared Ride	36,997
Total Actual Vehicle Revenue Miles	
Fixed Route	1,203,261
Shared Ride	661,377
Total Operating Expenses	\$14,194,908
Total Directly Generated Funds	\$1,345,612

Facilities

Passenger Facilities

The James F. Conahan Intermodal Transit Center, located at 47 S Washington Street, Wilkes-Barre, PA, serves as the main hub of the system. The transit center opened in 2010 and it acts as a trip origin, trip destination, transfer station, and ticket sales location for the LCTA system.

PennDOT offers three free-of-charge park and ride lots to customers within LCTA's service area. Park and ride facilities offer users the option to drive to a central location and then board a bus or carpool to reach their final destination. The park and ride lots are listed in Table 5 and mapped in the previous Figure 5.

Table 5: Park and Ride Lots

Park and Ride Lot	Location	Routes Served
Sugar Notch / Ashley	343-359 S Main St, Wilkes-Barre, PA 18706	13
Casey Ave / Interstate 81 Exit 165	917 Wilkes Barre Township Blvd, Wilkes-Barre Township, PA 18702	3, 55
Dupont / Yatesville	213 PA-315, Pittston, PA 18640	None (17, 19, 52 travel by but do not stop at lot)

Operations and Maintenance Facilities

The LCTA fixed route operations and administrative offices are located at 315 Northampton Street, Kingston, PA. Shared-ride facilities are located at 2009 Wyoming Avenue, Forty Fort, PA. Passengers can purchase physical tickets at both locations.

In 2019, the LCTA began considering plans for a new administrative headquarters. The site of the former Murray Complex in Wilkes-Barre, located on South Pennsylvania Avenue, was acquired in 2019. Construction began in 2021, and the new facility is expected to open in March 2024. The site will consolidate the LCTA fixed route and shared-ride operations and administrative offices into one facility and include a new natural gas fueling station. Locations are mapped in the previous Figure 5.

Fare Structure and Payment Methods

LCTA accepts cash, paper tickets, smart card, and passes. The fixed route bus fare structure is shown in Table 6. LCTA offers four reduced fare passes: Day Pass, 10 Ride, 20 Ride and 31 Day. Payment for fixed route bus fare and reduced fare passes can be made through [LCTA Smart Pay](#), the mobile payment system of LCTA.

Table 6: Fixed Route Fare Structure

Fare Structure	
Standard Fare	\$1.75
Transfer	\$0.75
Children (under 42 inches)	Free
Senior Citizens (age 65 and over)*	Free
People with Disabilities**	1/2 of standard fare
People with Medicare Card	1/2 of standard fare

* With a valid State Transit ID Card

** With a valid Reduce Fare ID Card

The fare for the LCTA shared-ride service is based on distance traveled and applicable rider program (see Table 7). Payment occurs through a pre-paid balance service using the Ecolane Evolution platform.

Table 7: LCTA Shared Ride Fare Structure

Type	0 < 2 Miles	2 < 4 Miles	4 < 6 Miles	6 < 10 Miles	10 < 16 Miles	16+ Miles
Senior Co-Pay	\$2.50	\$2.80	\$3.20	\$4.20	\$6.00	\$6.75
Medical Assistance Co-Pay	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
STEP Co-Pay	\$3.50	\$3.50	\$3.50	\$3.50	\$3.50	\$3.50
Persons with Disability / ADA Co-Pay	\$3.50	\$3.50	\$3.50	\$4.20	\$6.00	\$6.75

Other Transportation Service Providers

Luzerne County is bordered by Wyoming, Lackawanna, Monroe, Carbon, Schuylkill, Columbia, and Sullivan Counties. Existing transit service in Luzerne County primarily serves the Wilkes-Barre and Wyoming Valley areas, which leads to interactions with many of the transit agencies listed in the following section.

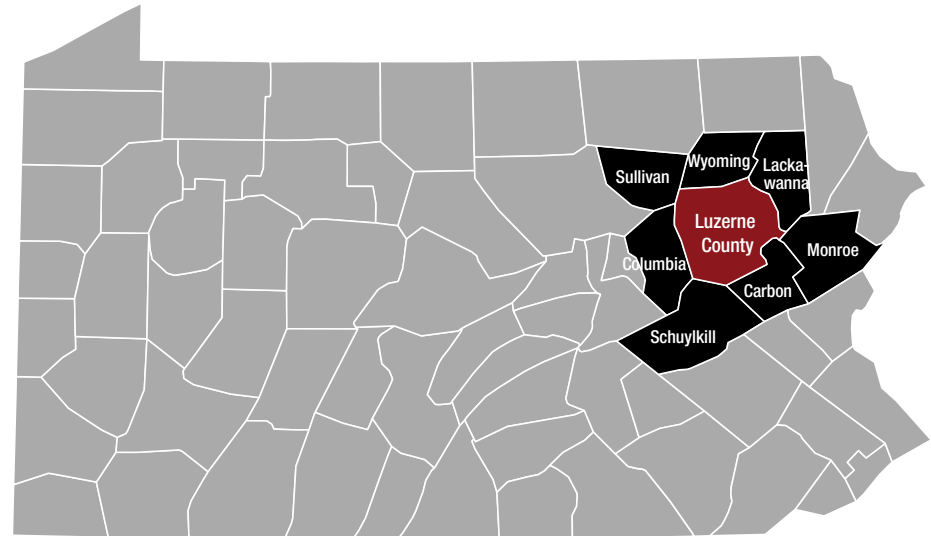
Neighboring Transit Services

The County of Lackawanna Transit System (COLTS) operates transit services in Lackawanna County. Route 26 intersects with the LCTA system at the Mohegan Sun and VA Medical Center stops in Wilkes-Barre. This route operates 3 trips in each direction from 9:15 am to 5:30 pm on weekdays and 9:15 am to 4:20 pm on Saturdays. The Mohegan Sun stop connects to LCTA Routes 1, 5, 17, and 52 while the VA Medical Center connects riders to Routes 10 and 17, which travel to the Intermodal Transportation Center where riders can access other LCTA routes. Route 28 connects to the intersection of Main Street and Broad Street in Pittston and operates 13 trips in each direction between 5:15 am and 7:10 pm on weekdays and 11 trips in each direction from 7:15 am to 7:00 pm on Saturday. The Main Street and Broad Street stop connects with LCTA Routes 2 and 11. Connections are also available to LCTA Routes 16 and 17 at locations in Old Forge and Moosic. COLTS also provides a shared-ride paratransit service for county residents to travel to destinations within $\frac{3}{4}$ -mile of COLTS bus routes, including Route 26 which travels into Luzerne County.

Lackawanna and Luzerne counties are joint members of a Metropolitan Planning Organization (MPO) which was established as a result of the 1973 Federal Highway Act with the purpose of distributing federal and state funds for highway and bridge projects within the two-county area. Due to their proximity, existing service, and history of cooperation, Luzerne and Lackawanna Counties transit services frequently interact and often collaborate on regional planning efforts.

Hazleton Public Transit operates a transit system in and around Hazleton in Luzerne County. Route 15 intersects with the LCTA system in Wilkes-Barre with common stops at the Wyoming Valley Mall, Mohegan Pennsylvania casino, and the Intermodal Transportation Center in Wilkes-Barre. In Hudson, Route 15 intersects with LCTA's Route 17 and it intersects with all of LCTA's routes at the Intermodal Transportation Center in Wilkes-Barre. In addition to its fixed route service, HPT offers a shared-ride program that operates within Luzerne County.

Other Transit Systems The transit systems of the other surrounding counties, including Monroe, Carbon, Schuylkill, Sullivan, Wyoming, and Columbia, do not currently have any connections to existing LCTA service.



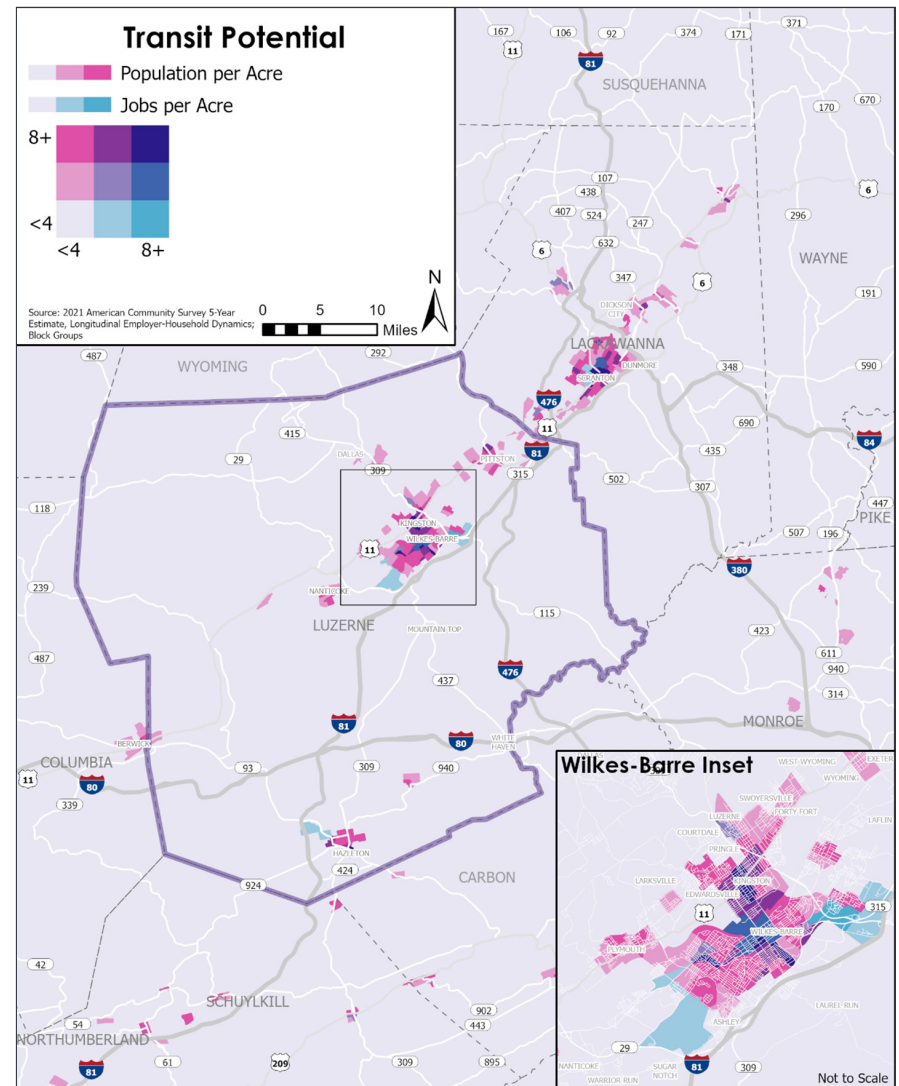
COMMUNITY PROFILE

While all county residents can benefit from a robust and convenient public transportation system, certain areas are more likely to utilize transit because of their demographic makeup. Some factors, such as population density, employment location, age, income, and health, can make a person more or less likely to use public transportation. A person's likelihood to use public transportation, also called propensity, can be measured on a population level by determining the concentration of each of these factors in the population of a given area. A market assessment was conducted using these factors for Luzerne County. The demographic information presented in this section was sourced from the U.S. Census Bureau's 2021 American Community Survey (ACS) 5-Year Estimate. The employment data was sourced from the most recent available 2019 Longitudinal Employer-Household Dynamics (LEHD) estimate.

Population and Employment

Two key drivers of transit demand are population and employment. The transit potential map, shown in Figure 6, illustrates both the population density and the job density of Luzerne County. The majority of Luzerne County is shown light purple, which indicates both low job and low population density. Areas that have higher density, shown in darker pinks and blues, are concentrated along the Wilkes-Barre to Scranton corridor that runs between Luzerne and Lackawanna counties.

Figure 6: Luzerne County Transit Potential (Population and Employment Density)



Over the next two decades, the population in the region is expected to remain relatively consistent. Figure 7 shows the projected population growth in 2040 and was developed by the Lackawanna-Luzerne Counties Joint Comprehensive Plan in 2021. From 2018 to 2040, the county is expected to grow by approximately 17,000 people (5.4%). Figure 8 shows the anticipated growth areas in relation to urban centers, industrial parks, and the transportation network.

Figure 8: Luzerne County Future Land Use

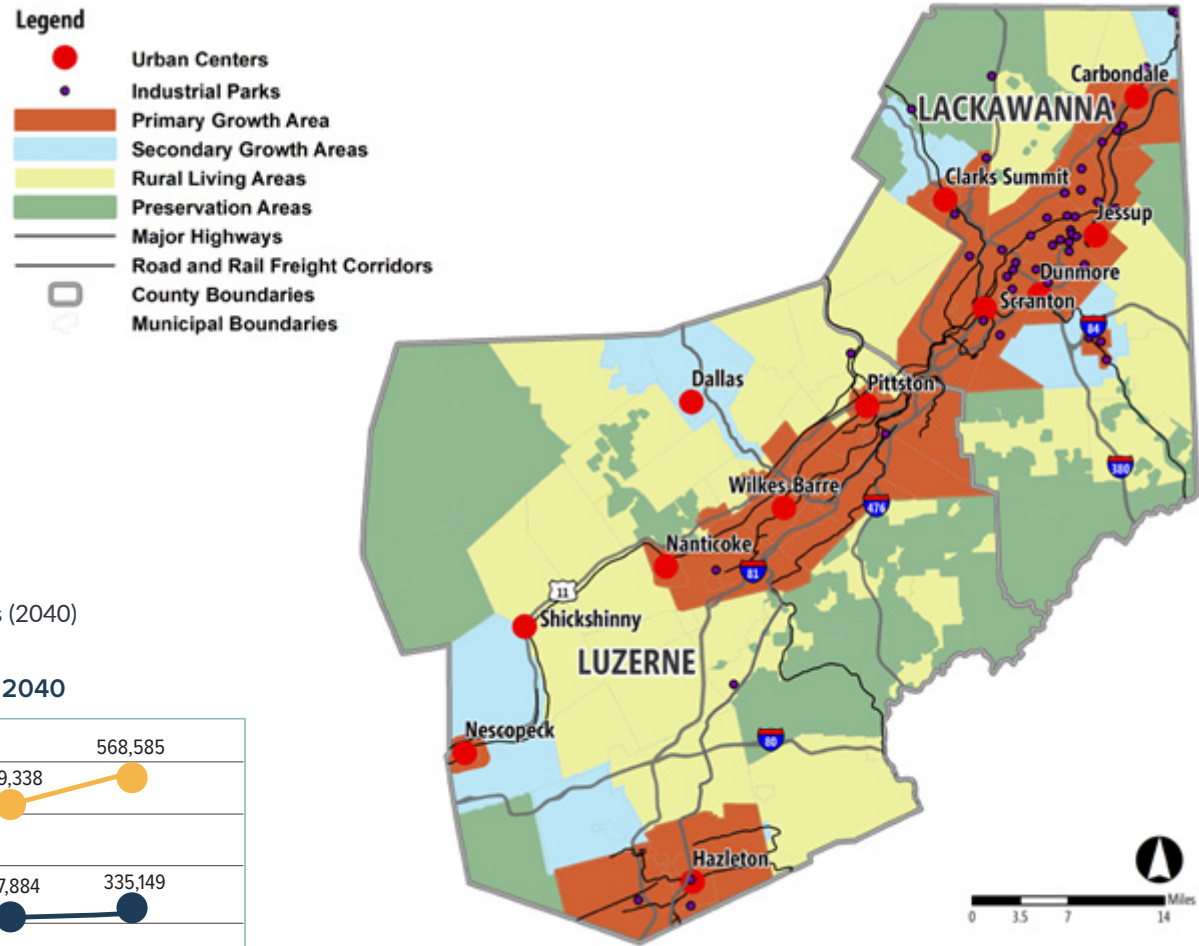
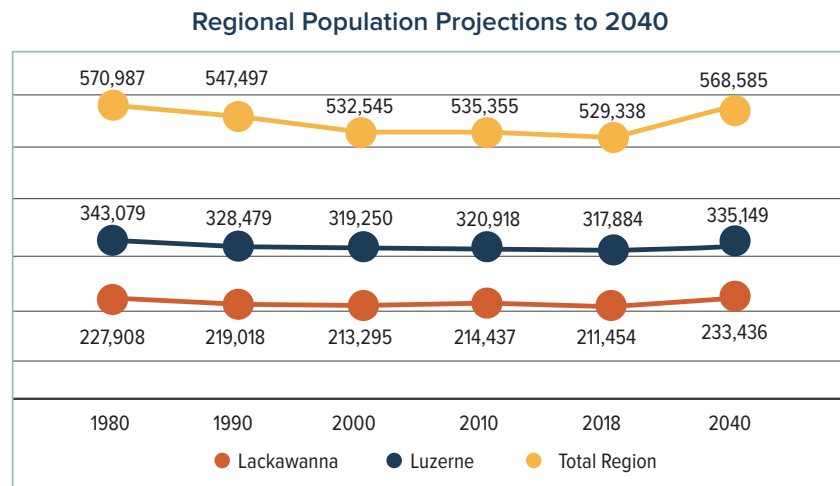


Figure 7: Luzerne County Regional Population Projections (2040)



Complete Economic and Demographic Data Source (CEDDS), from Woods & Poole Economics, Inc. for 2040 projections.

