

DEVELOPMENT PLAN

2024

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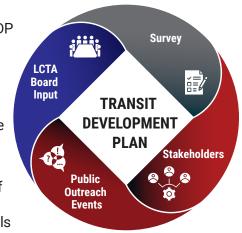
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## **Executive Summary**

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.



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#### **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.



**39%** of respondents use transit to go shopping.



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



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



**25%** of respondents use transit to run errands.



**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:

INVESTMENT INCREASED

#### **Improved Network**

Optimizes existing service, and targeted introduction of new service. Based on the current projected operating budget of LCTA, to be implemented in near-term.

#### **Enhanced Network**

Builds upon the improved network with high-priority improvements that require additional investment.

#### **Aspirational Network**

Builds upon the enhanced network with a long-term vision for transit service in Luzerne County that requires additional investment. DRAFT · DRAFT ·

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.

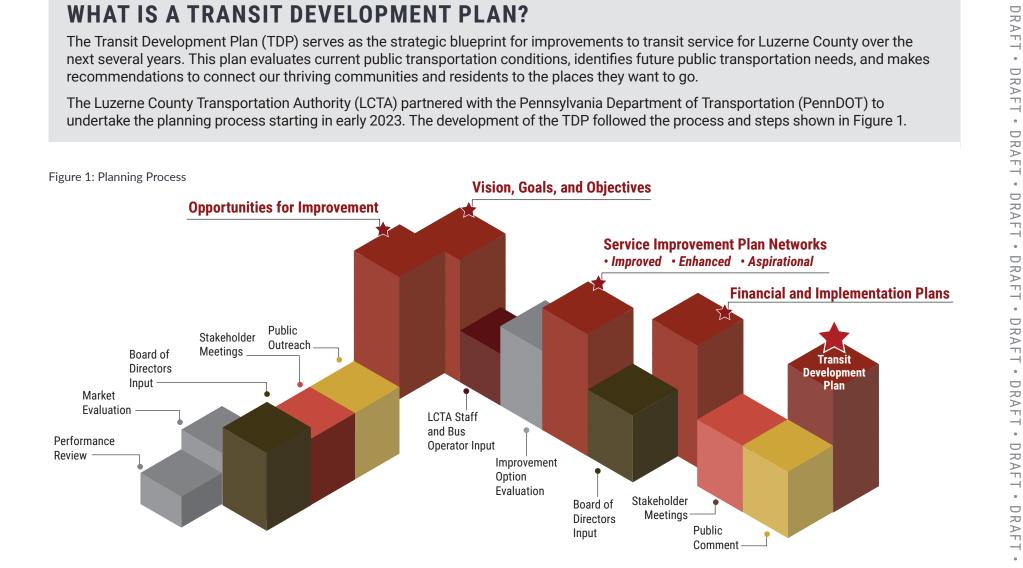
Overall, the TDP centers the community's needs and input to develop a strategic roadmap for improvements to Luzerne County public transit.

# 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.



#### LCTA ORGANIZATION AND GOVERNANCE

LCTA was created in 1972 by the Luzerne County Board of County Commissioners to provide fixed route transit to the Wilkes-Barres area. LCTA incorporated ADA paratransit into its services in 1990 and introduced shared-ride service in 2012. Currently, LCTA operates fixed route bus service in the Wilkes-Barre area and operates a shared-ride paratransit service throughout Luzerne County.

#### **Board of Directors**

LCTA is governed by a nine-member Board of Directors that is appointed by the Luzerne County Council. The Board holds regularly scheduled meetings on the last Tuesday of each month that are open to the public at the Luzerne County Transportation Authority office, which is currently located at 315 Northampton Street, Kingston, PA.

The Board consists of the following members as of 2024:

- Chairman Charles Sciandra
- Vice-Chairman Michael Cefalo
- Treasurer Dr. Valerie Kepner
- Assistant Treasurer John Young
- Secretary Lynette Villano
- Assistant Secretary Dennis Driscoll
- Member Gary Polakoski
- Member Joseph Padavan
- Member Tom Bindus

#### **Organizational Structure**

LCTA's current organizational structure is shown in Figure 2.



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Figure 2: LCTA Organizational Structure 2023

**LCTA Board** Solicitor **Assistant** Executive **LCTA Executive** Director/ Director Operations Director Marketing and Compliance Director of Director of HR Director of **Shared Ride** Safety Analyst/DBE Administrative Communications Finance Director Maintenance Director Officer Director **SVCS** Operations Manager **Shared Ride** Maintenance **Procurement** Accounting Grants Shared **Shared Ride** IT Manager Manager Supervisior Coordinator **Acct Assistant** Ride Asst **CSR Lead** Coordinator Dispatch Operations Director **Shared Ride** Accounting Customer **CSR** Shared Ride Service **Assistant** PT Dispatch Dispatcher **Shared Ride PT Customer** PT CSR **Shared Ride** Service Rep Dispatcher PT Dispatch PT Customer Shared Ride Service Rep PT Dispatcher PT Dispatch Client Program Administrator

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#### **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:





#### **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

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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 planned 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> <li>Emphasize customer service in operations and workforce training</li> <li>Improve service speed and reliability</li> <li>Emphasize planning and delivery of productive service</li> </ul>
Improve community mobility and assure high-quality customer service	<ul> <li>Provide public transportation services that add value throughout Luzerne County and facilitate access to jobs, education, healthcare and other needs</li> <li>Ensure equitable distribution of services and resources</li> <li>Modernize and improve customer communication infrastructure</li> <li>Pilot alternative service products</li> <li>Integrate technology with LCTA services</li> </ul>
Support economic growth and a vibrant built environment	<ul> <li>Support a strong, diverse, sustainable economy</li> <li>Address the growing need for transportation services to industrial parks and job centers</li> <li>Support economic development by using existing transportation infrastructure efficiently and effectively</li> </ul>

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#### Performance Standards

PennDOT conducts recurring performance reviews and annual reports using the following metrics for fixed route service in annual totals and five-year trends. LCTA completed its most recent performance report in January 2023. The performance report includes reported values for the metrics above and targets for 2027.

- Passengers per Revenue Vehicle Hour (2027 goal of 8.03)
- Operating Cost per Revenue Vehicle Hour (2027 goal of \$133.83)
- Operating Revenue per Revenue Vehicle Hour (2027 goal of \$13.74)
- Operating Cost per Passenger (2027 goal of \$16.67)

Performance measures LCTA uses for shared-ride service include:

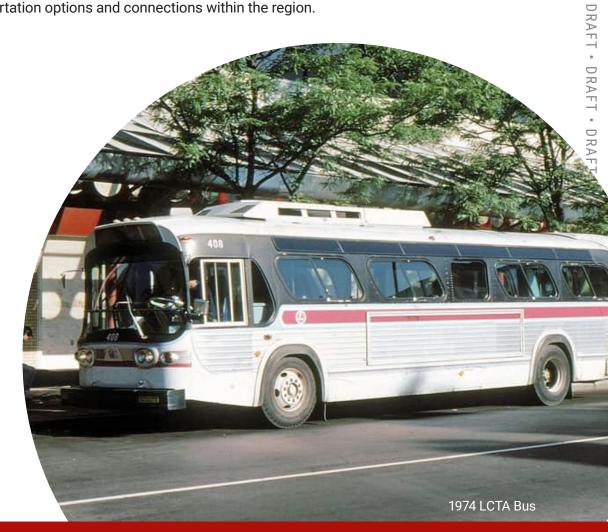
- Total Trips by Funding Program (Senior, Medical Assistance, etc.)
- Operating Cost per Passenger
- Operating Subsidy per Passenger Trip
- On-Time Performance
- Trip Completion Rate
- Customer Satisfaction/Complaints
- Average Trip Duration

#### **RELATIONSHIP TO PREVIOUS PLANS**

To develop a plan for the future, it is crucial to align with previous plans and understand where they can be built upon. The TDP is connected to the following previous plans:

- 2023 Transit Performance Review
  - The TDP evaluates LCTA's performance in recent years and future goals to develop a plan to meet those targets and provide improved service.
- Lackawanna-Luzerne Counties Joint Comprehensive Plan and 2045 Long-Range Transportation Plan

The TDP considers the transit needs and advances the goal of enhanced multi-modal transportation options and connections within the region.



