



WORKSHOP LV ENVIRONMENT / TRANSPORTATION

Priority Climate Action Plan

Transportation Decarbonization



Meeting Agenda

- **Welcome and Introductions**
- **Overview of EPA Climate Pollution Reduction Grant Program and the Priority Climate Action Plan**
- **PennDOT Carbon Reduction Strategy**
- **Comparing CPRG and CRP programs**
- **Interactive Activity Results from Previous Workshop**
- **Priority Climate Action Plan Draft Outline**
- **LANTA Presentation**
- **Next Workshop Meeting**



Ground Rules

1. **All people are welcome here:** We continue to build a bigger table to bring more people into this work.
2. **This is a safe space:** We are all coming into this workshop with different backgrounds and knowledge bases. All questions are good questions, as long as they are based in respect.
3. **Questions are encouraged:** There will be opportunities for questions and comments throughout the presentation portion of the agenda.
4. **Participation is key:** There will be opportunities for verbal and non-verbal participation – both are important. Please be conscientious of your participation in both sections.

Introductions – Welcome!

Let us know who you are and who you represent



Climate Pollution Reduction Grants (CPRG)

Inflation Reduction Act authorized the United States Environmental Protection Agency (EPA) to provide funding for CPRG program



CPRG provides funding for larger metro areas to create climate action plans



Metro areas each received \$1 million in planning grant funds

This grant will allow for the LVPC to create a plan to apply for the larger, more competitive funding round for projects.



Carbon Reduction Program (CRP)

- Emphasis areas of PennDOT plan:
 - EV infrastructure, congestion reduction, and multimodal transportation projects
- Key role of CRP is to “Coordinate with local agencies and climate action plans (CAPs)”
- Lehigh Valley is receiving ~\$10.5 million in funding for projects
- We are not required to create plan for CRP
 - Opportunity to integrate with PCAP

CRP Goal: Provide funds for projects designed to reduce carbon emissions from on-road highway sources

Comparison of CPRG and CRP

CPRG

- Climate Pollution Reduction Grant
- Administrated through the EPA
- PCAP is first step of CPRG program
- Need to apply for implementation (project) grant funds
- No control over project selection

CRP

- Carbon Reduction Program
- Administrated through the USDOT
- CRP will be integrated into PCAP
- Lehigh Valley is slated to receive project funds
- LVTS awards CRP funds to projects

Plan for and fund transportation decarbonization projects

Interactive Activity Results

Develop mixed-transportation network that supports more compact development pattern, alternative travel options, and greater transit connections.
(FutureLV Policies 2.1 & 2.3)

- Enhance transit service and pedestrian and bicycle facilities along corridors.
- Improve connections between mass transit and pedestrian and bicycle infrastructure.

Support the expansion of technology, communication, and utilities to reduce travel demands and congestion and prepare for the next generation of jobs.
(FutureLV Policy 2.5)

- Encourage trip planning technologies for all travel modes.
- Advance autonomous and electric vehicle technologies.
- Develop smart streets with adaptive traffic signals.

Reduce climate change impacts through mitigation and adaptation.
(FutureLV Policy 3.4)

- Reduce greenhouse gas emissions.
- Advocate for use of native, climate-adaptive and carbon sequestering landscaping.
- Incorporate environmentally sensitive transportation technologies.

Create community spaces that promote physical and mental health.
(FutureLV Policy 5.3)

- Promote street trees and pedestrian-scale lighting.
- Strengthen sidewalk, bike route, and trail infrastructure.
- Improve multimodal access to green spaces.