Source: Lackawanna-Luzerne County Joint Comprehensive Plan & Long Range Transportation Plan (2021)

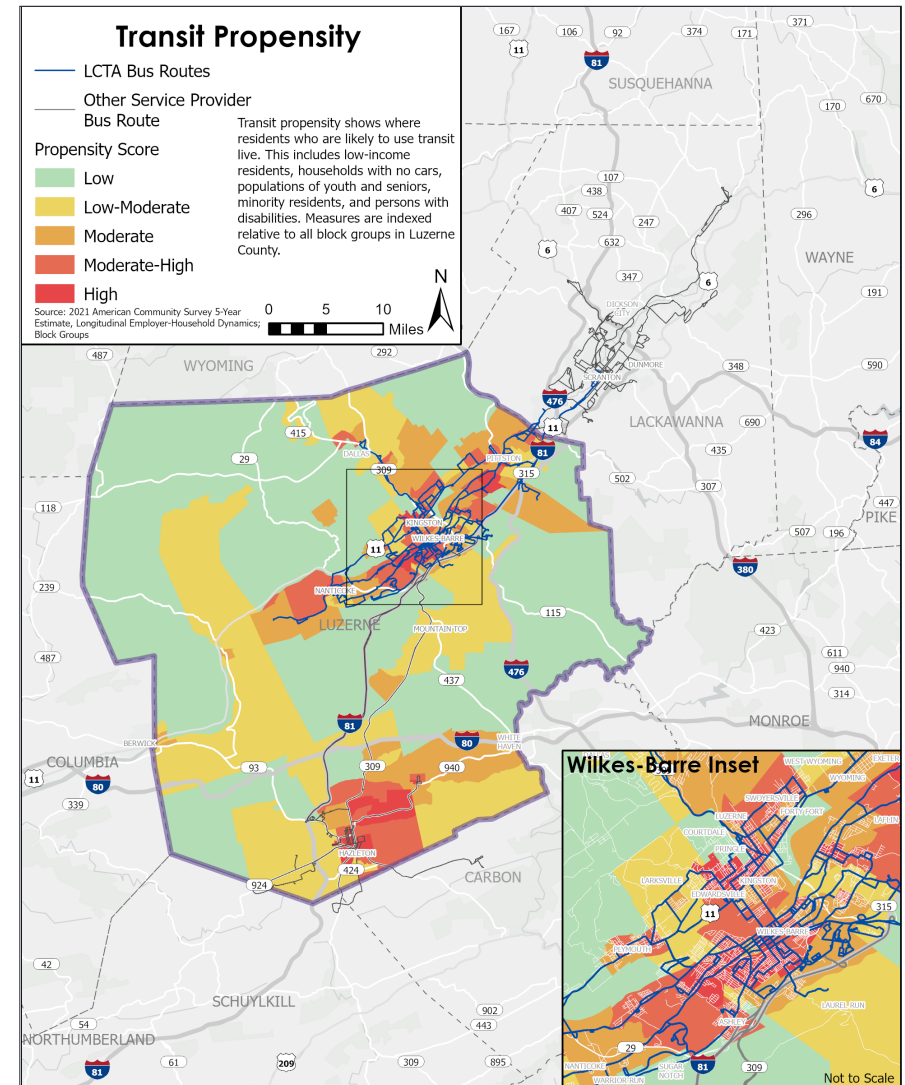
The Pennsylvania Center for Workforce Information & Analysis's April 2023 County Profile report provides information about the type of employment offered in Luzerne County. In 2021, the top four employment industries measured by number of employees in the county were Health Care and Social Assistance (17.4%), Transportation and Warehousing (13.7%), Retail (11.6%), and Manufacturing (11.6%). The 2020 Long-Term Project report, which considers the Scranton-Wilkes-Barre-Hazleton Metropolitan Statistical Area, anticipates a 6.4% change in employment across all industries by 2030. This represents an average annual change of 1,594 jobs across the statistical area. As the county grows its population and expands its employment opportunities, its residents may request more access to public transportation.

Transit Propensity

Socio-economic and demographic information is necessary to understand markets within Luzerne County and areas with a higher likelihood of transit use. Multiple factors were combined into a single index called transit propensity. Propensity can be calculated for a given area by measuring the demographic traits correlated with higher-than-average transit ridership, such as age or income, and the population density of the area. Propensity is meant to transform multiple factors into a single summary that can be used to assess a population's needs and desires for public transportation. This analysis used the following factors when defining propensity:



Figure 9: Luzerne County Transit Propensity



Transit propensity should be considered along with other factors such as overall population and employment density. For example, an area may have a population with a high propensity for using transit but have a low density and therefore be challenging to efficiently serve.

Figure 9 shows transit propensity for Luzerne County. Much like the previous population and employment density maps, there is a concentration of higher propensity scores along the Wilkes-Barre to Scranton corridor.

The majority of the Moderate-High and High propensity scoring census block groups in the Wilkes-Barre region are adjacent to existing bus routes.

There are some higher-propensity areas outside of the Wilkes-Barre urban area that are not directly adjacent to existing bus routes. The Hazleton region in the south of the county is served by HPT, another regional transit provider. However, there are areas in or near Wilkes-Barre with Moderate-High or High propensity scores that may be opportunities for additional connections to transit given their walking distance to existing bus stops:

- Low-density areas to the west of Nanticoke
- Korn Krest neighborhoods north of Sans Souci Parkway
- Lee Park neighborhood south of S Main Street
- Ashley Park
- East end of Kingston near the Kingston Recreation Center
- West of Dallas near Back Mountain
- Pittston neighborhoods north of William Street and east of N Main Street



MOBILITY

Travel Patterns

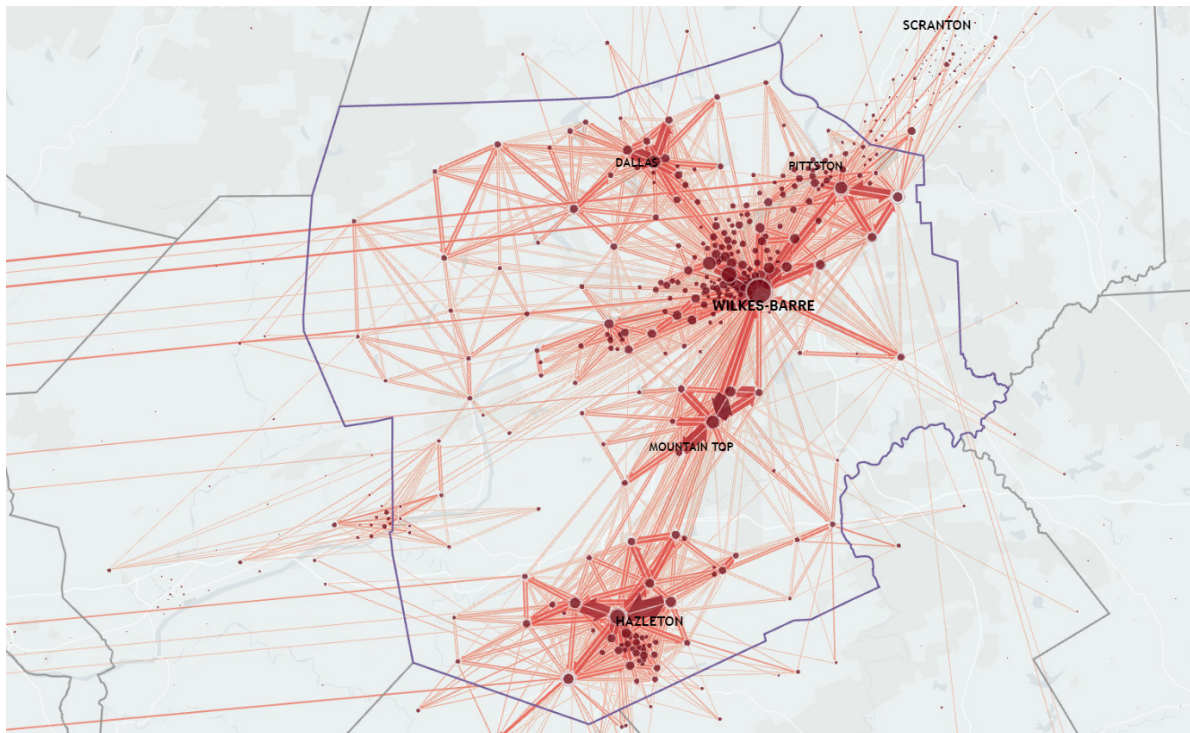
In order to best serve Luzerne County residents with reliable, practical, and affordable transit options, it is important to understand how they travel. The mobility modeling software Replica was used to better understand travel patterns of Luzerne County residents. The most recently available data was used, Fall 2021, for an average Thursday (weekday) and Saturday (weekend).

Travel patterns analyzed include origin-destination, time of day, and trip purpose for all types of travel—not just public transit. The primary findings included:

- Nearly 90 percent of all trips beginning in Luzerne County also end in Luzerne County.
- The strongest origin-destination relationships are between and within the densest population and development centers and their surrounding municipalities.
- There are relatively few trips between Scranton and Wilkes-Barre compared to between Wilkes-Barre and other surrounding municipalities such as Dallas, Pittston, Mountain Top, and Hazleton.
- Weekday travel peaks are from 7:00 am to 9:00 am and 2:00 pm to 6:00 pm, coinciding with commutes to and from work and school. Weekend travel is consistently heavy from 10:00 am to 7:00 pm but reaches its peak between 12:00 pm and 1:00 pm. Most weekend trips are for residents returning home from their weekend activities, which primarily include shopping and eating.

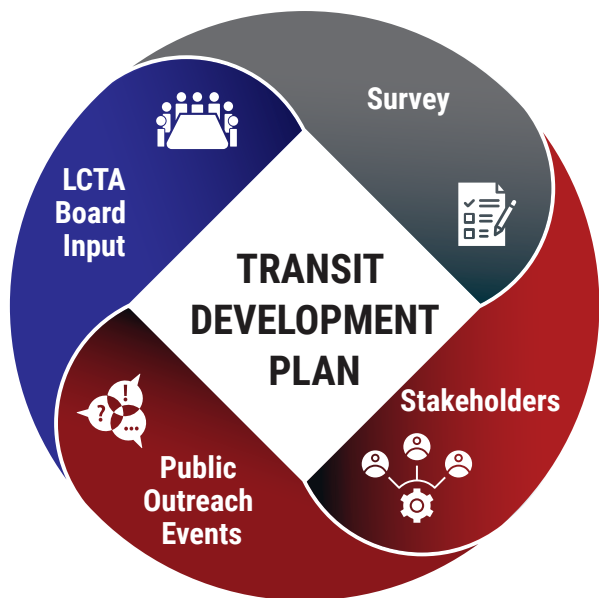
Overall, these travel patterns supported the need for transit options between Wilkes-Barre and its immediate neighbors rather than focusing on connections to Scranton, while this remains an important regional connection. Within communities, transit options that provide service between residential and employment centers during the week and between residential and commercial centers on weekends would align with these travel patterns.

Figure 10: Weekday Travel Patterns of Luzerne County Residents



The origin-destination of trips from all modes of transportation are shown here. Data is sourced from the mobility modeling software Replica for an average Thursday in Fall of 2021. Thicker lines represent a greater number of trips.

4 Public Outreach



In addition to data analysis, the TDP was shaped by public input, stakeholder interests, and LCTA Board of Director input.

LCTA solicited public input through a variety of outreach activities. Information about the TDP effort was posted on the LCTA website, LCTA social media channels, and in print in high-exposure locations. A survey was published in print and digital formats and was supplemented with two in-person open-house style events.

PUBLIC INPUT

An online and printed survey was distributed through print advertisements, social media, text and e-mail pushes to riders, and in-person. The survey was available in both English and Spanish. In-person surveys were conducted on Tuesday May 2, 2023 onboard multiple bus routes. The survey was open between April 27, 2023 and May 31, 2023.

To supplement the survey, two open-house style events were held. On May 2, 2023 an event was held at the James F. Conahan Intermodal Transportation Center in conjunction with LCTA's Riders Appreciation Week to solicit input from current users. On May 20, 2023 the project team hosted a booth at the Fine Arts Fiesta, a popular community event. Attendees at these events were encouraged to share their priorities for improvement and complete the survey.

The public survey received 175 responses from residents in and around Luzerne County (147 online surveys and 28 paper/in-person surveys). Key conclusions from the survey include:



48% of respondents travel via LCTA services.



65% of respondents use transit because they do not have access to a car or are unable to drive.



39% of respondents use transit to go shopping.



25% of respondents use transit to run errands.



61% of respondents use transit more than once per week.



61% of respondents rated Luzerne transit as "excellent" or "good."

Among respondents, the three highest priorities were:



extended service hours



more frequent buses



more connections

Upgrades to the mobile app and bus stops were also often requested. Approximately 71% of respondents indicated the transit amenity improvement they'd most like to see most is upgraded bus stops, including better signage, more shelters, and benches. Many praised the safety and accessibility of the LCTA system.

STAKEHOLDER INPUT

Stakeholders from local government, human services, education, and business groups were engaged in the TDP process. Stakeholders were encouraged to attend one of three virtual meetings held in May 2023 to introduce the planning process and gather input on needs and priorities. The three highest priorities for stakeholders were:



more frequent buses



extended service hours



more connections

Note that though the order is different, there was alignment between the public and stakeholder priorities.

In December 2023, another round of meetings was held with stakeholders to present the draft service improvement plan.

BOARD OF DIRECTORS INPUT

Feedback was gathered from the LCTA Board of Directors at multiple points during the planning process. On June 27, 2023, the project team met with the LCTA Board of Directors to discuss the project, public and stakeholder feedback, as well as gather Board opinions and insight. The outcome was confirmation of the vision, mission, and service goals for the TDP. The project team also met with the Board on November 20, 2023 to present the draft service improvement plan and gather additional feedback.



5 Service Improvement Plan

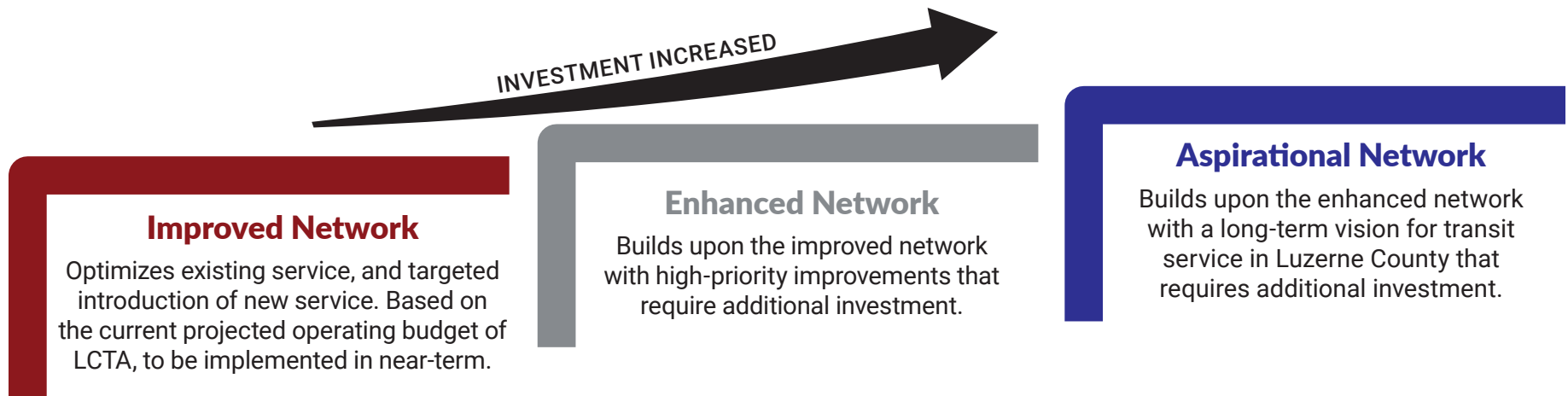
SERVICE RECOMMENDATIONS

Service improvement options were developed in a collaborative process with LCTA staff, including input from several bus operators at a service planning workshop. The improvements aim to achieve the vision, mission, and service goals TDP, and address needs and opportunities identified through the TDP process.