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# 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 Rout	es	
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 Servic	e	
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	

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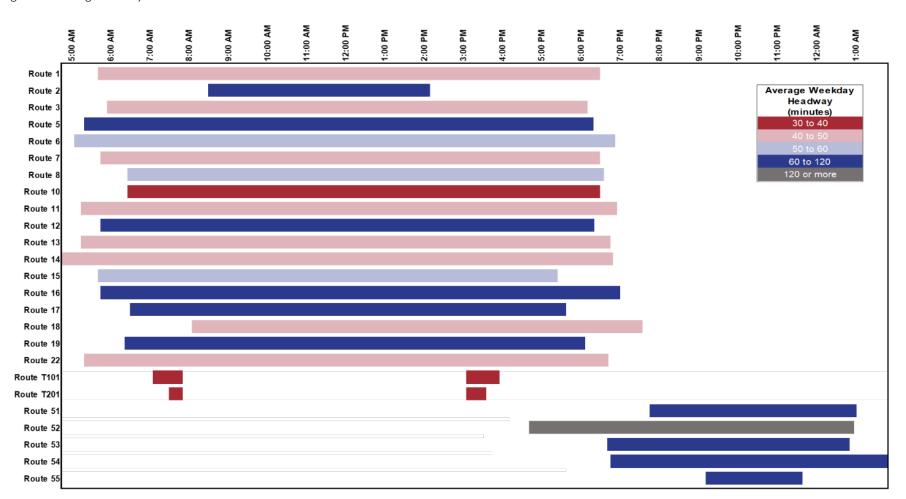
Fixed route weekday operations begin at 5:00 am and continue to 1:00 am, although actual service time varies by route. The majority of fixed routes end operations by 7:00 pm and five routes provide night service (see Figure 3). Tripper Service are helper buses for Routes 1, 5, and 16 during the morning 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.

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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

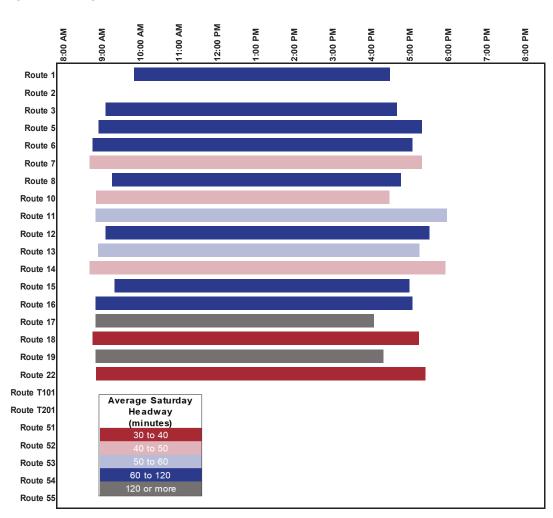


Note: Color-coded headways are representative of daily average across the entire span of service. Actual headways may be shorter during certain times of the day.

Figure 4: Existing Saturday Level of Service

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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 3/4 -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 3/4 -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.

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SHARED RIDE TRANSIT

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.

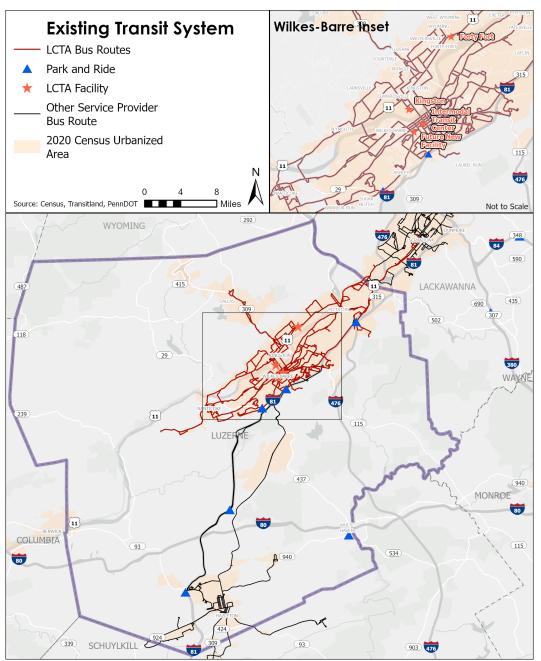
Table 3: Existing LCTA Shared-Ride Service

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				
	Sat	turday 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



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#### **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 Average Saturday Annual Total	2,400 908 671,209
Unlinked Passenger Trips (Shared-Ride) Average Weekday Average Saturday Annual Total	398 64 105,900
Total Actual Vehicle Revenue Hours Fixed Route Shared Ride	87,838 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.

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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		None	
	213 PA-315, Pittston, PA 18640	(17, 19, 52 travel by but do not stop at lot)	

#### **Operations and Maintenance Facilities**

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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		

<sup>\*</sup> With a valid State Transit 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

Туре	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

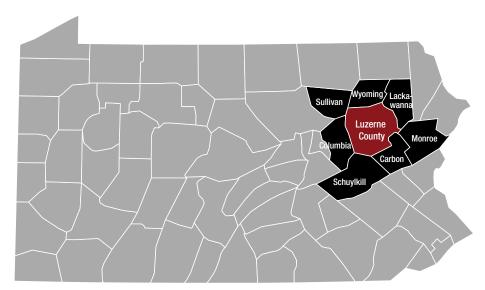
<sup>\*\*</sup> With a valid Reduce Fare ID Card

#### 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



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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 ¾-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.

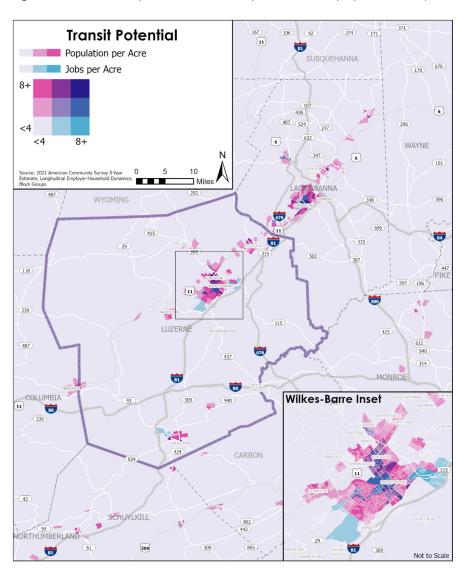
#### Population and Employment

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)

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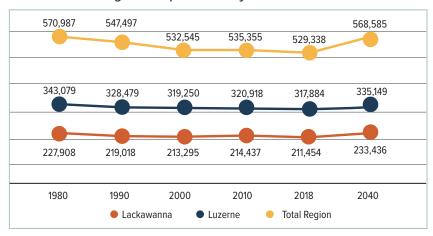
Over the next two decades, the population in the region is expected to remain relatively consistent. Figure 7 shows the projected population growth in 2040 and was developed by the Lackawanna-Luzerne Counties Joint Comprehensive Plan in 2021. From 2018 to 2040, the county is expected to grow by approximately 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