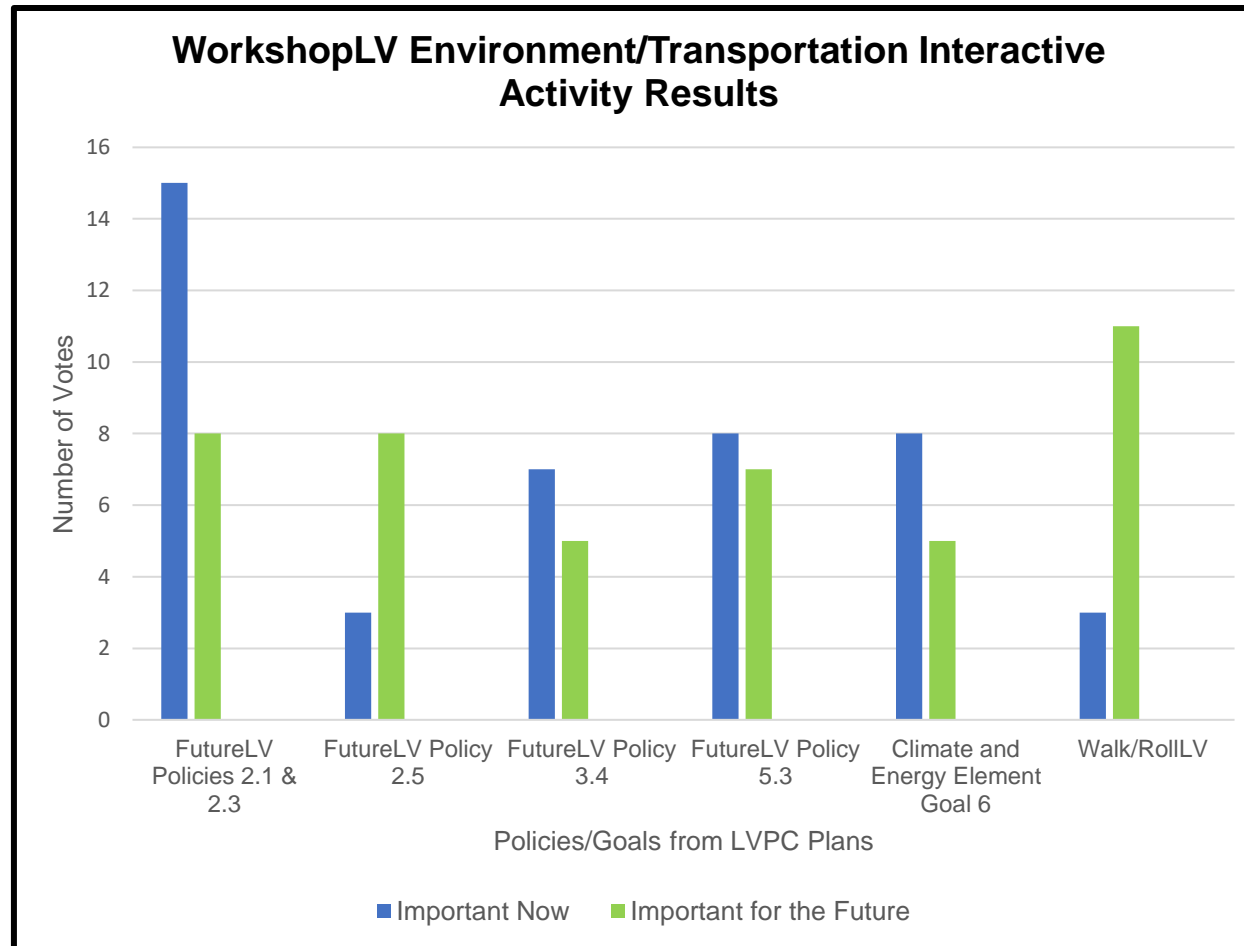
To reduce Lehigh Valley greenhouse gas emissions from residences, government operations and businesses.
(Climate Goal 6 from LVPC Climate and Energy Element)

- Reduce greenhouse gas emissions based on practical methods identified in a comprehensive inventory and reduction strategy.
- Measure progress through environmental monitoring network.

Facilitate regional coordination on active transportation issues.
(Walk/RollLV)

- Explore the potential for regional bike share/scooter share.
- Enhance regional trail network and multimodal connections.

Interactive Activity Results



Questions?



Priority Climate Action Plan Draft Outline



Introduction

- **Overview of CPRG Program and Priority Climate Action Plan**
 - What is the PCAP? Purpose and scope of the PCAP?
- **Importance of Climate Change**
 - Background and history
 - Relationship between climate change and transportation
 - State, national, and global carbon reduction targets
- **Why Transportation?**

Supporting Plans and Initiatives

- **Existing LVPC Plans that Support Transportation Decarbonization**
 - FutureLV: The Regional Plan, Walk/RollLV, Climate and Energy Element, Livable Landscapes, Transportation Safety Plan, and others
- **Partner Plans at Each of These Levels:**
 - Local
 - Regional
 - State
 - Federal

Coordination and Outreach for PCAP Development

Key Coordination Partners for PCAP

- Roles and responsibilities of key stakeholders in transportation decarbonization
- Stakeholder engagement and collaboration
 - WorkshopLV Environment/Transportation Meetings