Recommendations for improved service were influenced by four key design principles:

- Service Legibility – routes and schedules should be easy to understand and navigate, regardless of the user’s familiarity with the system.
- Route Linearity – routes should travel in a linear and direct path to reduce travel time and improve system comprehension.
- Bidirectional Service – routes should be aligned so that inbound and outbound stops mirror each other on the same street where possible. This enables passengers to be dropped off in the same location they were picked up. Long, one-way loops should be avoided.
- Service Classification – the type of service offered in an area should match its needs, and routes should be designed for a particular purpose.

Improvement options were developed and packaged into three service plan alternatives that represent increasing levels of investments:



A summary of the recommendations included in each alternative network are listed below, including changes to individual routes and system-wide summary maps. Individual route maps, showing changes to routes in more detail, are included after the three networks. All levels of service (frequency of buses and service hours) are at a planning-level and are subject to refinement as LCTA undergoes its scheduling and budgeting processes.

For some routes, frequencies may change in response to travel demand. A route may have a different frequency in its “peak” service period (assumed to be three hours in the morning and three hours in the afternoon), when travel demand is the strongest, than in its “off-peak” service period, when there is less ridership. Using different frequencies during off-peak times can enable limited resources to be used efficiently. Night service is typically any service after 6:30 p.m.

In addition to traditional fixed route service, several areas within Luzerne County were identified as candidates to pilot an alternative demand response type of service commonly referred to as microtransit. Many transit systems across the country, including several in Pennsylvania, have implemented microtransit to supplement fixed route or to maintain coverage to areas that are inefficient to serve with a fixed bus route. Common characteristics of microtransit include:

On-demand

service responds and is dispatched to riders in real-time.



Technology-enabled:

technology supports real-time ride requests, dynamic and optimized routing, and payment through a smartphone app, website, or via phone call.



Flexible

accommodates riders whose schedule may not fit into fixed route service timings.



Zone-based

trips start and end in a predefined area with opportunities to connect to existing fixed routes.



Smaller vehicle

operated with smaller vehicles than fixed route service to reach areas full size buses cannot.



Suitable zones are typically areas characterized by a population with a high propensity for transit use (e.g., need) but a lower density of people and jobs. The lower density usually presents a challenge for traditional fixed route service but makes it ideal for on-demand service.

Due to the difficulty of serving large industrial parks and lower-density areas with traditional fixed route bus service, microtransit zones were prioritized for the areas of CenterPoint-Grimes-Pittston, Hanover, and Nanticoke-Glen Lyon. This service would be tested as a pilot program, with the option to expand or adjust service areas in response to demand and feedback from customers during the pilot.

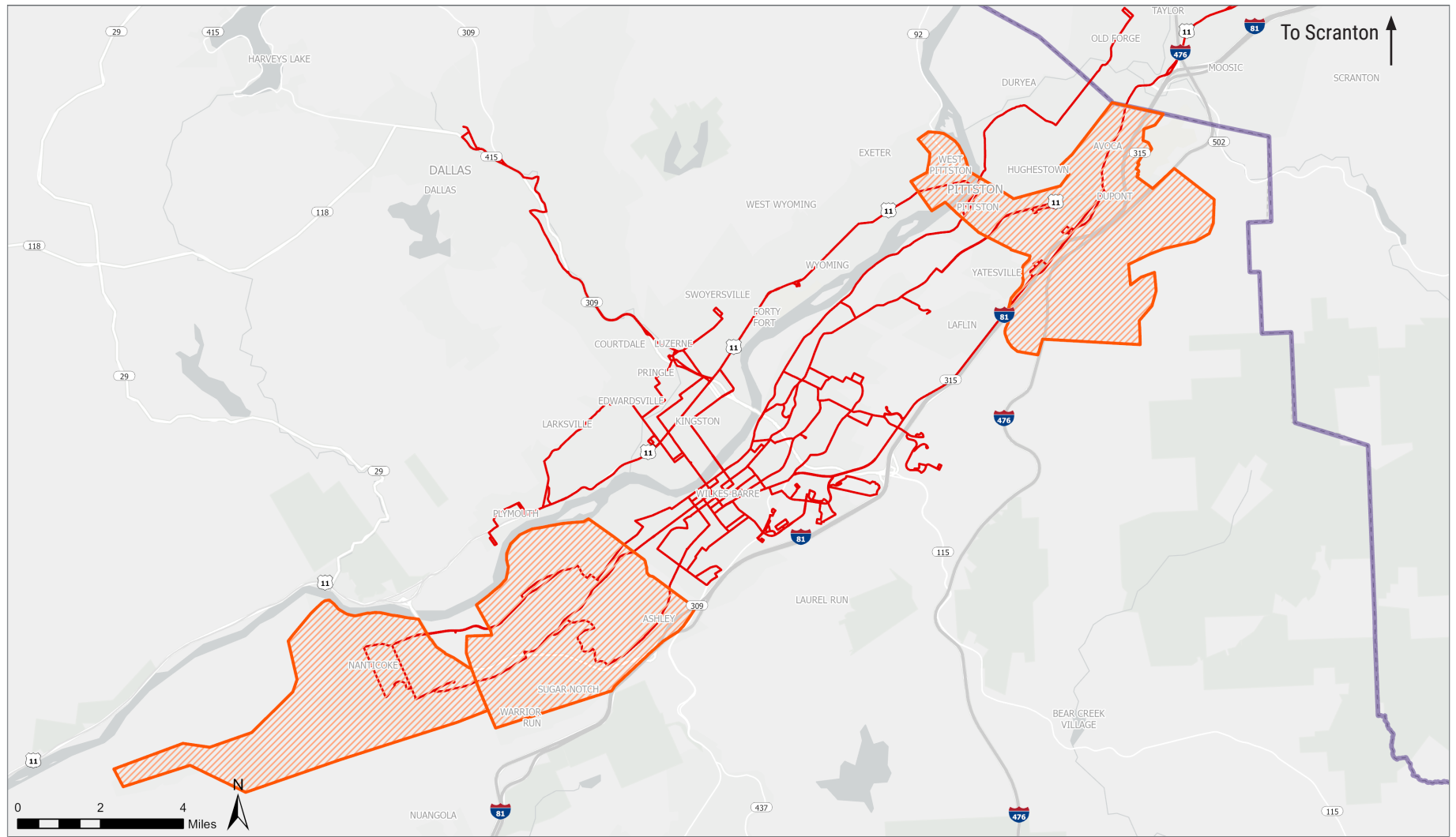
Improved Network



The improved network focuses on optimizing existing routes for improved service legibility, bidirectional service, more direct and linear travel, and more frequent buses in key areas. Existing routes with large one-way loops or excessive deviations were streamlined to make the system easier to understand and to use from the customer perspective.

The improved network consists of the following recommendations:

- **Route 1:** Split into two routes, Route 1 (Miners Mills) and Route 2 (Hudson), that meet at the Mohegan Sun Casino to improve service legibility and operate the same service pattern all trips.
- **Route 2:** Discontinue route and replace with on-demand microtransit service (see recommendation below)
- **Route 3:** Realign route to travel on High Street on every trip instead of alternating with Grove Street and operate the same service pattern on all trips.
- **Route 5:** Realign route to travel bidirectionally between Parsons and the Geisinger Medical Area. Add new connection to Wilkes-Barre Area Career and Technical Center on outbound trips and serve the casino in both directions on all weekday and Saturday trips.
- **Route 6:** Realign service through Trucksville, Shavertown, and Dallas to provide the same routing on streets in both directions (e.g., bidirectional service to Weis Markets) on all trips.
- **Route 7:** Realign as a new Route 7 that operates on weekdays and Saturday that provides direct crosstown connections from the Luzerne Shopping Center to the Wilkes-Barre Walmart via Edwardsville, Kingston, Intermodal Transit Center, Kohl's, and Wegmans. As a result, fixed route service into Georgetown and Laurel Run trailer park is discontinued due to low use.
- **Route 8:** Realign as new Route 8 that provides connections between the Intermodal Transit Center, Kingston, Edwardsville, and Swoyersville on both weekdays and Saturdays.
- **Route 10:** Realign to streamline service and provide bidirectional service along Mundy Street with connections to East End Center, John Heinz, and Wyoming Valley Mall on every trip.
- **Route 11:** Realign and merge with Route 22 to provide crosstown service along Wyoming Avenue between Plymouth and Pittston, with connection available to new Route 7 at West End Mall for travel to Wilkes-Barre. Realign area served by Route 22 in Plymouth to provide bidirectional service on Shawnee Avenue and new connections to apartments on New Street. Operate the same service pattern on all trips. Provide service to Lynnwood via the Hanover microtransit service when Route 22 is discontinued.
- **Route 12:** Realign route to serve Northampton Street, West Side Mall, and Washington Avenue in both directions on all trips. As a result, service along E. Main Street and Nesbitt Street is discontinued.
- **Route 13:** Realign route to provide faster and more direct service between the Intermodal Transit Center and Hanover Industrial Park. Maintain coverage to areas within and west of Hanover Industrial Park with a new microtransit service.
- **Route 14:** Realign route to truncate in Nanticoke near Prospect Street and Broad Street. Fixed route circulation within Nanticoke and service west to Glen Lyon is removed and provided with a new microtransit service. Operate the same service pattern on all trips.

Figure 15: Improved Network Summary Map



-  Improved Network
-  On-Demand Microtransit Zone



Enhanced Network

The enhanced network expands on the recommendations of the improved network by prioritizing improvements in line with public input: longer weekend hours, more frequent buses, and more connections within Luzerne County.

Additional investment would be needed, and funding has not been identified to implement these changes.

The enhanced network consists of the following recommendations:



Extend Saturday Service Hours

- Expand Saturday service hours to 9:00 a.m. to 6:30 p.m. on all routes operating on Saturday.
- Add Saturday night service to Routes 7, 13, 14, 18, 19, and the CenterPoint-Grimes-Pittston microtransit service on same schedule as weekday service.



Increase Frequency

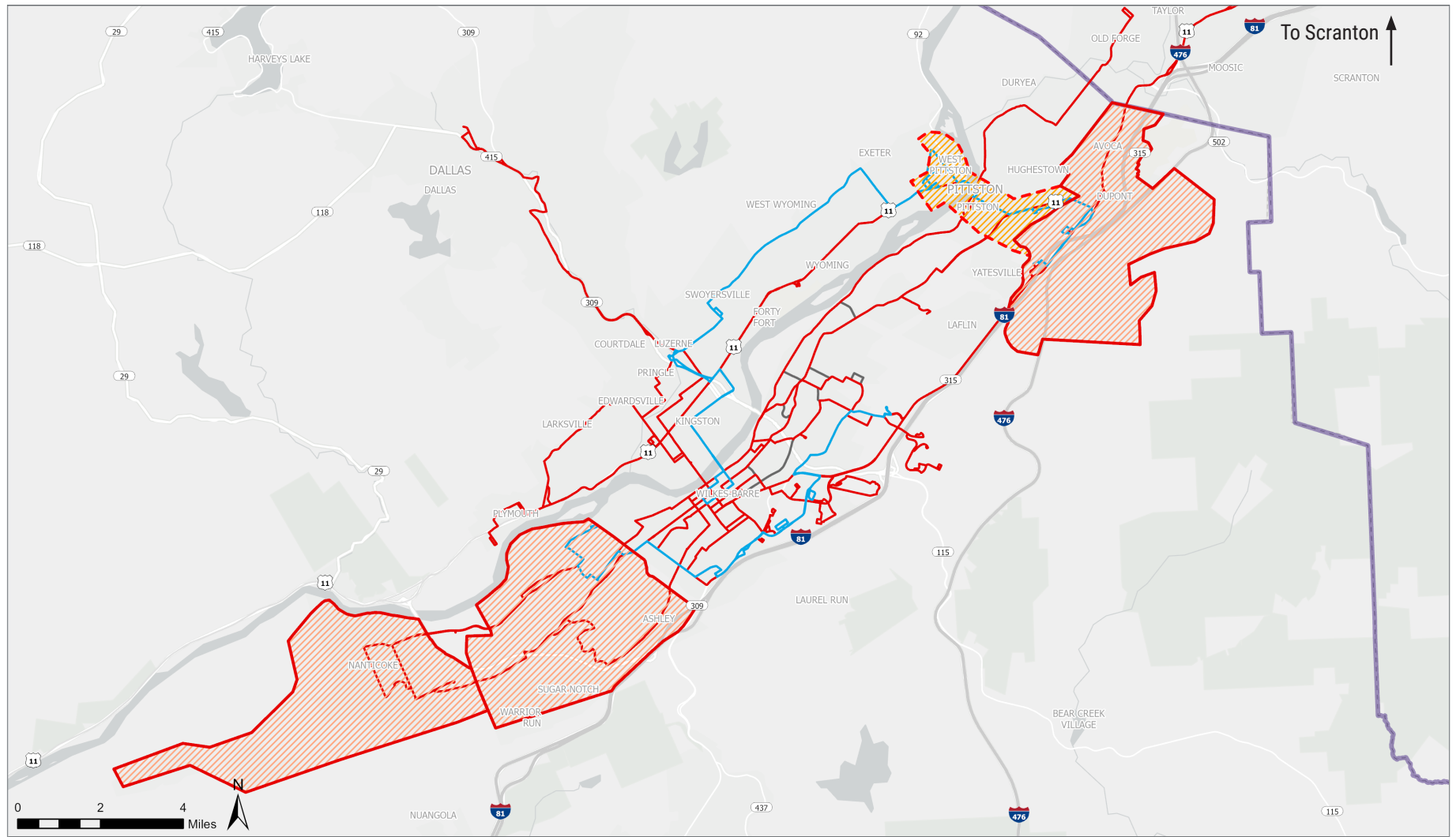
- **Routes 1 and 2:** 60-minute frequency during off-peak and on Saturday, increased from 80 minutes in improved network.
- **Route 5:** 60-minute frequency during off-peak, increased from 90 minutes in improved network.
- **Route 6:** 60-minute frequency during off-peak, increased from 90 minutes in improved network.
- **Route 8:** 60-minute frequency during off-peak and on Saturday between Intermodal and Swoyersville, increased from 80 minutes.
- **Route 11:** 40-minute frequency during off-peak and on Saturday, increased from 60 minutes in improved network.
- **Route 13:** 30-minute frequency all day on weekdays, increased from 60 minutes in improved network.
- **Route 14:** 35-minute frequency during off-peak and on Saturday, increased from 70 minutes in improved network.
- **Route 19:** 60-minute frequency during off-peak and on Saturday, increased from 120 minutes in improved network.
- **Route 20:** 60-minute frequency during off-peak and on Saturday, increased from 120 minutes in improved network.
- **CenterPoint-Grimes-Pittston Microtransit:** Provide an additional vehicle in the zone throughout the day for faster response time.



Add and Update Routes

- **Add new crosstown Route 9**
Provide direct connections between Lynnwood, Blackman Street, Wilkes-Barre Walmart, Wyoming Valley Mall, Parsons, and Mohegan Sun Casino. Operate with a 60-minute frequency on weekdays between 6:30 a.m. and 6:30 p.m. and 60-minute frequency on Saturdays between 9:00 a.m. and 6:00 p.m.
- **Realign existing Route 2 as new Route 4:**
Add the new Route 4 (Pittston Circulator) to operate on weekdays and Saturdays for travel between West Pittston, Pittston Commons, Walmart, and Geisinger Healthplex. Operate with an 80-minute frequency on both weekdays from 8:00 a.m. and 6:30 p.m. and Saturdays from 9:00 a.m. to 6:30 p.m. Adjust the CenterPoint-Grimes-Pittston microtransit zone area given the new fixed route service.
- **Extend Route 8**
Extend Route 8 for service beyond Swoyersville on every other trip on weekdays to provide connections to West Wyoming, Slocum Avenue, and Schooley Avenue.