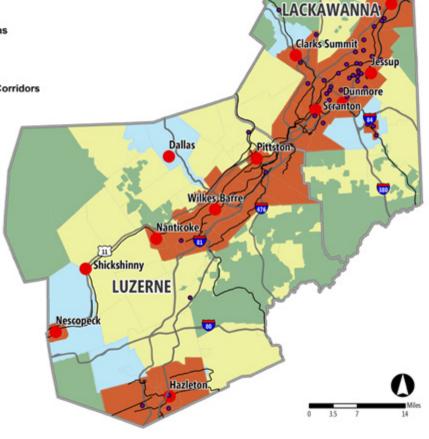
Figure 7: Luzerne County Regional Population Projections (2040)

#### Regional Population Projections to 2040



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





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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:

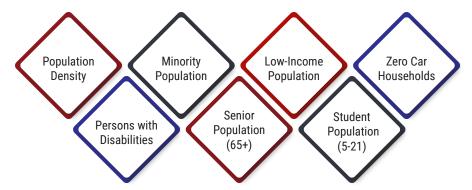
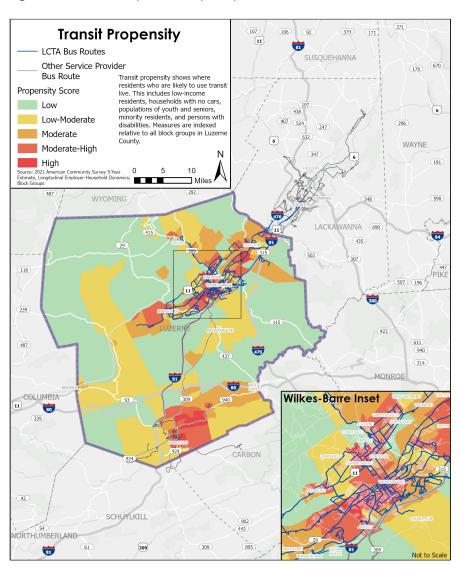


Figure 9: Luzerne County Transit Propensity



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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



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#### **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 origindestination, 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-destinatoin 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.

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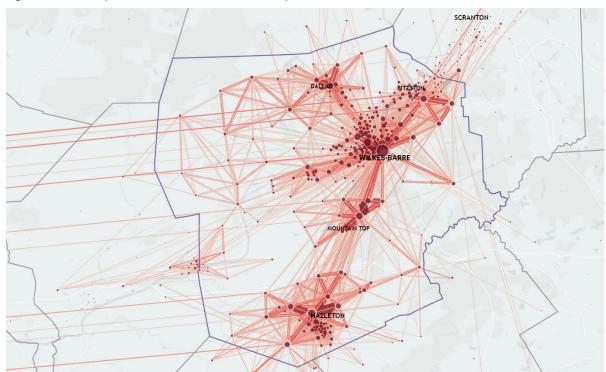
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■ Weekday travel peaks are from 7:00 am to 9:00 am and 2:00 pm to 6:00 pm, coinciding with commutes to and from work and school. Weekend travel is consistently heavy from 10:00 am to 7:00 pm but reaches its peak between 12:00 pm and 1:00 pm. Most weekend 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 form the mobility modeling software Replica for an average Thursday in Fall of 2021. Thicker lines represent a greater number of trips.

## PERFORMANCE EVALUATION

Each bus route was evaluated based upon four key performance indicators: ridership, passengers per one-way vehicle trip, passengers per revenue mile, and passengers per revenue hour. These metrics helped to identify which routes were maximizing service and revenue and which routes were underutilized. LCTA data from January through December 2022 was used for this analysis.

Ridership is the most straightforward way of seeing the demand for a route. Figure 11 charts each route by its annual number of passengers.

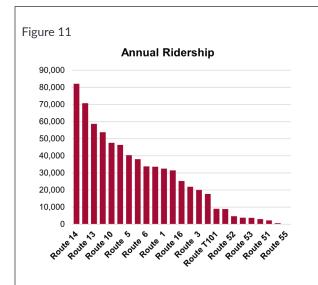
However, ridership does not measure efficiency. Based on demand and available resources, frequency, hours, and distance traveled can be different among routes.

Figure 12 charts each route by the number of passengers it serviced each one-way trip.

Figure 13 charts each route by the number of passengers it serviced each hour it is collecting revenue.

Figure 14 charts each route by the number of passengers it serviced each mile traveled.

Routes which ranked in the top three for multiple metrics include Route 14 (Nanticoke, Glen Lyon), Route 13 (Shoppers' Delight), and Route T101 (Route 1, 5, 16 Helpers). These indicate higher performers relative to the rest of the system. For all four metrics, the three routes which ranked in the bottom three were Route 51 (Kingston, Pittston), Route 2 (Pittston Circulator), and Route 55 (Georgetown, Blackman Street Loop). These indicate lower performance relative to the rest of the system, and all have limited hours of service.



Route 17

Route 14

Route 14

Route 14

Route 15

Route 16

Route 16

Route 17

Route 16

Route 17

Route 17

Route 17

Route 18

Route 22

Route 52

Route 53

Route 54

Route 54

Route 54

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Route 57

Route 65

Route 65

Route 67

Route

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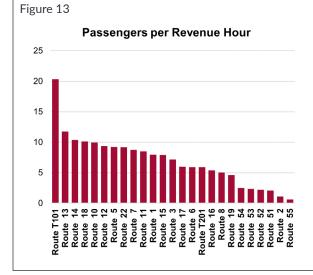
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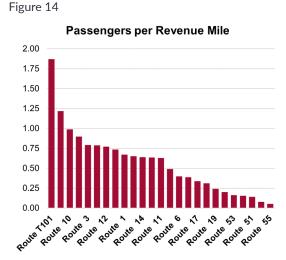
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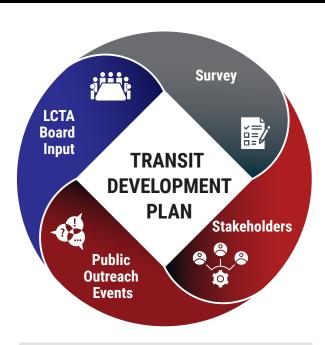
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# Public Outreach



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 inperson 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.



**39%** of respondents use transit to go shopping.



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



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

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**25%** of respondents use transit to run errands.



**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

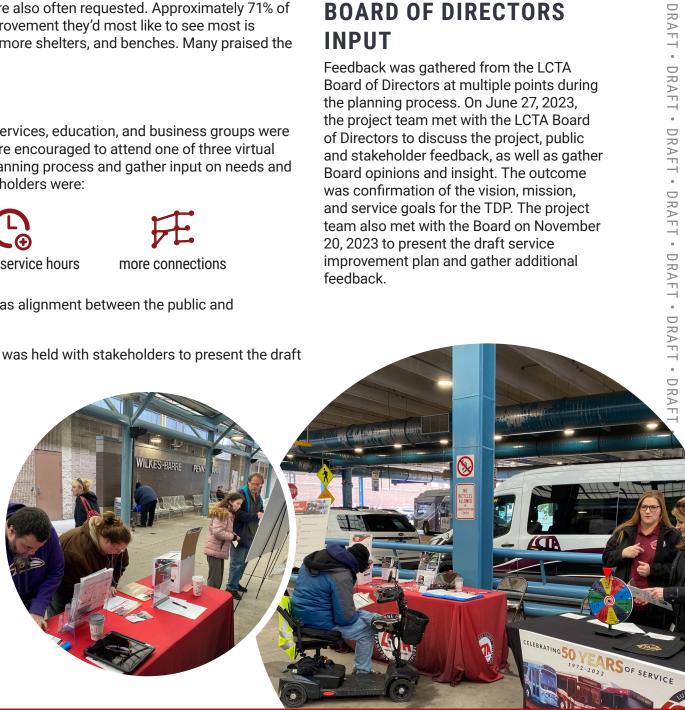
more connections

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.