Lehigh Valley Data Analysis

- **Lehigh Valley Transportation Sector GHG Inventory Update**
 - Current state of GHG emissions from the Lehigh Valley's transportation sector
 - Future emission projections
 - Targeted reductions and the pathway to achieve them
- **Other Particulates That Impact the Region**
 - PennDOT Regional Air Quality Performance Measures (PM 2 and 3)
 - Role of the Lehigh Valley in the state's GHG reduction trajectory

Equity and Environmental Justice

Low Income and Disadvantaged Communities Benefits Analysis

- **Justice40**
 - US EPA Environmental Justice (CEJST Tool)
- **PA DEP Environmental Justice Tool**

Goals and Policies

- **Goals**
- **Policy Measures to Reach Goals and Estimated GHG/Emissions Reductions**
- **Policy Areas:**
 - Reduce vehicle miles traveled (VMT)
 - Transit and supportive land-use/development
 - Electric vehicles and alternative fuels infrastructure
 - Walking and rolling
 - Congestion management
 - Green infrastructure

Action Plan

- **Transportation Systems Planning**
- **Review of Authority to Implement Strategies**
- **Project Development, Design, and Environmental Review**
- **Governance Structures Supporting Transportation Decarbonization**

Priority Strategies for CRP Funding

- **Transportation Project Eligibility and Funding Guidance**
- **Strategic Areas for Funding Allocations**
 - Electric Vehicle Infrastructure and Incentives
 - Freight and Traffic Operation Strategies
 - Travel Demand Management (TDM) Strategies
 - Application of Lower Carbon Materials in Transportation Infrastructure
 - Walking and Rolling
- **Regional Allocations of Funding**



Funding Allocations to Region

**Congestion
Mitigation and Air
Quality (CMAQ)**

**Transportation
Alternatives Set-Aside
(TASA)**

**Carbon Reduction
Program**



**Transportation Resiliency
(PROTECT)**

**Federal
Transit
Funding**

**CPRG
Implementation
Funding**

Integrating a CRP Project Selection Process

- **Framework for a Project Selection Process**
 - Steps to identify, evaluate, and select projects
 - Criteria to prioritize projects with greatest decarbonization potential
- **Implementation Project Plan and Timeline**



Conclusion and Summary

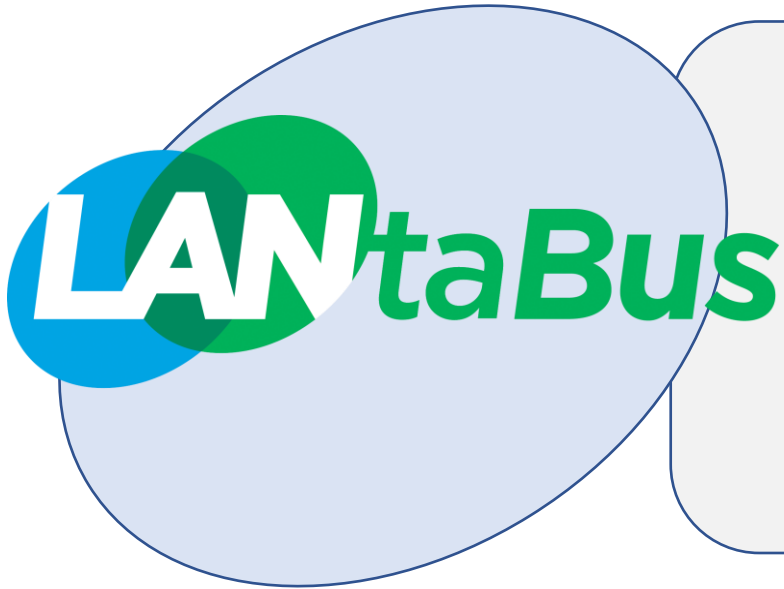
- **Restating Importance of Transportation Decarbonization**
- **Recap of Plan's Goals, Expected Outcomes, and Path Forward**
 - Comprehensive Climate Action Plan (CCAP), progress monitoring, Long Range Transportation Plan (LRTP)
- **Emphasis of Community Involvement and Collective Action**

Questions?