Figure 16: Enhanced Network Summary Map



- New Service
- Frequency or Service Span Improvements
- No Change from Previous Plan
- On-Demand Microtransit Zone

Aspirational Network

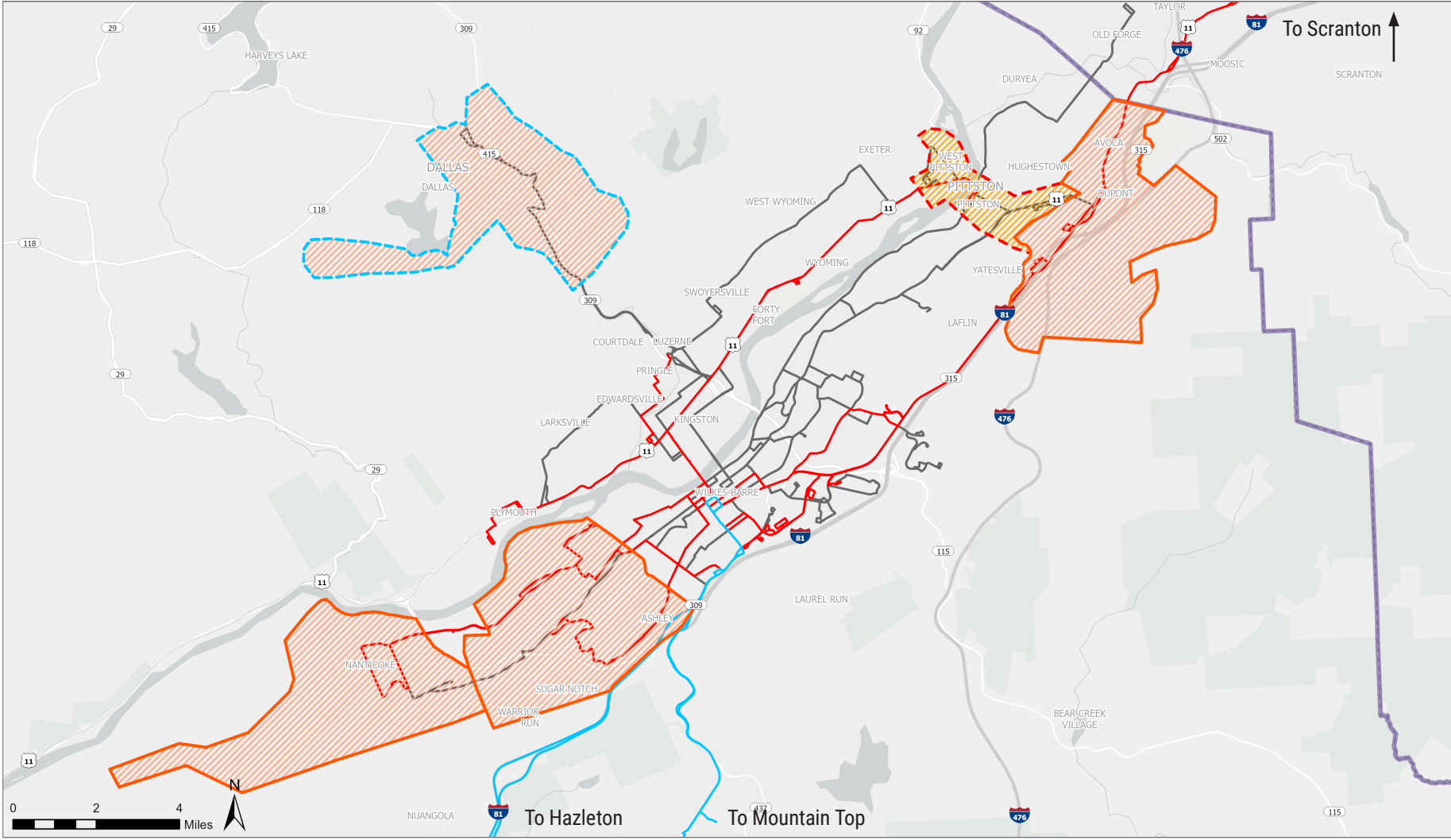
The aspirational network assumes a long-term implementation schedule and increased budgets. In addition to new connections, frequency and service span improvements were identified for key routes.

Additional investment would be needed, and funding has not been identified to implement these changes.

The aspirational network consists of the following recommendations:

- Extend weekday and Saturday night service on routes operating in the improved and enhanced networks.
 - **Route 7:** extend service to 12:30 a.m.
 - **Route 13:** extend service to 12:30 a.m. and increase frequency to 60 minutes
 - **Route 14:** extend service to 12:30 a.m.
 - **Route 18:** extend service to 12:30 a.m. and increase frequency to 60 minutes
 - **Route 19:** extend service to 12:30 a.m.
 - **CenterPoint-Grimes-Pittston Microtransit:** extend service to 12:00 a.m.
- Add weekday and Saturday night service on additional routes and services:
 - **Route 9:** 120-minute frequency from 6:30 p.m. to 12:30 a.m.
 - **Route 11:** 120-minute frequency from 6:30 p.m. to 12:30 a.m.
 - **Hanover Microtransit:** extend service to 12:00 a.m.
- Add new **Dallas-Shavertown-Truckville microtransit service** with connections to Route 6, and operate service from 5:30 a.m. to 6:30 p.m. This includes an extension of the zone to service Penn State Wilkes-Barre campus.
- Add additional weekday trips on **Route 17 (Scranton)** to increase to 70 minutes from 140 minutes in the enhanced network.
- **Add new route to Mountain Top:** 60-minute frequency on weekdays from 6:30 a.m. to 6:30 p.m. and with 120-minute frequency on Saturdays from 9:00 a.m. to 6:30 p.m.
- **Add new route to Hazleton:** two mornings round trips and two afternoon round trips to supplement service provided by Hazleton Public Transit.

Figure 17: Aspirational Network Summary Map



ROUTE 1

IMPROVED (Near-Term)

More direct bus service

More frequent buses

- Split existing Route 1 into two routes, Route 1 (Miners Mills) and Route 2 (Hudson), that meet at the Mohegan Sun Casino to improve service legibility and operate the same service pattern all trips.

Route 1	Weekday	Saturday
Peak / Off Peak Frequency (mins.)	60 / 80	80
Night Service Frequency (mins.)	—	—
Service Hours	6:00 a.m. - 6:30 p.m.	10:00 a.m. - 5:00 p.m.
Route 2	Weekday	Saturday
Peak / Off Peak Frequency (mins.)	60 / 80	80
Night Service Frequency (mins.)	—	—
Service Hours	6:00 a.m. - 6:30 p.m.	10:00 a.m. - 5:00 p.m.

ENHANCED (Future, Not Funded)

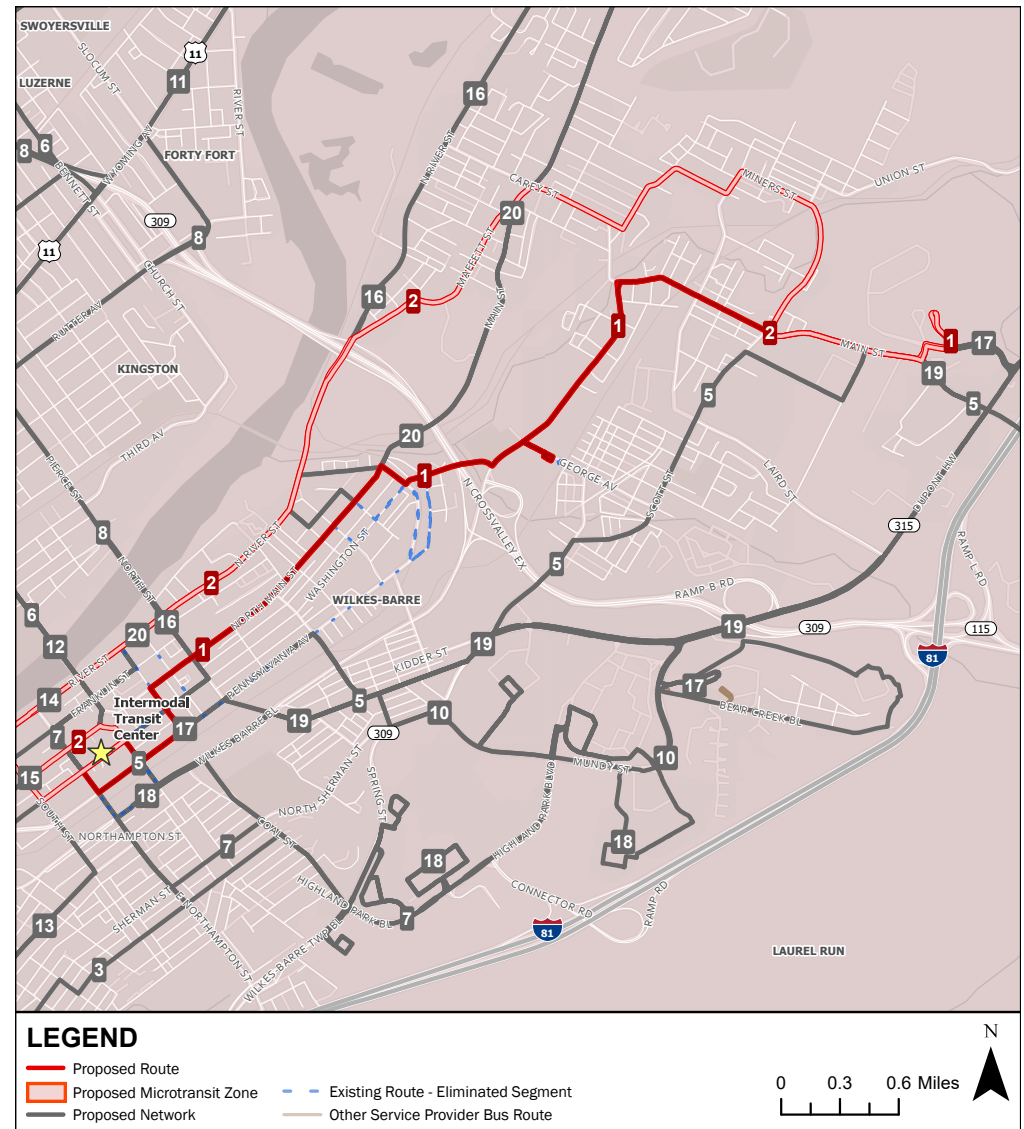
More direct bus service

Longer service hours

More frequent buses

- Expand Saturday service hours to 9:00 a.m. to 6:30 p.m.
- 60-minute frequency during off-peak and on Saturday, increased from 80 minutes in improved network.

Improved Network Map



ROUTE 3

IMPROVED (Near-Term)

Longer service hours

- Realign route to travel on High Street on every trip instead of alternating with Grove Street and operate the same service pattern on all trips.

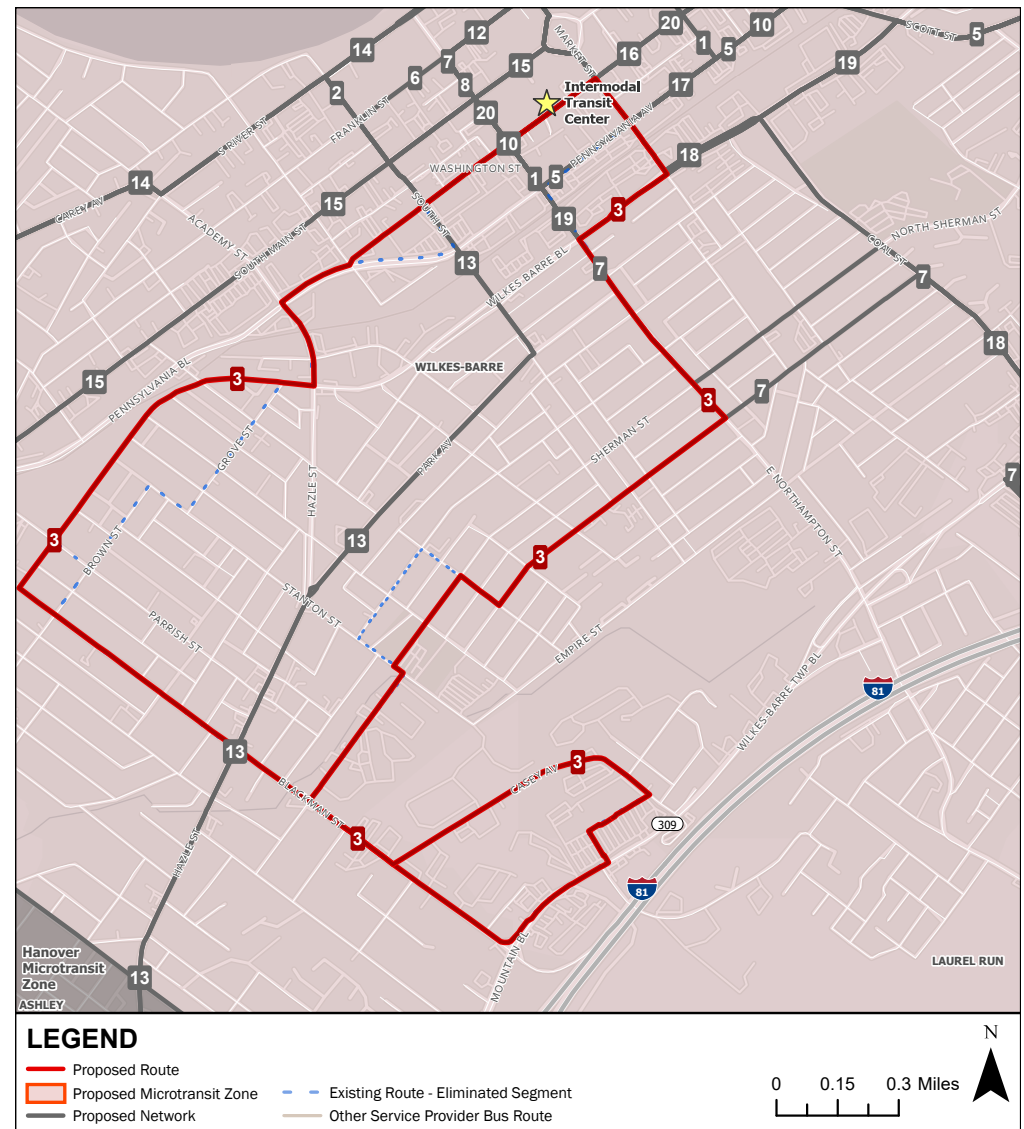
Route 3	Weekday	Saturday
Peak / Off Peak Frequency (mins.)	40	40
Night Service Frequency (mins.)	—	—
Service Hours	6:00 a.m. - 7:30 p.m.	9:00 a.m. - 5:30 p.m.

ENHANCED (Future, Not Funded)

Longer service hours

- Expand Saturday service hours to 9:00 a.m. to 6:30 p.m.

Improved Network Map



ROUTE 5

IMPROVED *(Near-Term)*

 **More connections within Luzerne County**

 **More direct bus service**

- Realign route to travel bidirectionally between Parsons and the Geisinger Medical Area. Add new connection to Wilkes-Barre Area Career and Technical Center on outbound trips and serve the casino in both directions on all weekday and Saturday trips.

Route 5	Weekday	Saturday
Peak / Off Peak Frequency (mins.)	60 / 90	90
Night Service Frequency (mins.)	–	–
Service Hours	5:30 a.m. - 6:30 p.m.	9:00 a.m. - 5:30 p.m.

ENHANCED *(Future, Not Funded)*

 **Longer service hours**

 **More frequent buses**

- Expand Saturday service hours to 9:00 a.m. to 6:30 p.m.
- 60-minute frequency during off-peak, increased from 90 minutes in improved network

Improved Network Map



ROUTE 6

IMPROVED *(Near-Term)*

More direct bus service

- Realign service through Trucksville, Shavertown, and Dallas to provide the same routing on streets in both directions (e.g., bidirectional service to Weis Markets) on all trips.

Route 6	Weekday	Saturday
Peak / Off Peak Frequency (mins.)	60 / 90	90
Night Service Frequency (mins.)	—	—
Service Hours	5:30 a.m. - 6:30 p.m.	9:00 a.m. - 5:30 p.m.