# 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:



#### **Improved Network**

Optimizes existing service, and targeted introduction of new service. Based on the current projected operating budget of LCTA, to be implemented in near-term.

#### **Enhanced Network**

Builds upon the improved network with high-priority improvements that require additional investment.

#### **Aspirational Network**

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Builds upon the enhanced network with a long-term vision for transit service in Luzerne County that requires additional investment.

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 are at a planning-level and are subject to refinement as LCTA undergoes its scheduling and budgeting processes.

In addition to traditional fixed route service. several areas within **Technology-enabled:** Luzerne County technology supports realwere identified as **On-demand Flexible** time ride requests, dynamic candidates to pilot an and optimized routing, alternative demand service responds accommodates riders and payment through a and is dispatched to whose schedule may response type of service smartphone app, website, or not fit into fixed route riders in real-time. commonly referred to as via phone call. service timings. microtransit. Many transit systems across the country, including several in Pennsylvania, have implemented microtransit **Zone-based** to supplement fixed route or to maintain trips start and end in a predefined area with coverage to areas that **Smaller vehicle** opportunities to connect are inefficient to serve to existing fixed routes. operated with smaller with a fixed bus route. vehicles than fixed Common characteristics route service to reach of microtransit include: areas full size buses cannot.

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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.

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- 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.

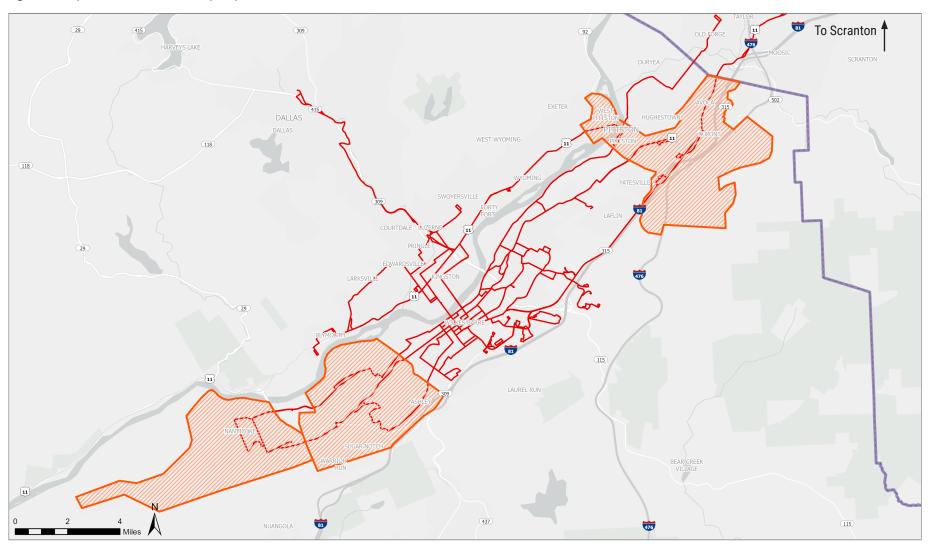
- Route 15: Realign route to provide faster and more direct between the Intermodal Transit Center and Nanticoke via Main Street and Middle Road and operate the same service pattern on all trips.
- Route 16: Split River Road and Hilldale route patterns into two separate routes (Hilldale becomes new Route 20). Realign Route 16 in Duryea onto Phoenix Street and Foote Ave on all trips.
- Route 17: 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 18: 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.
- 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 20: Add new route 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.

- Night Routes (51, 52, 53, 54, 55): 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.
- 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. Operate on weekdays and on Saturdays.
- 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. Operate on weekdays and Saturdays,
- 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. Operate on weekdays and Saturdays.

No changes were recommend in the improved network for Route T101/T201 and seasonal Route 24 (Frances Slocum)



Figure 15: Improved Network Summary Map



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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.



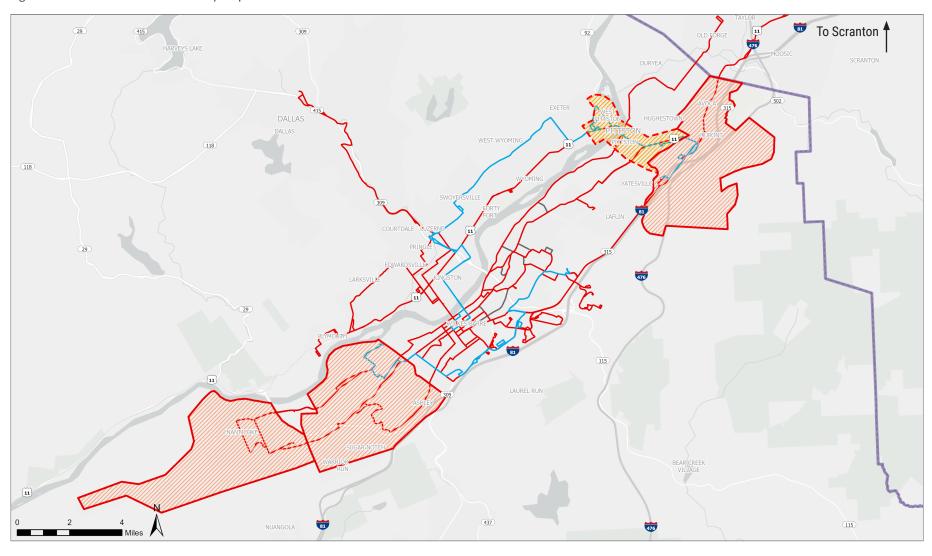
#### Add and Update Routes

■ 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.

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- 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-GrimesPittston 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



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- 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:

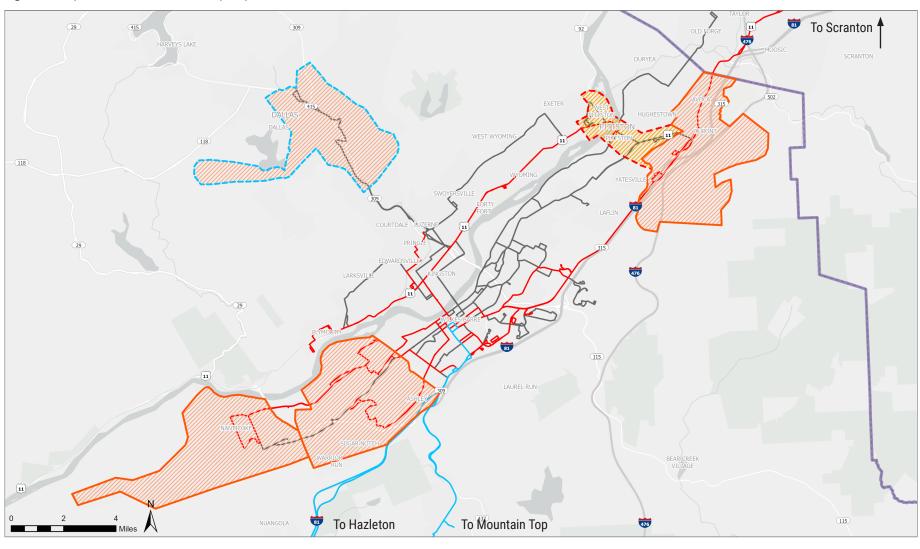
- Extend weekday and Saturday night service on routes operating in the improved and enhanced networks.
  - Route 7: extend service to 12:30 a.m.
  - Route 13: extend service to 12:30 a.m. and increase frequency to 60 minutes
  - Route 14: extend service to 12:30 a.m.
  - Route 18: extend service to 12:30 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-Trucksville 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. DRAFT •