TRANSIT IN THE LEHIGH VALLEY



4.5 million passenger trips annually (pre-COVID)

- 50%-55% work commutes
- 10%-15% school commutes
- 10% seniors

85 buses – 64 CNG; 21 Diesel-Electric Hybrids

250 employees – drivers/maintenance represented by Amalgamated Transit Union Local 956

Consolidated/Coordinated paratransit program – Sr Shared Ride, ADA, PwD, MATP, and other programs

400,000-450,000 passenger trips annually (pre-COVID)

85 paratransit vans



Funding

- Capital Budget

- Federal – Federal Transit Administration (FTA)
- State – PennDOT Bureau of Public Transportation (BPT)
- County

- Operating Budget

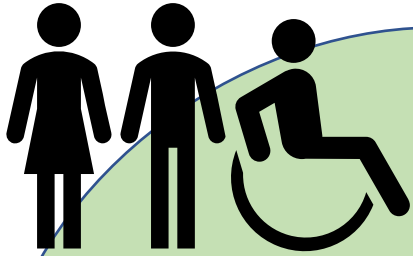
- Passenger fares
- State Operating Assistance (PennDOT) with County match
- Federal grant funding for approved expenses
- Other revenues



Funding - LANtaVan

- Lottery/PwD – Operating cost is reimbursed through shared ride fare charged to PennDOT
 - Lottery funds pay 85% of cost, rider pays 15% copay
 - County AAA's and MATP sponsor some copays
- MATP – reimburses on a per trip rate
- Other arrangements
- System is funded on a reimbursement of costs structure





Rapid population growth

6,000 new residents each year

Close to 100,000 more residents by 2030

Youngest Baby Boomers turn 65 by 2030 when Lehigh Valley will have close to 150,000 seniors

Source – LVPC, FutureLV – The Regional Plan

“The Lehigh Valley is one of the fastest growing regions in Pennsylvania, with a projected 24% population increase by the year 2045” *FutureLV – The Regional Plan*



“Access to public transportation causes access challenges as more development occurs in outlying areas away from the Lehigh Valley’s population centers.”

LVEDC & WBLV Lehigh Valley Talent Supply and Industry Sector Analysis

TRANSIT ENVIRONMENT

Medical facilities are both employment and quality of life destinations

Business model of growth and decentralization expands mobility needs

Increased employment in sector

Two growing, nationally renowned hospital networks



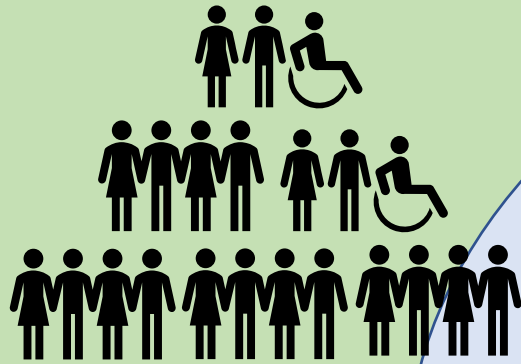
Eco/Tourism emerging component of regional economic development



LVPC, LVEDC, Discover LV identify Eco/Tourism as key regional industry

Discover Lehigh Valley Strategic Plan notes “Easier public transportation within the area” as a factor to become better/world class visitor destination

More people



Going to more places



At more times



TRANSIT LEVELS AND RESULTING UTILIZATION

- #60 Allentown-Bethlehem-Easton, PA
- #65 Springfield-Holyoke-Northampton, MA
- #67 Albany-Schenectady-Troy, NY

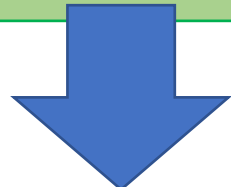
Rank: Metro Areas by Population
Natl Transit Database

- #36 Albany-Schenectady-Troy, NY (1.41)
- #95 Springfield-Holyoke-Northampton, MA (0.93)

Metros 40-80 Avg. (0.84)

Rank: Metro Areas by Transit Service Hours per Capita

#160 Allentown-Bethlehem-Easton, PA (0.62)

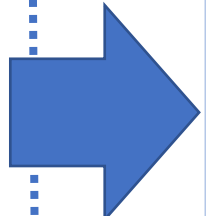


#38 A-S-T, NY (27.5)

#71 S-H-N, MA (17.8)

Metros 40-80 Avg (15.7)

#162 A-B-E, PA (7.5)



Rank: Metro Areas by Transit Trips per Capita

QUALITY OF LIFE AND ECONOMIC IMPACTS OF LOW LEVEL OF TRANSIT SERVICE

66,000

LV residents
living in areas
with Low or Very
Low Access to
Opportunity

Source – LVPC
Equity Analysis

Length of commute
to jobs a key
contributing factor

Source – LV Med Provider

Cost to medical provider
per missed appointment -
\$145

8%

Medical
Appointment
No-Show Rate

\$21 Million

Regional
economic loss
from lost 100
employee logistics
location

Source – LVEDC

Workforce availability
fundamental to
employer location
decisions – Brookings
*Talent Driver Economic
Development*