ENHANCED *(Future, Not Funded)*

Longer service hours

More frequent buses

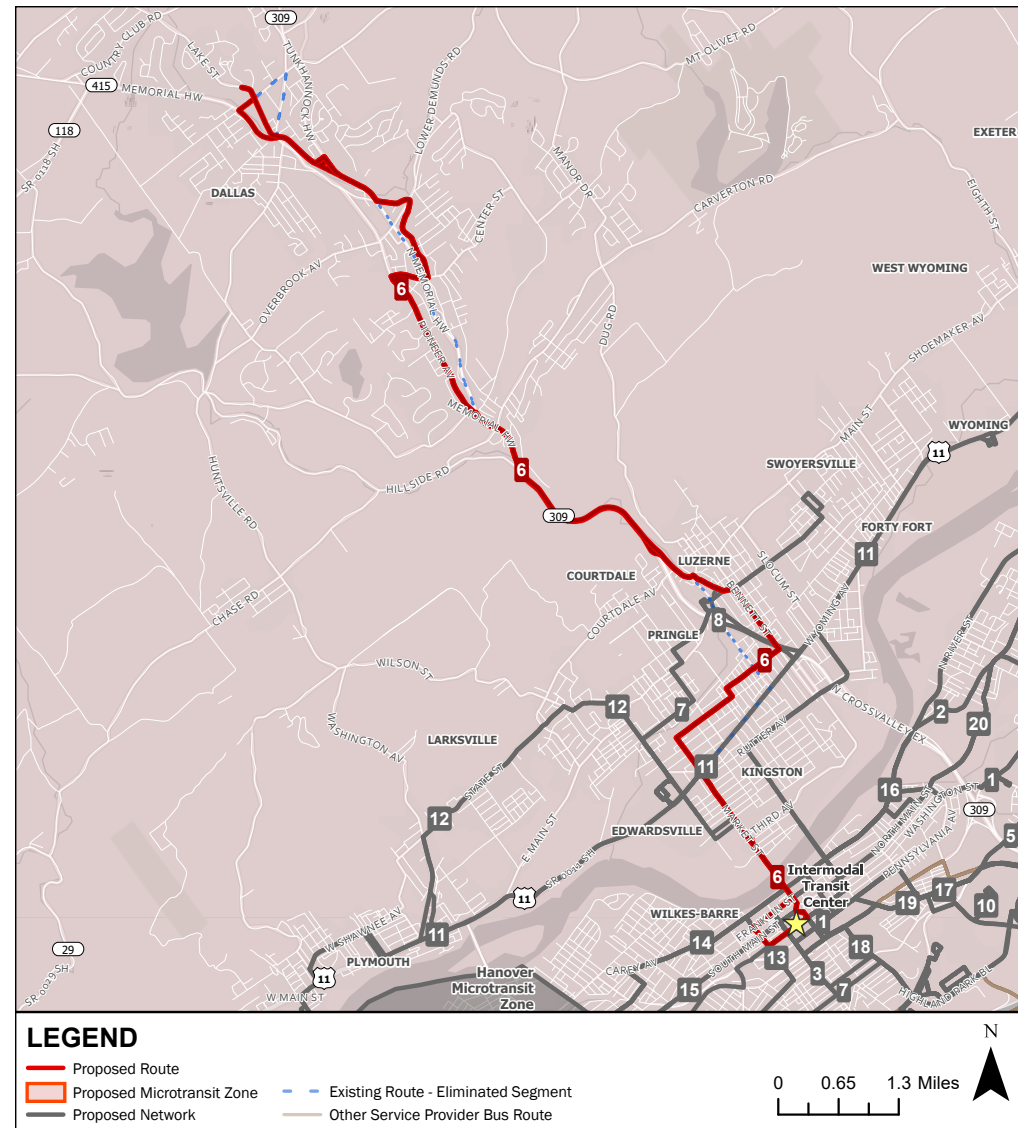
- Expand Saturday service hours to 9:00 a.m. to 6:30 p.m.
- 60-minute frequency during off-peak, increased from 90 minutes in improved network.

ASPIRATIONAL *(Future, Not Funded)*

More connections within Luzerne County

- Dallas-Shavertown-Trucksville Microtransit: Add new microtransit service with connections to Route 6, and operate service from 5:30 a.m. to 6:30 p.m. This includes an extension of the zone to service Penn State Wilkes-Barre campus.

Improved Network Map



ROUTE 7


IMPROVED *(Near-Term)*

-  **More direct bus service**
-  **Longer service hours**
-  **More frequent buses**
-  **More connections within Luzerne County**
-  **Right-size service to demand**

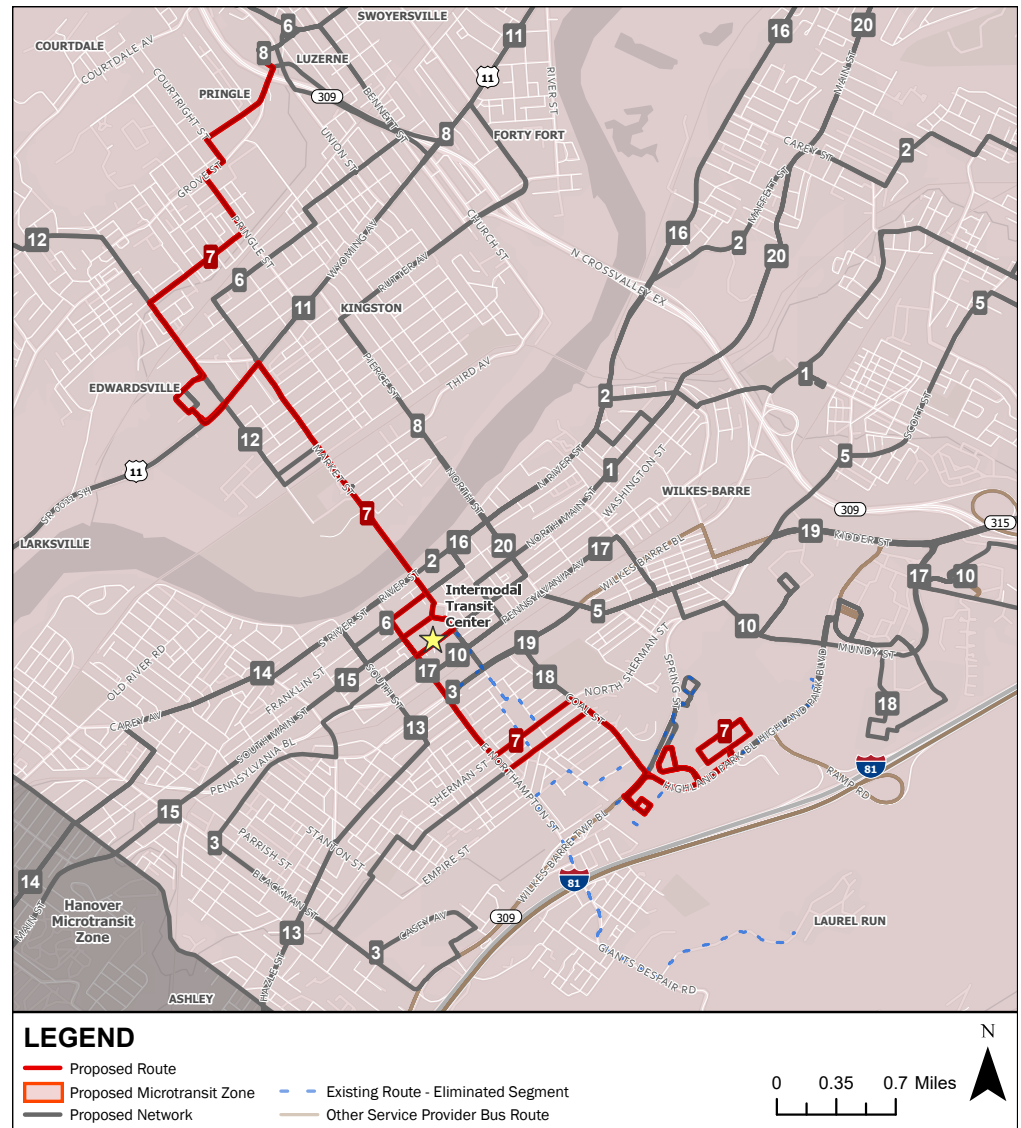
- Realign as a new Route 7 that operates on weekdays and Saturday that provides direct crosstown connections from the Luzerne Shopping Center to the Wilkes-Barre Walmart via Edwardsville, Kingston, Intermodal Transit Center, Kohl's, and Wegmans.
- Fixed route service into Georgetown and Laurel Run trailer park is discontinued due to low use.
- Edwardsville and Pringle see more frequent buses compared to existing Route 8 service.
- Add weekday night service

Route 7	Weekday	Saturday
Peak / Off Peak Frequency (mins.)	45	45
Night Service Frequency (mins.)	90	—
Service Hours	6:30 a.m. - 11:00 p.m.	9:00 a.m. - 5:30 p.m.


ENHANCED *(Future, Not Funded)*

-  **Longer service hours**
- Expand Saturday service hours to 9:00 a.m. to 11:00 p.m. (90-minute frequency after 6:30 p.m.)

Improved Network Map



ASPIRATIONAL *(Future, Not Funded)*

-  **Longer service hours**
- Expand service hours with night service on weekdays and Saturday from 6:30 p.m. to 12:30 a.m. at 90-minute frequency.

ROUTE 8




IMPROVED (Near-Term)

-  **More direct bus service**
-  **Longer service hours**
-  **More frequent buses**
-  **Right-size service to demand**

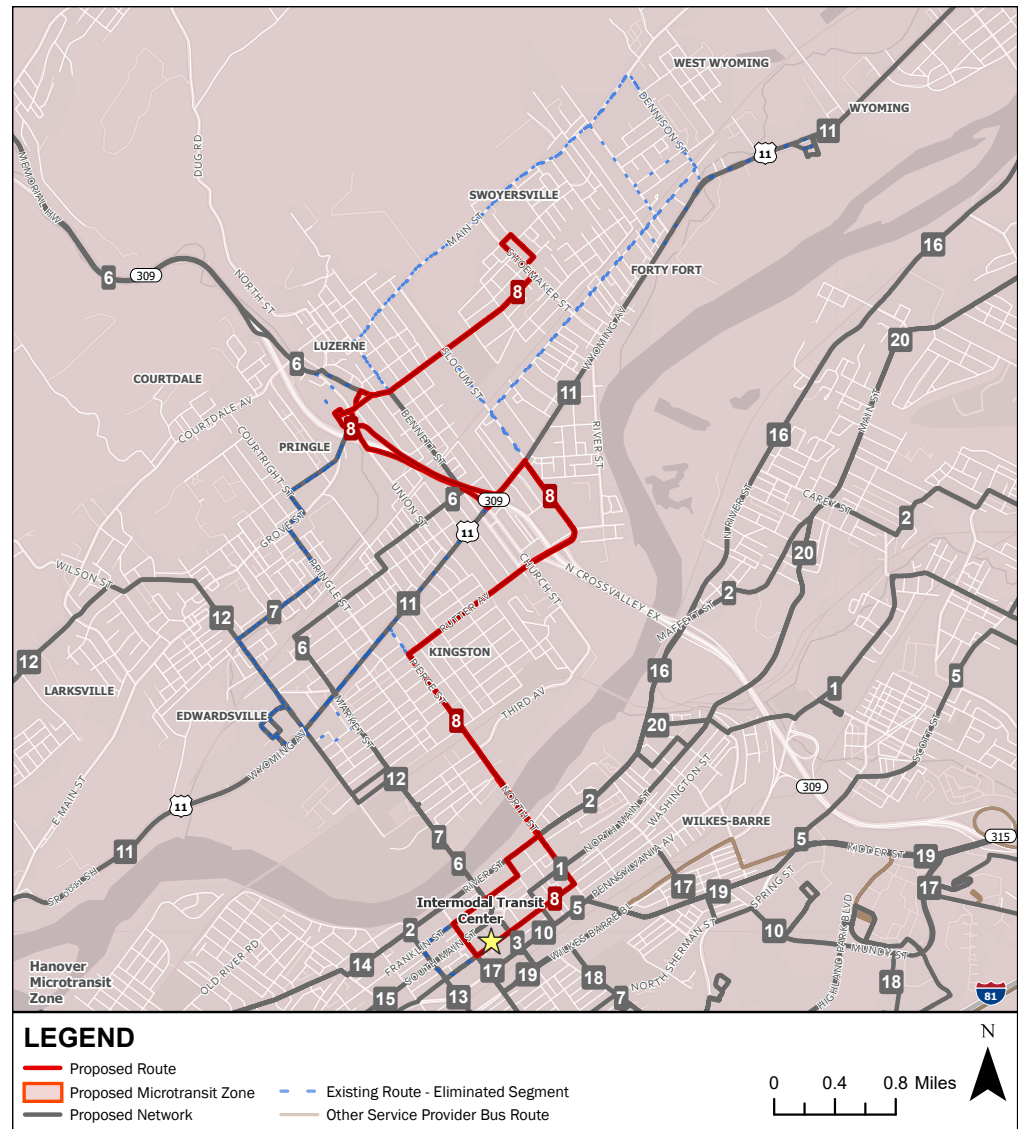
- Realign as new Route 8 that provides connections between the Intermodal Transit Center, Kingston, Edwardsville, and Swoyersville on both weekdays and Saturdays.
- Luzerne and Swoyersville see more frequent buses and longer service hours, particularly on Saturday, compared to existing Route 8 service.

Route 8	Weekday	Saturday
Peak / Off Peak Frequency (mins.)	60 / 80	80
Night Service Frequency (mins.)	—	—
Service Hours	7:30 a.m. - 6:30 p.m.	9:30 a.m. - 5:30 p.m.

ENHANCED (Future, Not Funded)




-  **Longer service hours**
-  **More connections within Luzerne County**
-  **More frequent buses**
 - Expand Saturday service hours to 9:00 a.m. to 6:30 p.m.
 - Extend Route 8 for service beyond Swoyersville on every other trip on weekdays to provide connections to West Wyoming, Slocum Avenue, and Schooley Avenue.
 - 60-minute frequency during off-peak and on Saturday between Intermodal and Swoyersville, increased from 80 minutes.

Improved Network Map



ROUTE 10


IMPROVED *(Near-Term)*

-  **More direct bus service**
-  **More frequent buses**
-  **Longer service hours**

- Realign to streamline service and provide bidirectional service along Mundy Street with connections to East End Center, John Heinz, and Wyoming Valley Mall on every trip.

Route 10	Weekday	Saturday
Peak / Off Peak Frequency (mins.)	40	40
Night Service Frequency (mins.)	—	—
Service Hours	6:00 a.m. - 7:30 p.m.	9:00 a.m. - 5:30 p.m.

ENHANCED *(Future, Not Funded)*

-  **Longer service hours**
- Expand Saturday service hours to 9:00 a.m. to 6:30 p.m.

Improved Network Map



ROUTE 11 AND ROUTE 22

IMPROVED *(Near-Term)*

 **More direct bus service**


 **More connections within Luzerne County**

- Realign Route 11 and merge with Route 22 to provide crosstown service along Wyoming Avenue between Plymouth and Pittston, with connection available to new Route 7 at West End Mall for travel to Wilkes-Barre.
- Realign area served by Route 22 in Plymouth to provide bidirectional service on Shawnee Avenue and new connections to apartments on New Street.
- Operate the same service pattern on all trips.
- Provide service to Lynnwood via the Hanover microtransit service when Route 22 is discontinued.

Route 11	Weekday	Saturday
Peak / Off Peak Frequency (mins.)	40 / 60	60
Night Service Frequency (mins.)	—	—
Service Hours	6:00 a.m. - 6:30 p.m.	9:00 a.m. - 6:00 p.m.


ENHANCED *(Future, Not Funded)*

 **More frequent buses**

 **Longer service hours**

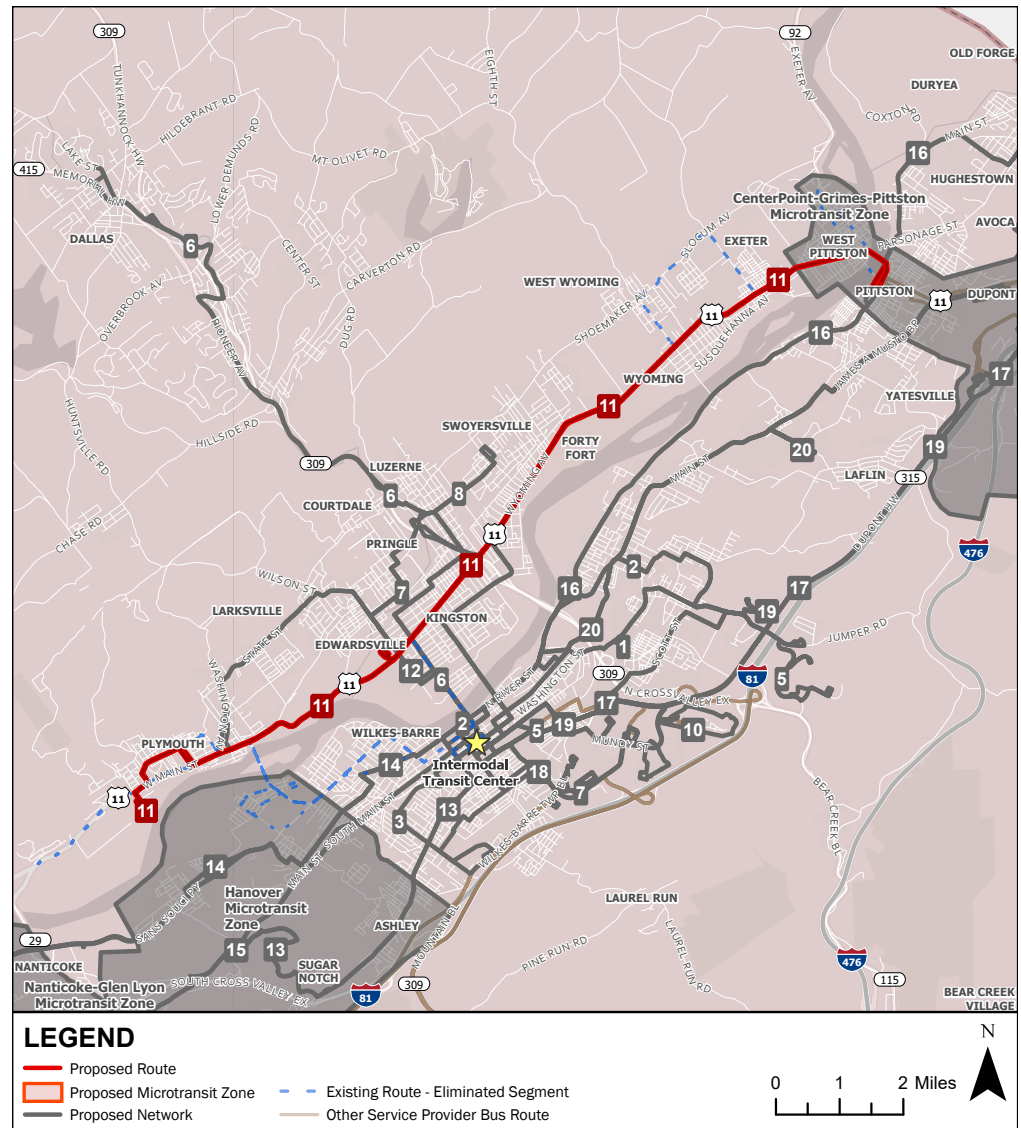
- 40-minute frequency during off-peak and on Saturday, increased from 60 minutes in improved network.
- Expand Saturday service hours to 9:00 a.m. to 6:30 p.m.