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- 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



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

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#### **IMPROVED** (Near-Term)



## '🔲' 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.)		

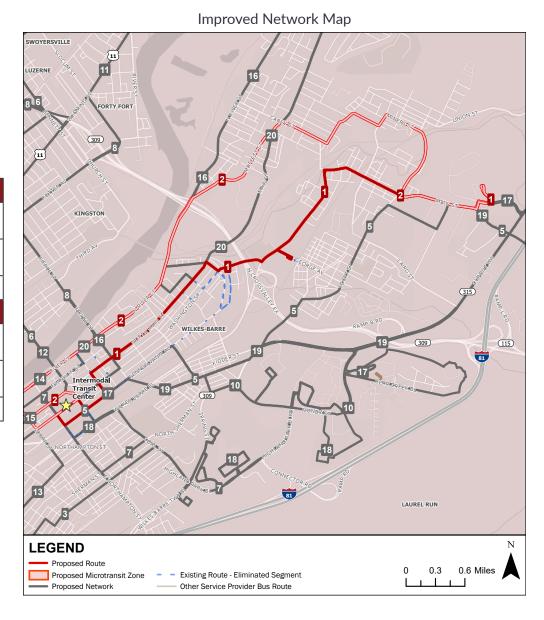
#### **ENHANCED** (Future, Not Funded)



**L**onger 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** (Near-Term)



**ROUTE 3** 

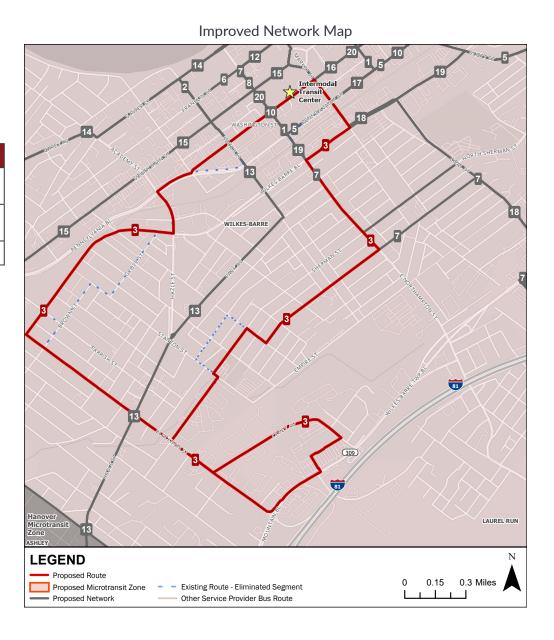
Realign route to travel on High Street on every trip instead of alternating with Grove Street and operate the same service pattern on all trips.

Route 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)



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



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#### **IMPROVED** (Near-Term)



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**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



#### **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)





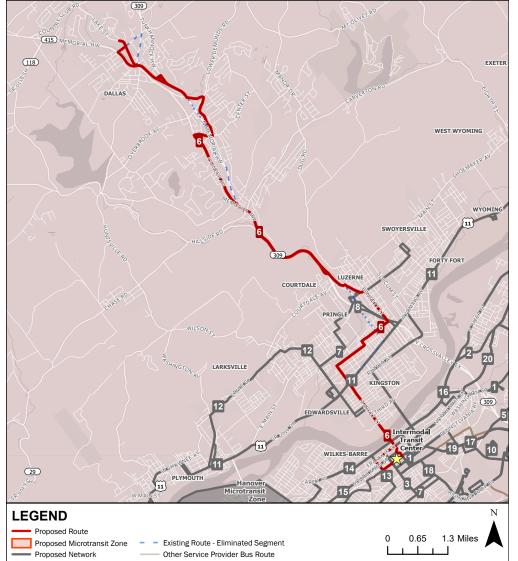
- Expand Saturday service hours to 9:00 a.m. to 6:30 p.m.
- 60-minute frequency during off-peak, increased from 90 minutes in improved network.

#### **ASPIRATIONAL** (Future, Not Funded)



 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





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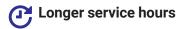




#### **IMPROVED** (Near-Term)



More direct bus service





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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.

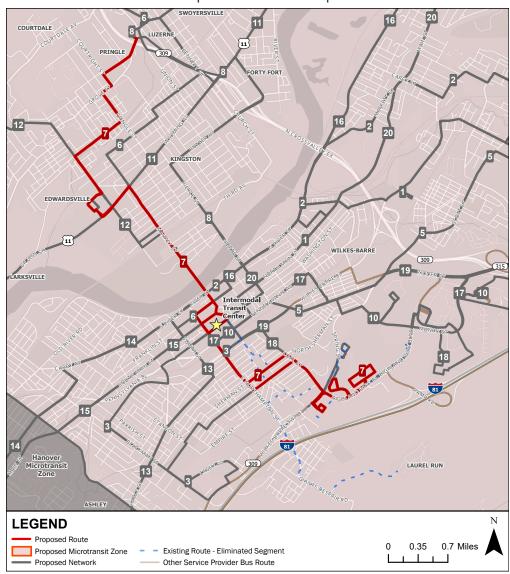
#### **ENHANCED** (Future, Not Funded)



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)



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** (Near-Term)



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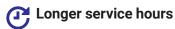
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More direct bus service





More frequent buses



- 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



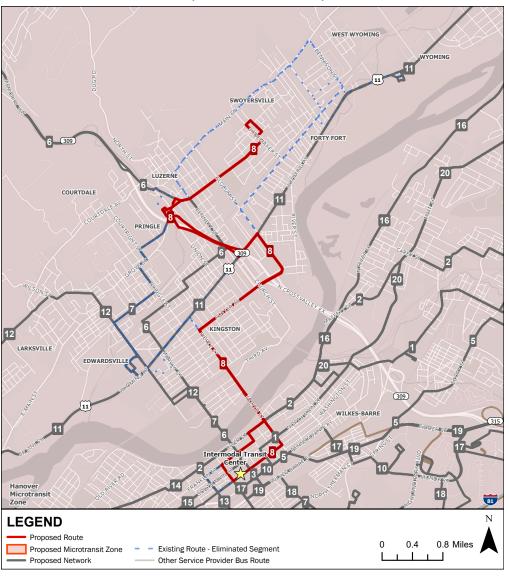
**More connections within Luzerne County** 



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



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#### **IMPROVED** (Near-Term)

More direct bus service

🖳 More frequent buses

Longer service hours

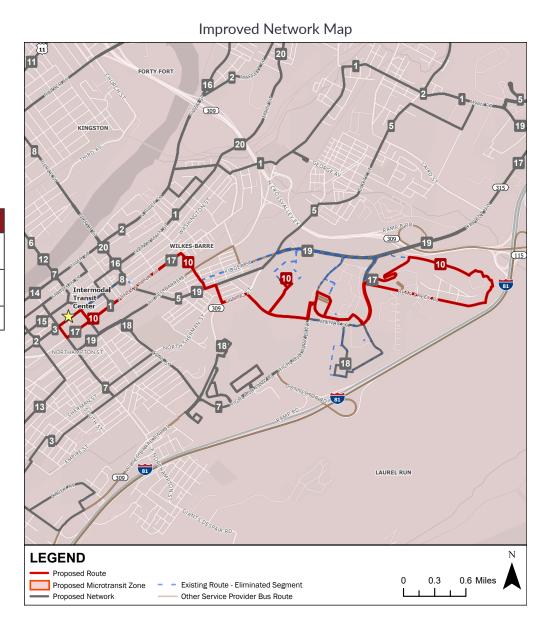
Realign to streamline service and provide bidirectional service along Mundy Street with connections to East End Center, John Heinz, and Wyoming Valley Mall on every trip.