ASPIRATIONAL *(Future, Not Funded)*

 **Longer service hours**

- Expand service hours with night service on weekdays and Saturday from 6:30 p.m. to 12:30 a.m. at 90-minute frequency

Improved Network Map



ROUTE 12

IMPROVED *(Near-Term)*

More direct bus service

- Realign route to serve Northampton Street, West Side Mall, and Washington Avenue in both directions on all trips. As a result, service along E. Main Street and Nesbitt Street is discontinued.

Route 12	Weekday	Saturday
Peak / Off Peak Frequency (mins.)	60	60
Night Service Frequency (mins.)	—	—
Service Hours	6:30 a.m. - 6:30 p.m.	9:00 a.m. - 5:30 p.m.

ENHANCED *(Future, Not Funded)*

Longer service hours





- Expand Saturday service hours to 9:00 a.m. to 6:30 p.m.

Improved Network Map



ROUTE 13 AND HANOVER MICROTRANSIT (NEW)



IMPROVED (Near-Term)

-  **More direct bus service**
 -  **Longer service hours**
 -  **More frequent buses**
 -  **More connections within Luzerne County**
- Route 13 – Realign route to provide faster and more direct service between the Intermodal Transit Center and Hanover Industrial Park. Maintain coverage to areas within and west of Hanover Industrial Park with a new microtransit service.
 - Add weekday night service to Route 13
 - Hanover Microtransit – Pilot microtransit service in the Hanover Industrial Park area with connections to fixed Routes 13, 14, and 15. The zone would also provide connections to Warrior Run, Sugar Notch, Ashley, Lynnwood, and Korn Krest

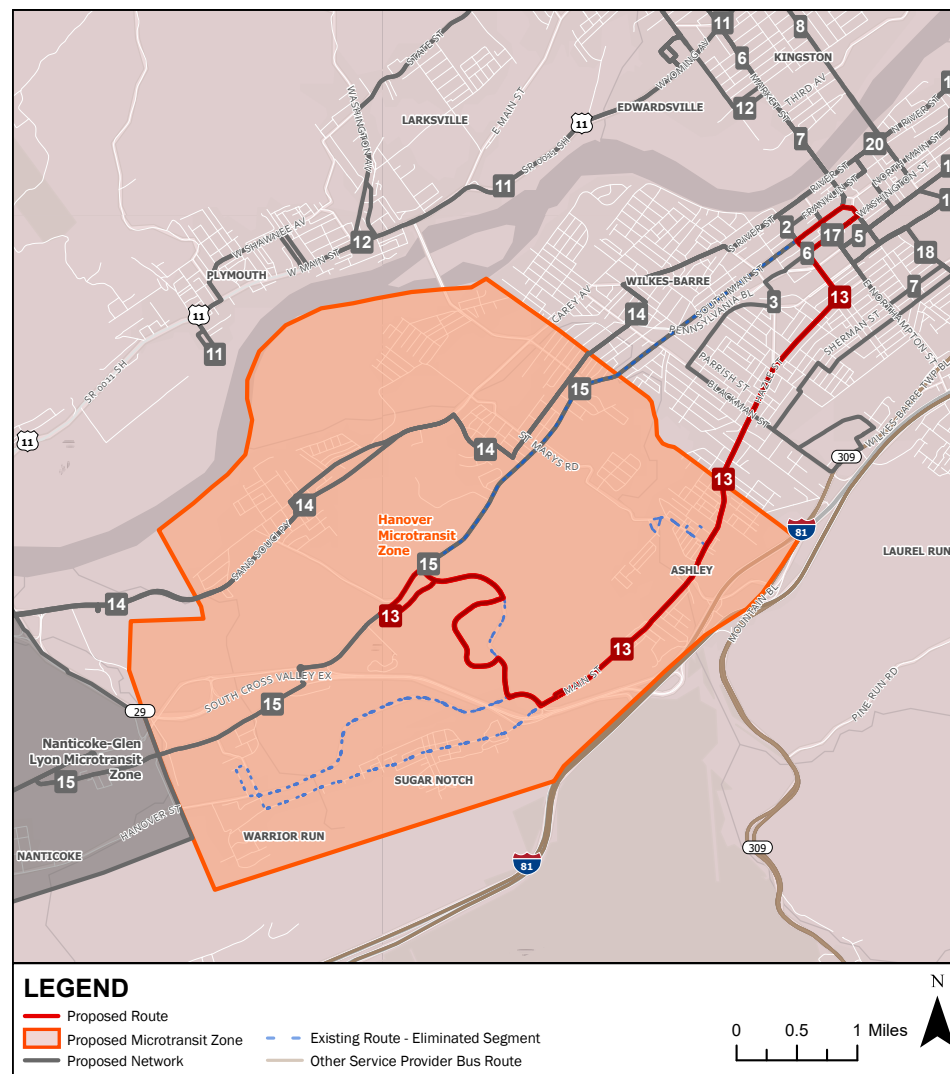
Route 13	Weekday	Saturday
Peak / Off Peak Frequency (mins.)	60	80
Night Service Frequency (mins.)	120	–
Service Hours	5:30 a.m. - 10:30 p.m.	9:00 a.m. - 5:30 p.m.
Microtransit Hanover	Weekday	Saturday
Peak / Off Peak Frequency (mins.)	15-30*	15-30*
Night Service Frequency (mins.)	–	–
Service Hours	5:30 a.m. - 6:30 p.m.	9:00 a.m. - 5:30 p.m.

*A target response time is assumed for microtransit


ENHANCED (Future, Not Funded)

-  **More frequent buses**
 -  **Longer service hours**
- Extend Saturday service of Route 13 to 10:30 p.m.
 - Expand Saturday service hours of microtransit zone to 9:00 a.m. to 6:30 p.m.
 - 30-minute frequency all day on weekdays Route 13, increased from 60 minutes in improved network.

Improved Network Map



ASPIRATIONAL (Future, Not Funded)

-  **Longer service hours**
- Expand service hours with night service on weekdays and Saturday.
 - Extend Route 13 service to 12:30 a.m. and increase frequency to 60 minutes.
 - Extend microtransit service to 12:00 a.m.

ROUTE 14 AND NANTICOKE-GLEN LYON MICROTRANSIT (NEW)

IMPROVED (Near-Term)



-  **More direct bus service**
-  **Longer service hours**
-  **More frequent buses**
-  **More connections within Luzerne County**

- Route 14 – Realign route to truncate in Nanticoke near Prospect Street and Broad Street. Fixed route circulation within Nanticoke and service west to Glen Lyon is discontinued and provided with a new microtransit service. Operate the same service pattern on all trips.
- LCTA will monitor demand for service in Glen Lyon to determine the need to maintain fixed route bus trip(s) at limited peak times to supplement the microtransit.
- Nanticoke-Glen Lyon Microtransit – Pilot microtransit service in the Nanticoke-Glen Lyon area with connections to fixed Routes 14 and 15. The zone would provide local connections within Nanticoke, Sheatown, Alden, Wanamie, and Glen Lyon.
- Add weekday night service for Route 14.

Route 14	Weekday	Saturday
Peak / Off Peak Frequency (mins.)	35 / 70	70
Night Service Frequency (mins.)	120	–
Service Hours	5:30 a.m. - 10:45 p.m.	9:00 a.m. - 5:30 p.m.
Microtransit Nanticoke- Glen Lyon	Weekday	Saturday
Peak / Off Peak Frequency (mins.)	15-30*	15-30*
Night Service Frequency (mins.)	–	–
Service Hours	5:30 a.m. - 6:30 p.m.	9:00 a.m. - 5:30 p.m.

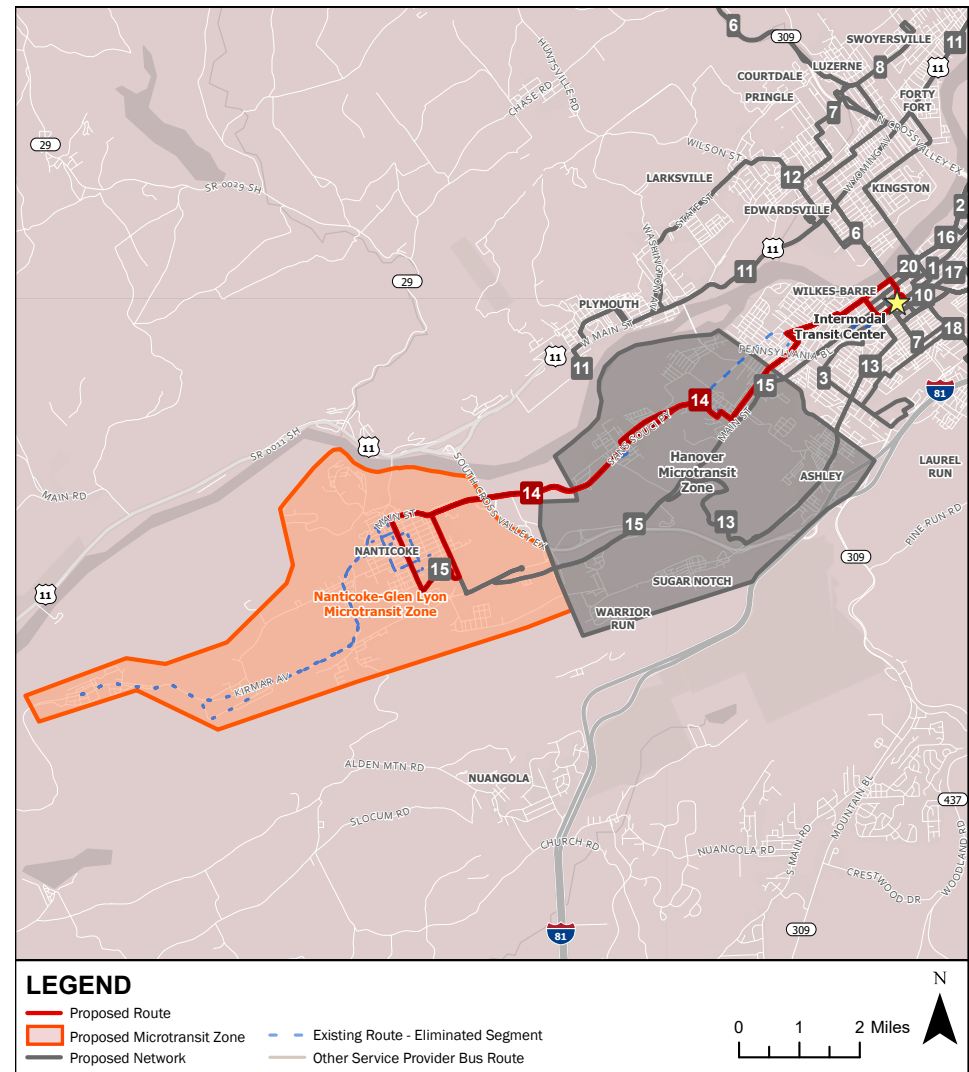
*A target response time is assumed for microtransit

ENHANCED (Future, Not Funded)

-  **More frequent buses**
-  **Longer service hours**

- Expand Saturday service hours of Route 14 to 10:45 p.m. at 120-minute frequency, and microtransit to 6:30 p.m.
- 35-minute frequency during off-peak and on Saturday, increased from 70 minutes in improved network.

Improved Network Map



ASPIRATIONAL (Future, Not Funded)

-  **Longer service hours**

- Expand Route 14 service hours with night service on weekdays and Saturday from 6:30 p.m. to 12:30 a.m. at 120-minute frequency, and extend to L.C.C.C. in Nanticoke.
- Expand microtransit service hours with night service on weekdays and Saturday to 12:00 a.m.

ROUTE 15

IMPROVED (Near-Term)

More direct bus service

- Realign route to provide faster and more direct between the Intermodal Transit Center and Nanticoke via Main Street and Middle Road and operate the same service pattern on all trips.

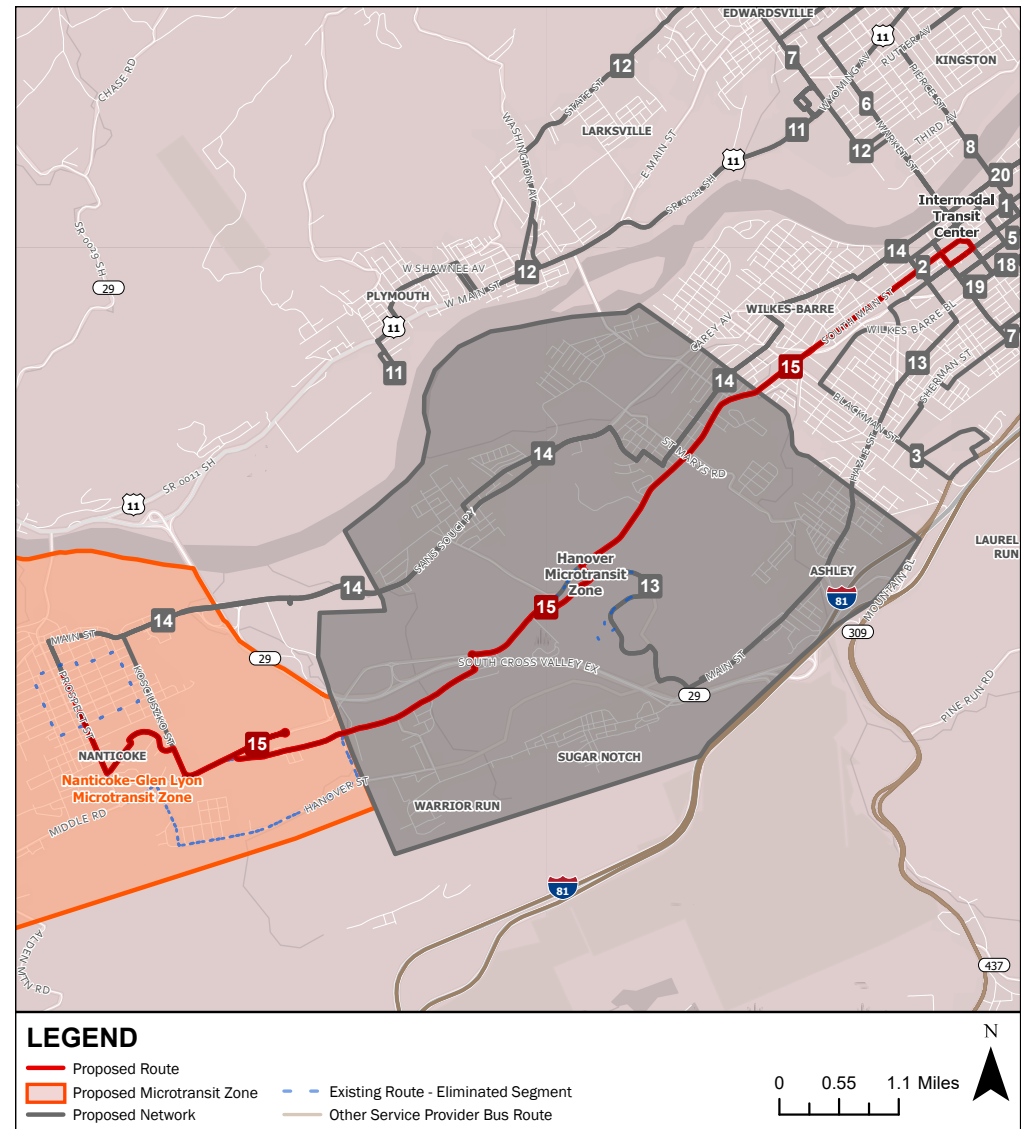
Route 15	Weekday	Saturday
Peak / Off Peak Frequency (mins.)	70	70
Night Service Frequency (mins.)	—	—
Service Hours	5:30 a.m. - 6:30 p.m.	9:00 a.m. - 5:00 p.m.

ENHANCED (Future, Not Funded)

Longer service hours

- Expand Saturday service hours to 9:00 a.m. to 6:30 p.m.