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)

C Longer service hours

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



## **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)



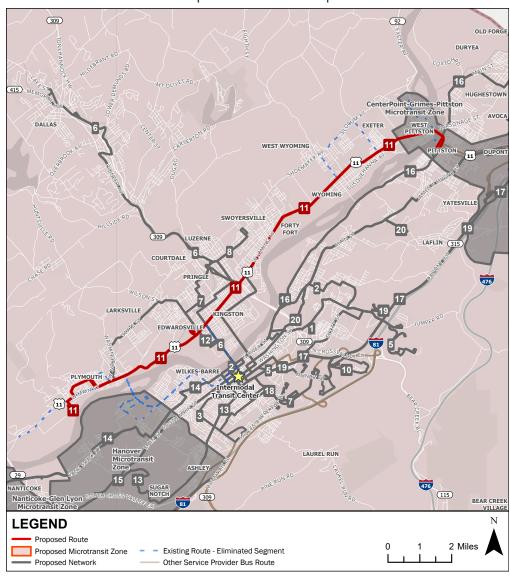
#### Longer service hours

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

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#### **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)



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

# Improved Network Map **LEGEND** Proposed Route 0.25 0.5 Miles Proposed Microtransit Zone Existing Route - Eliminated Segment

Other Service Provider Bus Route

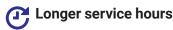
Proposed Network

## **ROUTE 13 AND HANOVER MICROTRANSIT (NEW)**

#### **IMPROVED** (Near-Term)

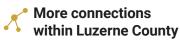


More direct bus service





More frequent buses



- 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*
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Night Service Frequency (mins.)	_	_

<sup>\*</sup>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

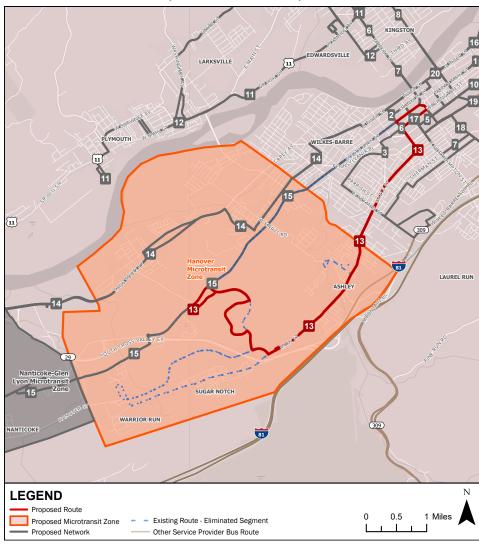
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#### **ASPIRATIONAL** (Future, Not Funded)



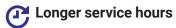
- Expand service hours with night service on weekdays and Saturday.
  - Extend Route 13 service to 12:30 a.m. and increase frequency to 60 minutes.
  - Extend microtransit service to 12:00 a.m.

## **ROUTE 14 AND NANTICOKE-GLEN LYON MICROTRANSIT (NEW)**

#### **IMPROVED** (Near-Term)

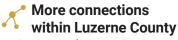


More direct bus service





More frequent buses



- 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*
Peak / Off Peak Frequency (mins.)  Night Service Frequency (mins.)	15-30* –	15-30* –

<sup>\*</sup>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.

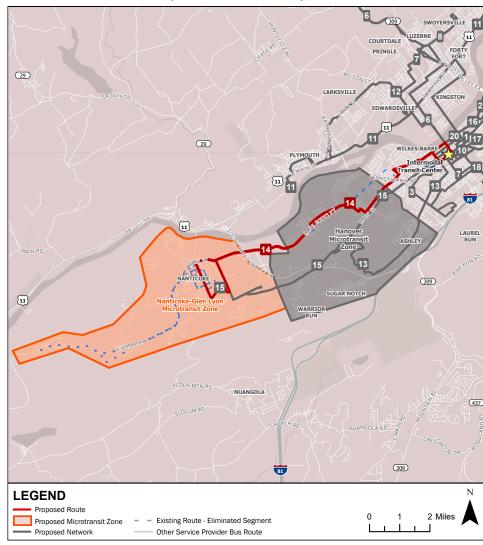
#### Improved Network Map

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#### **ASPIRATIONAL** (Future, Not Funded)



- 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.

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#### **IMPROVED** (Near-Term)

#### More direct bus service

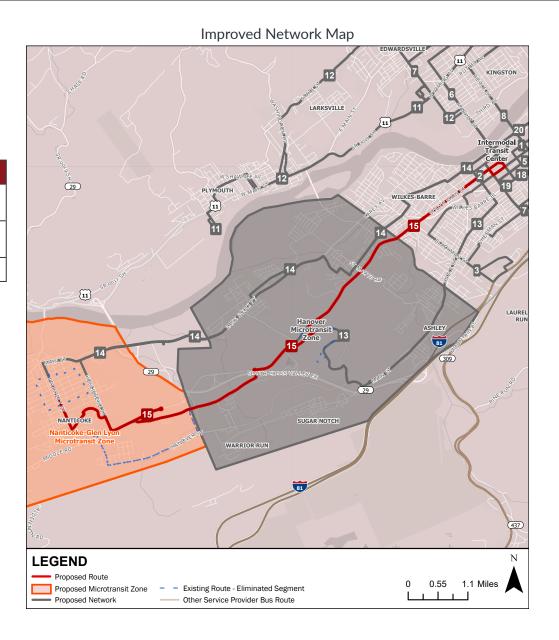
Realign route to provide faster and more direct between the Intermodal Transit Center and Nanticoke via Main Street and Middle Road and operate the same service pattern on all trips.

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)



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



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## **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.)	ı	-
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** 

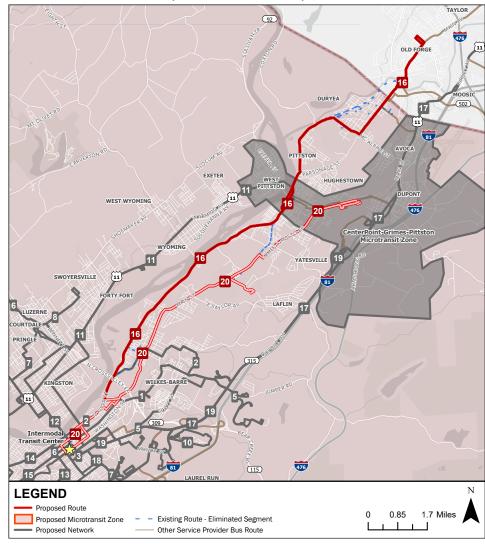


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More frequent buses

- 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



#### **IMPROVED** (Near-Term)





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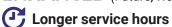
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#### **More connections within Luzerne County**

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)



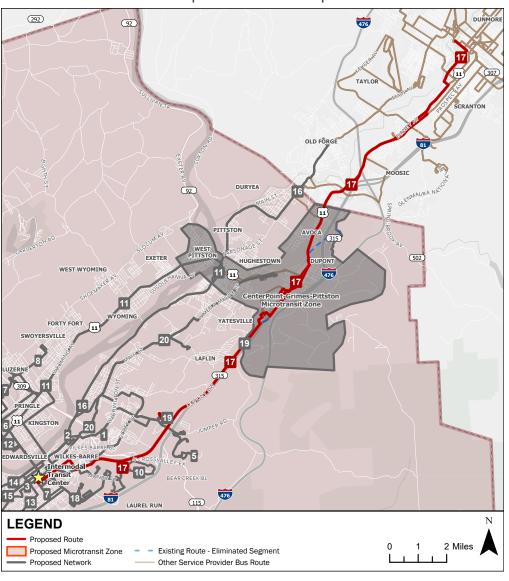
Expand Saturday service hours to 9:00 a.m. to 6:30 p.m.