Improved Network Map



ROUTE 16 AND ROUTE 20 (NEW)

IMPROVED (Near-Term)

 **More direct bus service**

 **More frequent buses**

 **More connections within Luzerne County**

- Split River Road and Hilldale route patterns of Route 16 into two separate routes (Hilldale becomes new Route 20).
- Realign Route 16 in Duryea onto Phoenix Street and Foote Ave on all trips.
- Add new Route 20 to cover portions of the Hilldale route pattern of Route 16 to connect between the Intermodal Transit Center and Pittston Commons via Wilkes-Barre General Hospital, Hilldale, and S Township Boulevard.

Route 16	Weekday	Saturday
Peak / Off Peak Frequency (mins.)	90	90
Night Service Frequency (mins.)	—	—
Service Hours	6:30 a.m. - 6:30 p.m.	9:00 a.m. - 5:30 p.m.
Route 20	Weekday	Saturday
Peak / Off Peak Frequency (mins.)	60 / 120	120
Night Service Frequency (mins.)	—	—
Service Hours	6:30 a.m. - 6:30 p.m.	9:00 a.m. - 5:30 p.m.

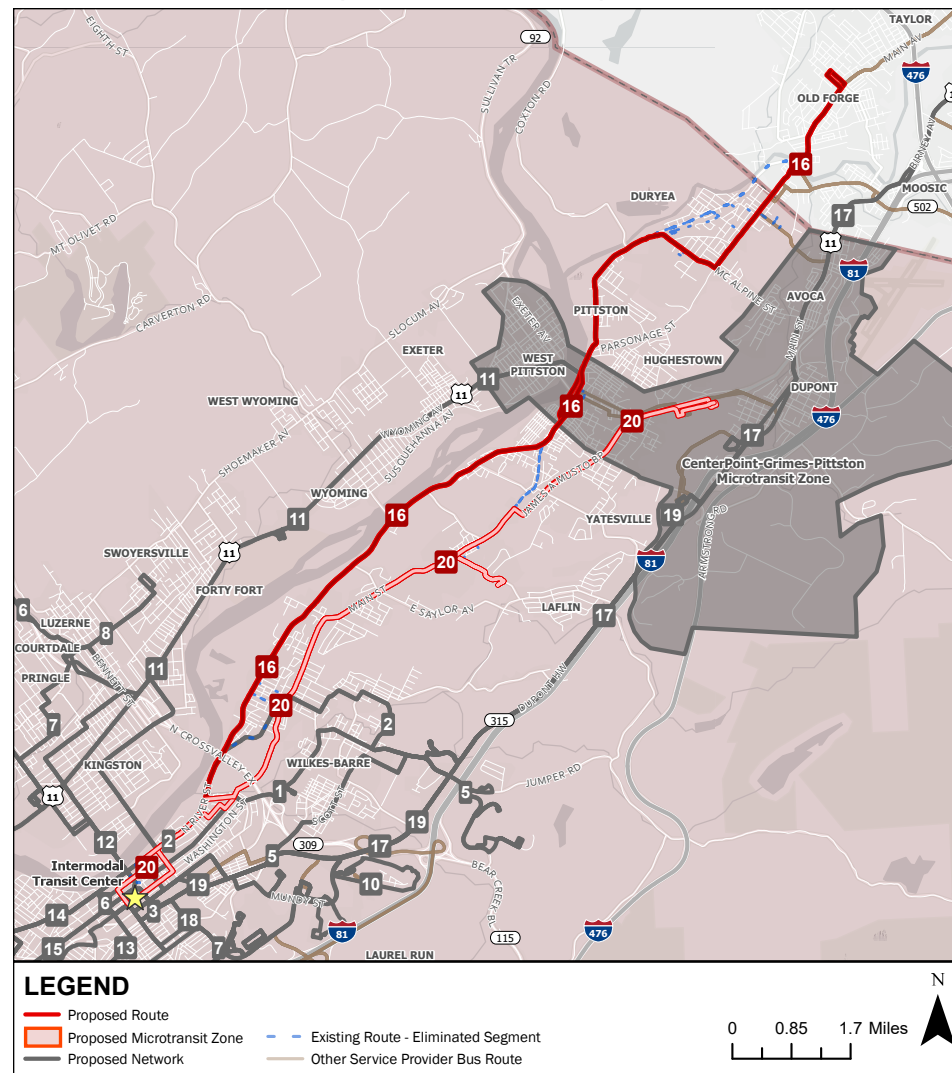
ENHANCED (Future, Not Funded)

 **Longer service hours**

 **More frequent buses**

- Expand Saturday service hours to 9:00 a.m. to 6:30 p.m. on both routes
- 60-minute frequency on Route 20 during off-peak and on Saturday, increased from 120 minutes in improved network.

Improved Network Map



ROUTE 17

IMPROVED (Near-Term)

 **More direct bus service**

 **More connections within Luzerne County**

- Realign route to serve the VA Hospital on every trip and discontinue fixed route service to the airport. Provide airport connection via a new microtransit service in the Pittston area.

Route 17	Weekday	Saturday
Peak / Off Peak Frequency (mins.)	140	140
Night Service Frequency (mins.)	—	—
Service Hours	6:40 a.m. - 6:20 p.m.	9:00 a.m. - 4:00 p.m.

ENHANCED (Future, Not Funded)

 **Longer service hours**

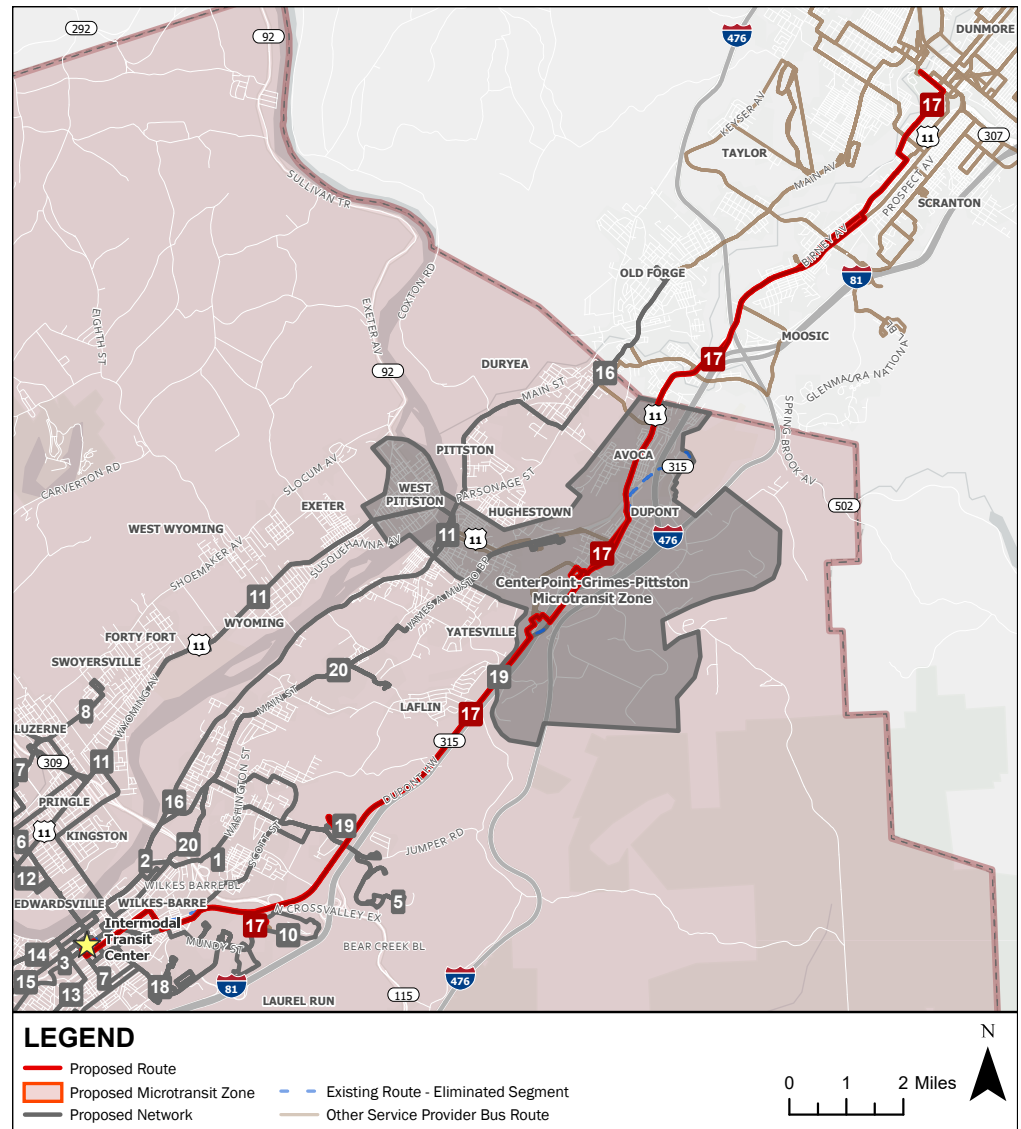
- Expand Saturday service hours to 9:00 a.m. to 6:30 p.m.

ASPIRATIONAL (Future, Not Funded)

 **More frequent buses**

- Add additional weekday trips to increase frequency to 70 minutes from 140 minutes.

Improved Network Map



ROUTE 18

IMPROVED *(Near-Term)*

More direct bus service

More frequent buses

Longer service hours

- Streamline route to improve service legibility and serve all destinations on all trips. Remove stop at Barnes & Noble/PetSmart for faster and more direct travel through the Arena Hub Plaza.
- Wyoming Valley Mall, Target, and the Arena Hub see more frequent buses because all stops are served on all trips.
- Add weekday night service.

Route 18	Weekday	Saturday
Peak / Off Peak Frequency (mins.)	40	40
Night Service Frequency (mins.)	120	—
Service Hours	6:00 a.m. - 9:30 p.m.	9:00 a.m. - 5:30 p.m.

ENHANCED *(Future, Not Funded)*

Longer service hours

- Expand Saturday service hours to 9:00 a.m. to 11:00 p.m. (120-minute frequency after 6:30 p.m.)

ASPIRATIONAL *(Future, Not Funded)*

Longer service hours

More frequent buses

- Expand service hours with night service on weekdays and Saturday from 6:30 p.m. to 12:30 a.m. at 60-minute frequency.

Improved Network Map



ROUTE 19, ROUTE 2, AND CENTERPOINT-GRIMES-PITTSTON MICROTRANSIT (NEW)

IMPROVED (Near-Term)



-  **More direct bus service**
-  **Longer service hours**
-  **More frequent buses**
-  **More connections within Luzerne County**

- Route 19 – Adjust route for more direct and frequent travel between the Intermodal Transit Center and Geisinger Healthplex CenterPoint, where connections are available to the new CenterPoint-Grimes microtransit service.
- Route 19 – Add weekday night service
- Route 2 – Discontinue route and replace with on-demand microtransit service.
- CenterPoint-Grimes-Pittston Microtransit – Pilot microtransit service in the CenterPoint and Grimes Industrial Parks with connections available to fixed Routes 17 and 19 at Geisinger Healthplex (also Walmart for Route 17). The zone would also provide connections to Dupont, Avoca, the airport, and West Pittston.

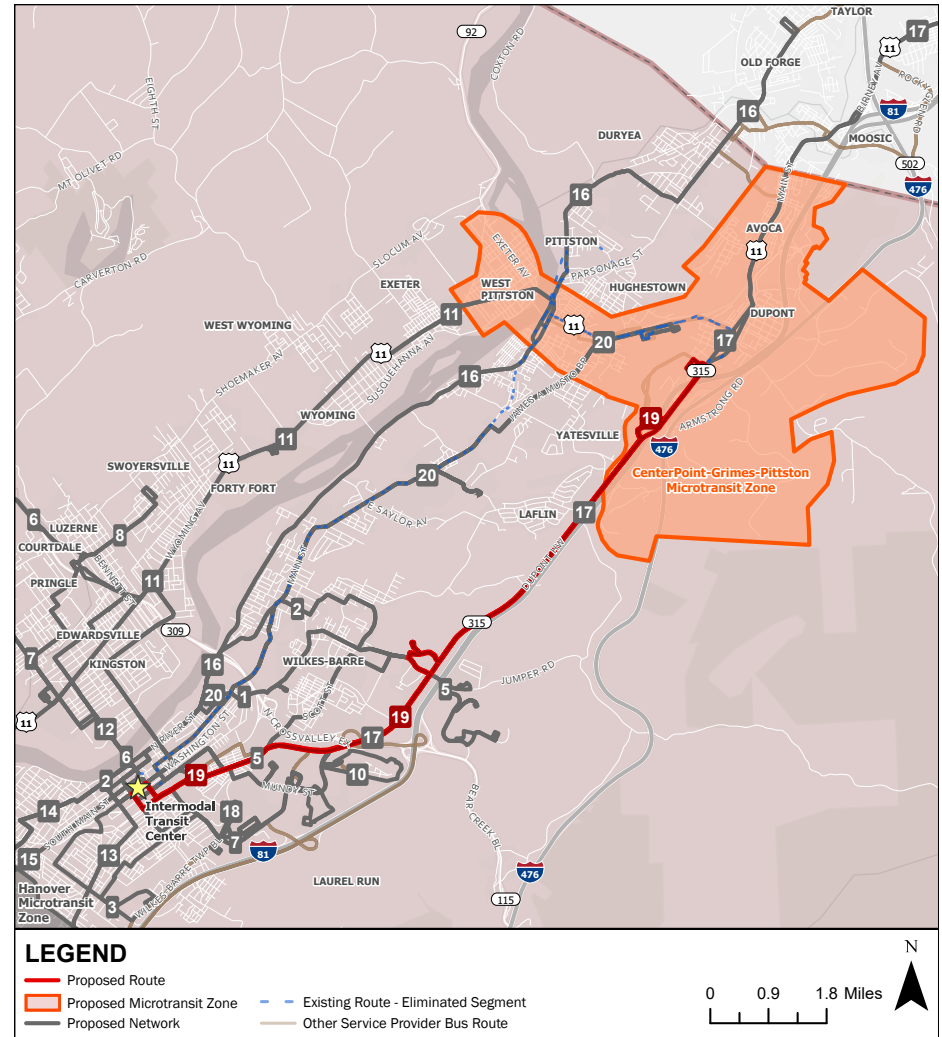
Route 19	Weekday	Saturday
Peak / Off Peak Frequency (mins.)	60 / 120	120
Night Service Frequency (mins.)	120	–
Service Hours	5:30 a.m. - 9:30 p.m.	9:00 a.m. - 5:00 p.m.
Microtransit CenterPoint-Grimes-Pittston	Weekday	Saturday
Peak / Off Peak Frequency (mins.)	15-30*	15-30*
Night Service Frequency (mins.)	15-30*	–
Service Hours	6:00 a.m. - 10:00 p.m.	9:00 a.m. - 5:00 p.m.

*A target response time is assumed for microtransit



ENHANCED (Future, Not Funded)

-  **More frequent buses**
-  **Longer service hours**
- Expand Saturday night service hours of Route 19 to 9:30 p.m. at 120-minute frequency, and microtransit to 10:00 p.m.
- Route 19 to have a 60-minute frequency during off-peak and on Saturday, increased from 120 minutes in improved network.
- Provide an additional vehicle in the zone throughout the day for faster response time.

Improved Network Map






ASPIRATIONAL (Future, Not Funded)

-  **Longer service hours**
-  **More connections within Luzerne County**
- Expand service hours with night service on weekdays and Saturday.
 - Route 19 from 6:30 p.m. to 12:30 a.m. at 120-minute frequency, and add connections to Mohegan Sun Casino and Pittston Walmart
 - Microtransit until 12:00 a.m.

NIGHT ROUTES (51, 52, 53, 54, 55)

IMPROVED *(Near-Term)*

-  **More direct bus service**
 -  **More connections within Luzerne County**
 -  **Right-size service to demand**
- Replace routes with extended evening hours on the daytime routes 7, 13, 14 (extended to L.C.C.C. in Nanticoke), 18, 19 (add connections to Mohegan Sun Casino and Pittston Walmart), and the CenterPoint-Grimes-Pittston microtransit service. This provides route consistency and bidirectional service instead of large one-way loop routes.