#### **ASPIRATIONAL** (Future, Not Funded)



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

## Improved Network Map



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#### **IMPROVED** (Near-Term)







- 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

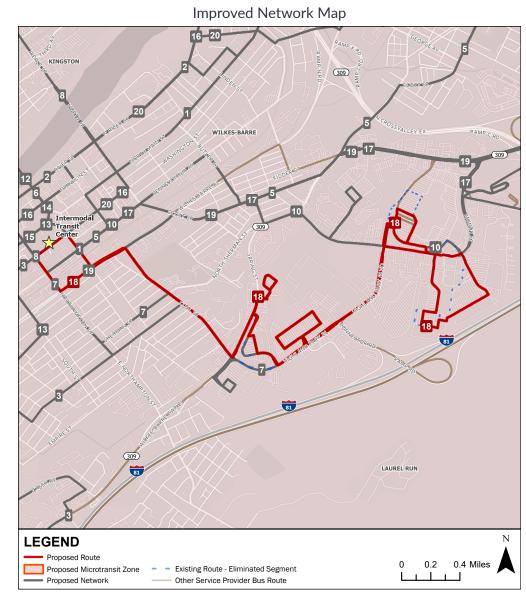
■ Expand Saturday service hours to 9:00 a.m. to 11:00 p.m. (120-minute frequency after 6:30 p.m.)

#### **ASPIRATIONAL** (Future, Not Funded)

**C** 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.



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

#### **IMPROVED** (Near-Term)

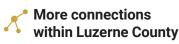


More direct bus service





More frequent buses



- 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.

<sup>\*</sup>A target response time is assumed for microtransit

#### **ENHANCED** (Future, Not Funded)

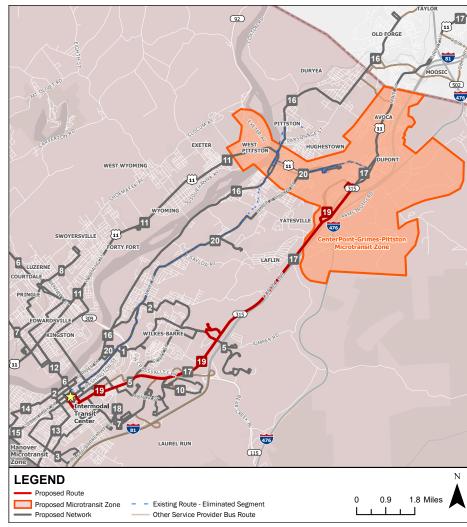


More frequent buses



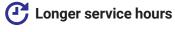
- Expand Saturday night service hours of Route 19 to 9:30 p.m. at 120-minute frequency, and microtransit to 10:00 p.m.
- Route 19 to have a 60-minute frequency during off-peak and on Saturday, increased from 120 minutes in improved network.
- Provide an additional vehicle in the zone throughout the day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

#### Improved Network Map



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#### **ASPIRATIONAL** (Future, Not Funded)





#### 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.

#### **IMPROVED** (Near-Term)







■ 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)**

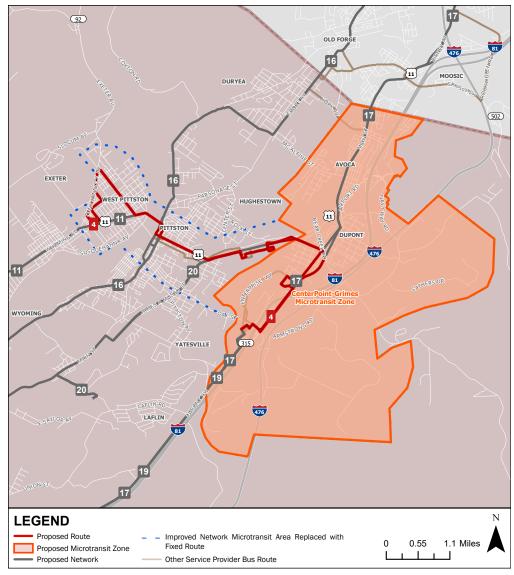
#### **ENHANCED** (Future, Not Funded)



#### 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)



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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.

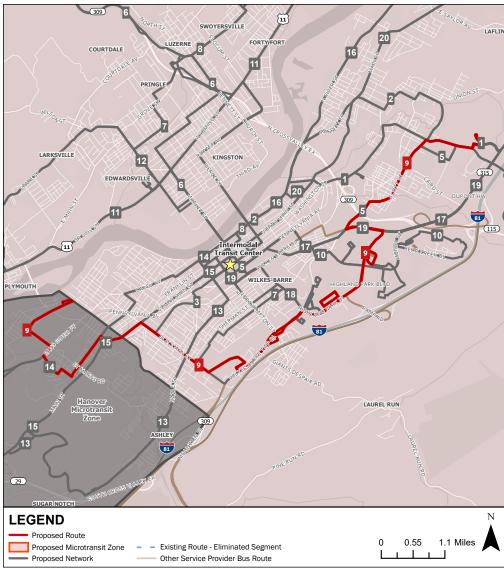
#### **ASPIRATIONAL** (Future, Not Funded)



**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**



#### **ASPIRATIONAL** (Future, Not Funded)



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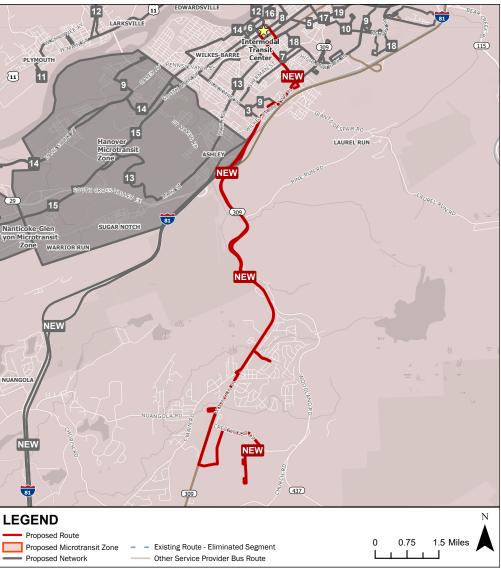
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#### More connections within Luzerne County

- 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



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## **HAZLETON (NEW)**

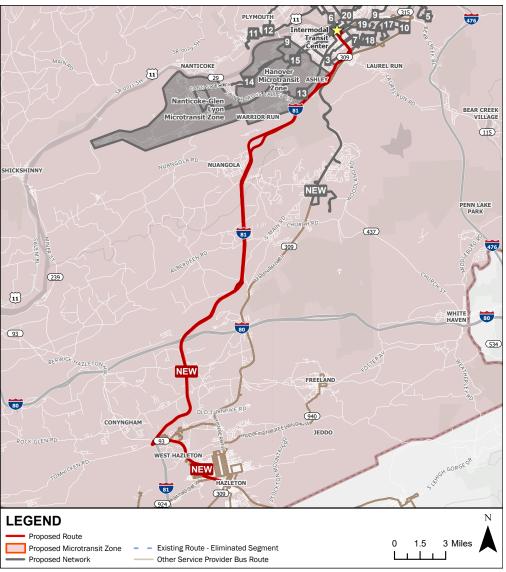
#### **ASPIRATIONAL** (Future, Not Funded)



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 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.