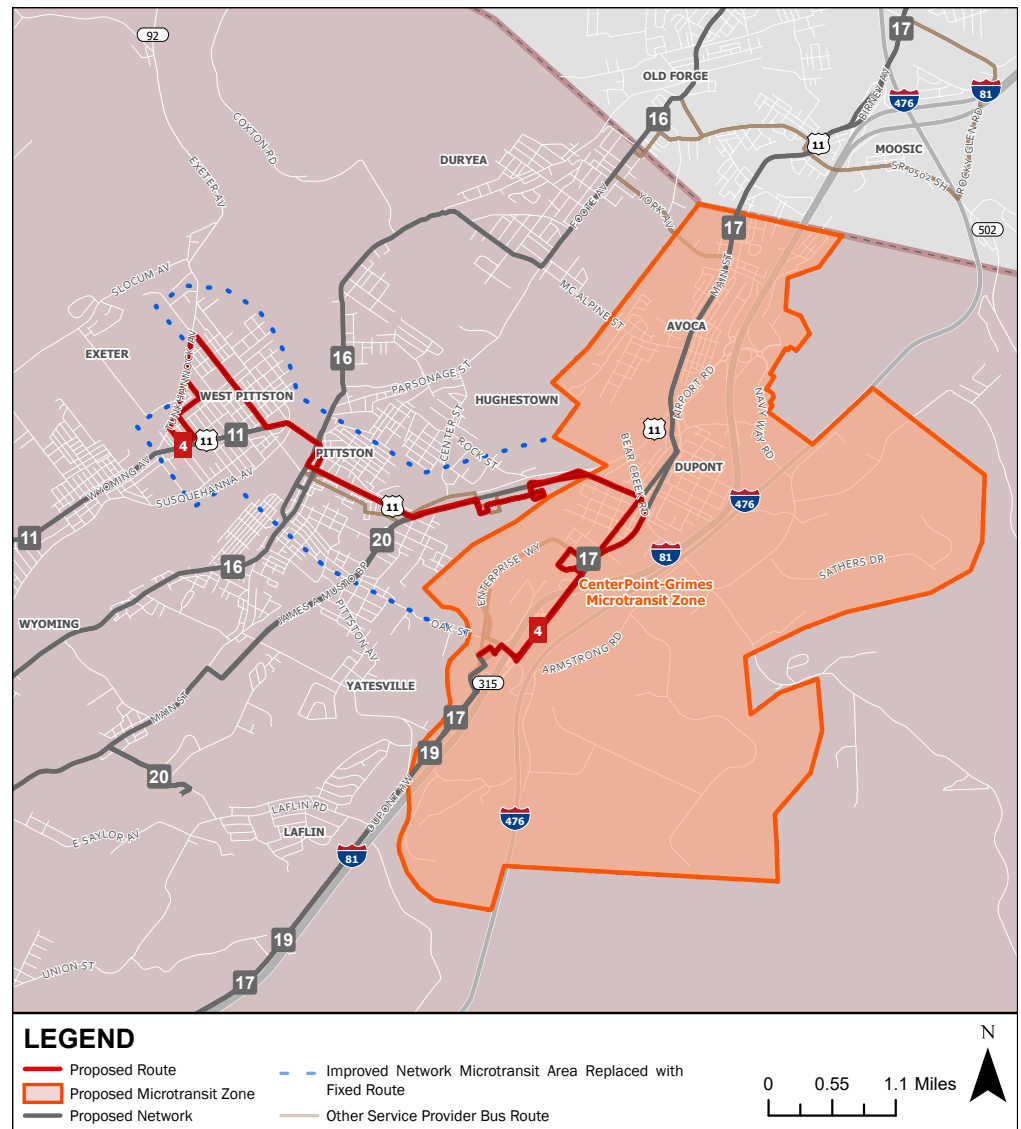
ROUTE 4 (NEW)

ENHANCED *(Future, Not Funded)*

More connections within Luzerne County

- Add the new Route 4 (Pittston Circulator) to operate on weekdays and Saturdays for travel between West Pittston, Pittston Commons, Walmart, and Geisinger Healthplex.
- Operate with an 80-minute frequency on both weekdays from 8:00 a.m and 6:30 p.m. and Saturdays from 9:00 a.m. to 6:30 p.m.
- Adjust the CenterPoint-Grimes-Pittston microtransit zone area given the new fixed route service to not duplicate service.

Enhanced Network Map



ROUTE 9 (NEW)

ENHANCED *(Future, Not Funded)*



More direct bus service



More connections within Luzerne County

- Add new crosstown route to provide direct connections between Lynnwood, Blackman Street, Wilkes-Barre Walmart, Wyoming Valley Mall, Parsons, and Mohegan Sun Casino. Operate with a 60-minute frequency on weekdays between 6:30 a.m. and 6:30 p.m. and 60-minute frequency on Saturdays between 9:00 a.m. and 6:00 p.m.

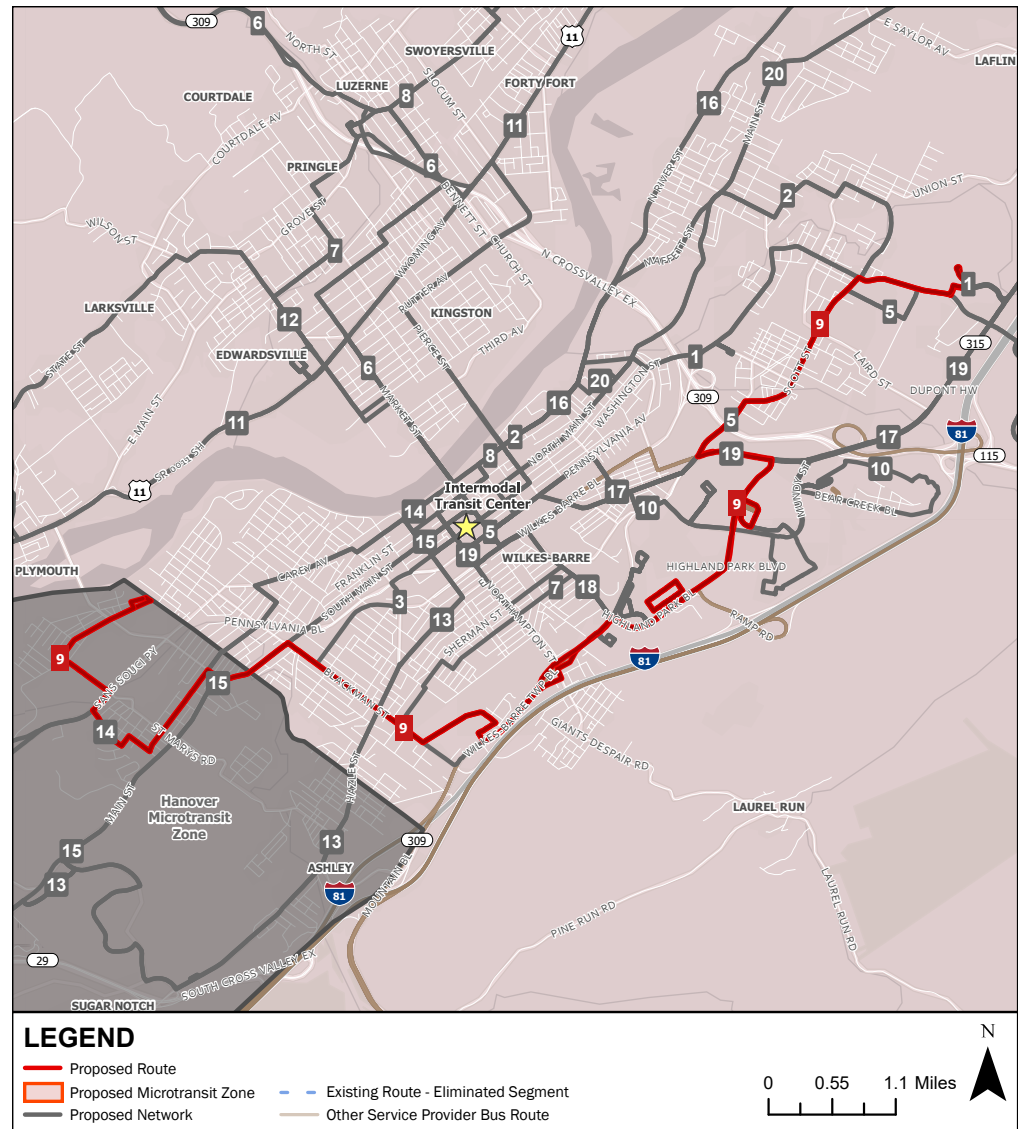
ASPIRATIONAL *(Future, Not Funded)*



Longer service hours

- Expand service hours with night service on weekdays and Saturday from 6:30 p.m. to 12:30 a.m. at 120-minute frequency.

Enhanced Network Map



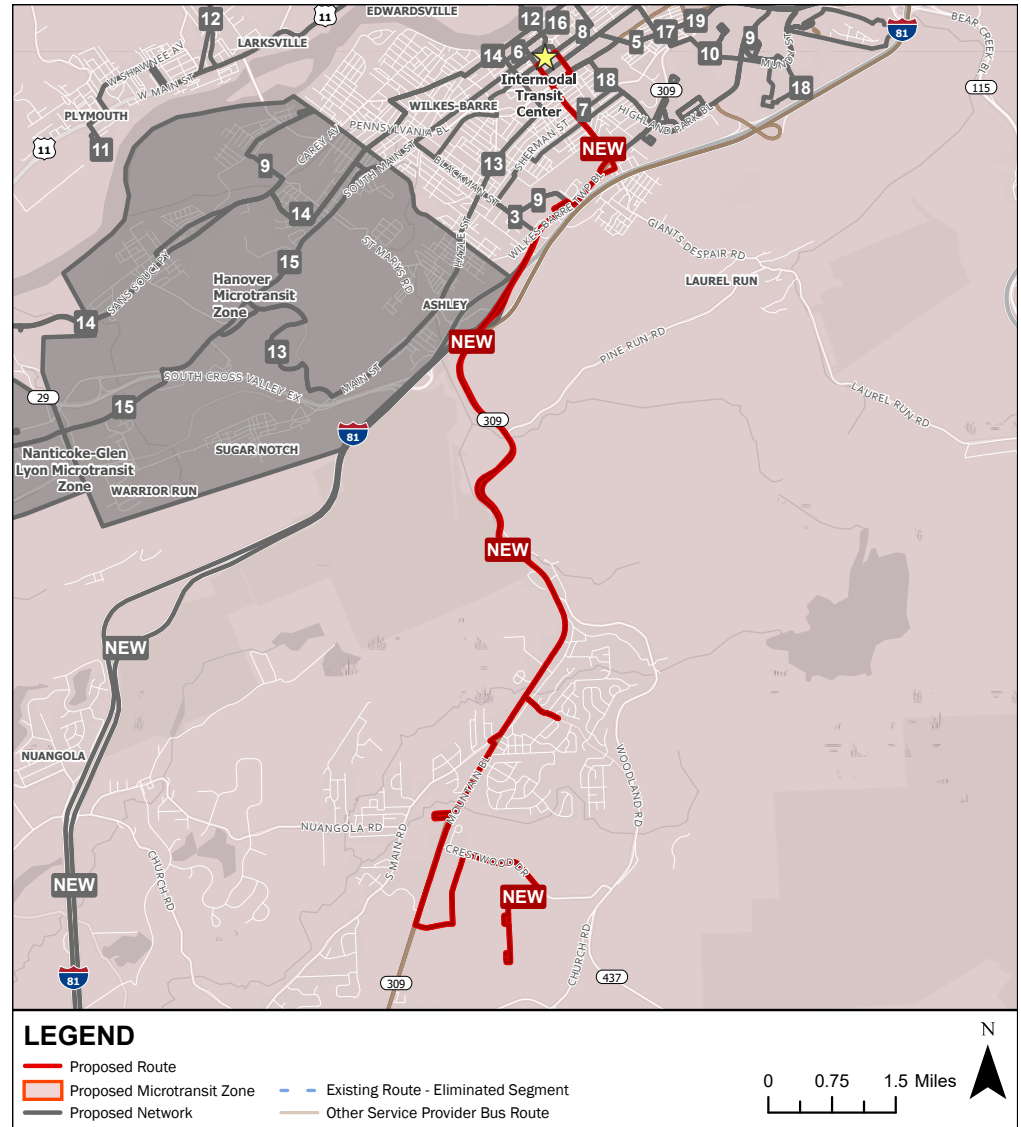
MOUNTAIN TOP (NEW)

ASPIRATIONAL *(Future, Not Funded)*

More connections within Luzerne County

- Add new route connecting Wilkes-Barre and Mountain Top operating with 60-minute frequency on weekdays from 6:30 a.m. to 6:30 p.m. and with 120-minute frequency on Saturdays from 9:00 a.m. to 6:30 p.m.
- Route would supplement existing Hazleton Public Transit service.

Aspirational Network Map



HAZLETON (NEW)

ASPIRATIONAL *(Future, Not Funded)*



More connections within Luzerne County

- Add new route connecting Wilkes-Barre and Hazleton operating with two mornings round trips and two afternoon round trips
- Route would supplement existing Hazleton Public Transit service.

Aspirational Network Map



Network Comparison

In addition to operational metrics, maintaining service to communities and key destinations was a factor in developing network alternatives. Each network's access to people, jobs, and key destinations within a quarter mile of LCTA transit service were evaluated to sustain similar access.

Multiple data sources were used to compile the accessibility metrics. Population data was sourced from the American Community Survey (2017-2021) and LEHD Origin-Destination Employment Statistics (2010-2019). Destinations, which include hospitals, groceries, public buildings, schools, and other crucial places, were derived from open-source geospatial data. Only destinations within Luzerne County were included in this analysis.

Table 8 shows the level of access for the existing system and network alternatives. It shows that while the total population that has access to the system increases from the existing service to the improved network, the population with access to only fixed route service decreases. This is due to the addition of microtransit zones to replace and expand transit service coverage to several areas. In general, the areas with discontinued fixed route service are currently covered by existing routes that have lower frequencies, shorter service spans, and lower use compared to the rest of the system. These stop see very little to no passenger activity on an average day.

Total population increases across all network alternatives compared to existing, and the percentage of accessible population that is considered vulnerable is relatively consistent, increasing by one percent for both minority populations and individuals experiencing poverty for the aspirational network. This indicates that the number of people within vulnerable groups with access to transit grows proportionally with the total amount of population with access.

Table 8: Accessibility Comparison by Network

Within 1/4-Mile of LCTA Service	Existing	Improved Network	Enhanced Network	Aspirational Network
Total Population	135,200	138,500	139,300	158,900
Fixed Route Areas	135,200	117,200	122,400	133,600
Microtransit Areas	-	40,800	40,800	49,900
Total Population Experiencing Poverty	23,000	23,500	23,700	28,600
Fixed Route Areas	23,000	21,100	20,800	24,000
Microtransit Areas	-	6,800	6,800	7,700
Population Experiencing Poverty (%)	17%	17%	17%	18%
Total Minority Population	31,100	31,900	32,000	38,100
Fixed Route Areas	31,100	28,100	29,400	34,700
Microtransit Areas	-	5,700	5,700	6,200
Minority Population (%)	23%	23%	23%	24%
Jobs	67,900	71,000	71,000	79,700
Fixed Route Areas	67,900	64,000	65,600	72,600
Microtransit Areas	-	17,800	17,800	21,600
Key Destinations	183	181	181	206

6 Financial and Implementation Plan

FINANCIAL PLAN

Assumptions

As a planning document, the financial plan provides planning-level estimates that will be further refined through LCTA's regular service planning and budgeting process. Some key assumptions include:

- Ranges are provided as costs may scale or recommendations may be refined as services changes are implemented.
- Service planning was done as a sketch-planning level. LCTA will perform more detailed scheduling to refine the estimates. Unless additional operating funds are found, span of service or headways will be modified to align proposed service with annual budgets.
- There is an expectation that as detailed service plans are developed, some efficiencies will be found through schedule improvements such as run-cutting and interlining.
- The network alternatives increase in necessary investment as service levels improve.

Financial Forecast

Table 9 shows the anticipated staffing, capital, and operating changes for each network alternative. Values and percentages shown represent each network's change from LCTA's current baseline financial projections. All values are based on estimated increases in level of service, typically reflected in vehicle revenue hours from the existing system to each proposed network. Items that are presented as ranges may be scaled to suit LCTA's needs and budget as the network is implemented. Enhanced and aspirational financial projections are shown as a change from existing, not from the previous network alternative.

The following items may be affected by the proposed networks:

- **Vehicle Revenue Hours** – All three networks will likely see an increase in revenue hours tied to improved levels of service, which directly impacts the cost of providing the service. These numbers will be further refined as LCTA develops final schedules for improved services.

- **Staffing** – Additional drivers, maintenance personnel, and support staff may be needed for each network. This change is influenced by the amount of service provided and the size and composition of the vehicle fleet.
- **Vehicle Fleet** – As the level of service offered in the proposed networks increases, additional fixed route buses and microtransit vehicles may be needed meet network demand. Microtransit vehicles must be leased, purchased, or adapted from current fleet vehicles, and the number of vehicles needed in each microtransit zone may be adjusted based on rider demand. During its initial pilot of microtransit service, it is recommended that LCTA lease, repurpose shared-ride vehicles, or purchase vehicles that are flexible to operate on other types of services.
- **Software** – The introduction of microtransit service will require additional microtransit scheduling and routing software, as well as training for employee users.



**TRANSIT
DEVELOPMENT
PLAN
2024**



DRAFT