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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

#### **ADDITIONAL RECOMMENDATIONS**

Additional recommendations that can be considered to complement service improvements were identified based on the top priorities from the public survey and other input received through the TDP process:

#### **Better Bus Stops**

- Increase the number of defined stop locations with signage and amenities. Create a schedule of improvements, including adding signage, benches, or shelters, for high priority stops.
- Prioritize improvements at high-activity stops based on stop-level ridership data.

## Pursue Partnerships with Private Institutions

 Universities and large employees located near transit stops can benefit from pass programs, which can encourage transit use. LCTA can pursue these partnerships with the goal of increasing ridership.



#### **Better Transit Service Info**

- Update static route and system maps with the latest routes and schedules.
- Promote real-time arrival information to customers and provide a public GTFS Realtime data feed that can be integrated to commonly used third-party apps like Google Maps and Transit.

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#### **More Accessible Buses or Stops**

- Consider factors such as ease and speed of boarding for mobility devices and people of all abilities, and flexibility to use the vehicle on multiple route types when purchasing future vehicles.
- Identify high use stops and inventory their surrounding areas for ADA accessibility.
- Partner with applicable organizations, such as PennDOT, the County, or municipalities to improve sidewalks, crosswalks, and curb ramps near high use stops.

# 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 sketchplanning 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.

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■ Software – The introduction of microtransit service will require additional microtransit scheduling and routing software, as well as training for employee users.

- Marketing and Branding Reconfigured services will require changes to the website, system maps, stops and other publicly-posted information. Public outreach and education will be needed to communicate proposed service changes to riders. Microtransit, in particular, is a new type of service that will require extensive outreach to develop an informed and comfortable user base.
- Bus Stops In addition to improving the level of service of the system, LCTA also plans to add passenger amenities to improve bus stops. Installation of new and/or improved signs and bus stops shelters and seating at high-use and transfer locations will be coordinated with service changes.
- Facilities It is anticipated that the new staff and fleet can be accommodated with the new LCTA administration and maintenance facility.

Table 9: Change to Existing LCTA Financial Projections

	INCREASED INVESTMENT		
	Improved	Enhanced	Aspirational
Staffing (FTEs)			
Total	0 to 10	10 to 24	24 to 41
Fixed Route Drivers	0	0 to 12	12 to 24
Microtransit Drivers	0 to 9	9 to 10	10 to 14
Paratransit Drivers	No change	No change	No change
Maintenance Workers	0 to 1	1 to 2	2 to 3
Operating			
Estimated Vehicle Revenue Hours <sup>1</sup>	+2% to +9%	+9% to +34%	+34% to +58%
Estimated Change in Operating Costs	+2% to +9%	+9% to +34%	+34% to +58%
Microtransit Software and Promotional Marketing	Up to 3 microtransit zones	Up to 3 microtransit zones	Up to 4 microtransit zones
Capital			
One-Time Fixed Route Vehicle Purchase	No change <sup>2</sup> (continue lifecycle replacement)	No change <sup>2</sup> (continue lifecycle replacement)	0 to +2 (continue lifecycle replacement)
Microtransit Vehicle Additions <sup>3</sup>	+4 to 5	+4 to 5	+5 to 6
Improved Bus Stops	No change from currently scheduled investment <sup>4</sup>	Up to +200% of currently scheduled investment	+200% to 300% of currently scheduled investment

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<sup>&</sup>lt;sup>1</sup>Estimated revenue hours shown may be higher than actual once the service is scheduled and there are efficiencies in run cutting, blocking, etc.

<sup>&</sup>lt;sup>2</sup>Lower fleet needs are anticipated to reduce fleet replacement costs.

<sup>&</sup>lt;sup>3</sup>Microtransit vehicles may be leased or repurposed from the existing shared-ride fleet.

<sup>&</sup>lt;sup>4</sup>Bus stop improvements are included in LCTA's existing system fiscal year 2024 financial projections.

#### **IMPLEMENTATION PLAN**

An implementation plan was developed to assist LCTA in transitioning the existing system to a new service network, specifically the improved network alternative. The implementation of the enhanced and aspirational networks would follow similar steps but would likely require an additional investment of resources which have not been identified at this time.

This plan outlines the steps required to support the proposed improved network, including capital investments, staffing, and marketing. Activities within the plan are divided into four types:

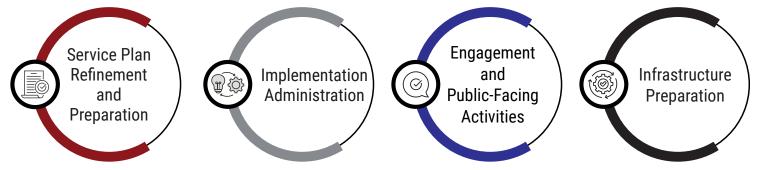
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Each activity is assigned an anticipated start period, which is based on the sequence of events that need to occur before LCTA's anticipated start of new service. The assumed start date for improved service is the third guarter of 2024.



#### **Implementation Activities**

Service Plan Refinement and Preparation

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## 2024: Q1

- Validate operating assumptions
- Conduct service equity analysis
- Coordinate with private property owners, as applicable

#### 2024: Q2

## VALIDATE Operating Assumptions

- Review community feedback on proposed service changes and finalize service design
- Perform test runs
- Develop draft schedules

#### LAUNCH Service

2024: Q3

- Develop final schedules
- Prepare operator work assignments

 Continue to optimize routes and services based on monitoring and customer feedback

2024: Q4+



## VALIDATE operating budget needs, capital

budget needs, and staffing needs

- Prepare operating and capital budget requests
- Finalize funding and grant strategy
- Prepare grant applications, if applicable
- Implement staffing changes
  - Confirm any new classifications
  - Post new positions
- Interview, hire, and train

- Develop plan for monitoring and evaluation of service changes
- Present proposed final service change information to the Board for adoption
- Conduct operator training on new routes and services
- Monitor the operational efficiency of the new routes or services
- Coordinate with other local, regional, and state planning efforts



Engagement and Public-Facing Activities

- Conduct employee meetings
- Develop outreach, engagement, and marketing strategy
- Develop branding and education campaign for new services (on-demand microtransit)
- Conduct public meetings
- Conduct stakeholder meetings
- Implement final outreach, engagement, and marketing strategy
- Begin implementation of final branding and education plan
- Update print materials
- Update digital materials

- Continue to promote after launch:
- New routes and services
- Engage stakeholders
- Community engagement



### ACQUIRE

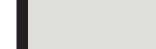
on-demand microtransit vehicles

- Prepare and issue RFP
- Evaluate and select vendor
- Inspection and acceptance
- Train operators and mechanics
- Develop maintenance schedule

#### ACQUIRE on-demand microtransit scheduling software

- Prepare and issue RFP
- Evaluate and select vendor
- Install and test
- Train schedulers, operators, mechanics, and administrators
- Configure new service schedule in FRITS
- Develop and implement bus stop improvement strategy
  - Identify existing stop relocation needs to support new services
  - Prioritize amenity deployment
- Coordinate with stakeholders (PennDOT, municipalities, private owners)
- Design and obtain necessary permits
- Select vendor and install

- Continue vehicle lifecycle replacement activities
- Continue to implement bus stop improvement strategy





# TRANSIT DEVELOPMENT