Source – WBLV Local
Plan

Lack of transportation
and workplace
accommodations
often cited as primary
impediments

100%+

Persons with
Disabilities
Unemployment
Differential

FINANCIAL OUTLOOK

Current Operating
Funding does not allow
for system growth

LANTA
continues to
add service to
address
regional
growth

COVID relief
funding has
bridged gap but
are one-time
allocations

Need enhanced levels
of operating
assistance in FY '25 to
keep current levels of
service / continue to
grow the system

PRIORITIES FOR SYSTEM ENHANCEMENTS

FREQUENCY

Increase service frequencies throughout the system

Reduce commute time between job centers and equity communities

Develop high frequency bus corridors (EBS)

Improve connections to hospitals and medical facilities

Maintain service to legacy neighborhoods

Expand mobility options for seniors and persons with disabilities

Improve connections to key tourism and eco-tourism locations

Improve connections to schools, colleges, job training

Enhanced Bus Service (EBS)

Bus Rapid Transit (BRT) for the Lehigh Valley

➤ What is BRT?

BRT provides fast, frequent transit service along a dedicated corridor

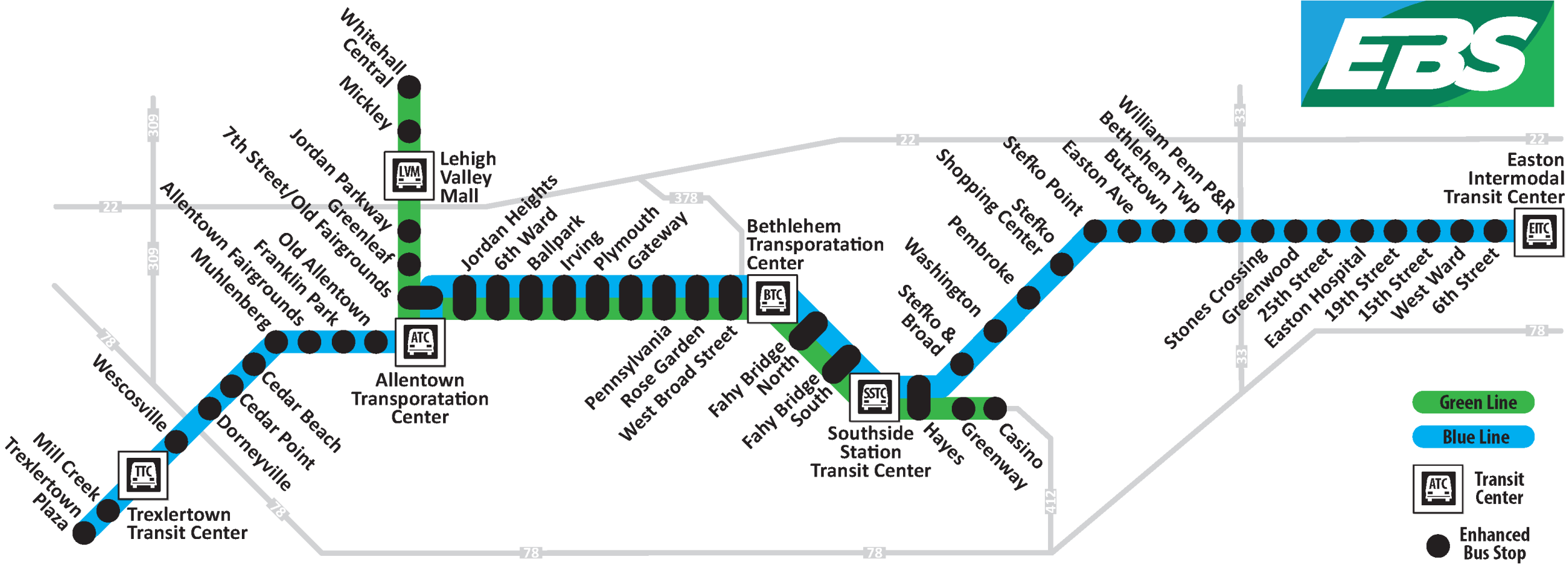
Elements of light rail with cost efficiencies of bus system



Elements of EBS/BRT

- Service improvements – high frequency, express/limited stop alignments.
- Enhanced stations/stops – shelters, seating, information signage.
- Roadway improvements designed to expedite bus movements.
- Fare technology improvements to expedite passenger boarding.

Enhanced Bus Service (EBS)



Green Line

Blue Line

ATC Transit Center

● Enhanced Bus Stop



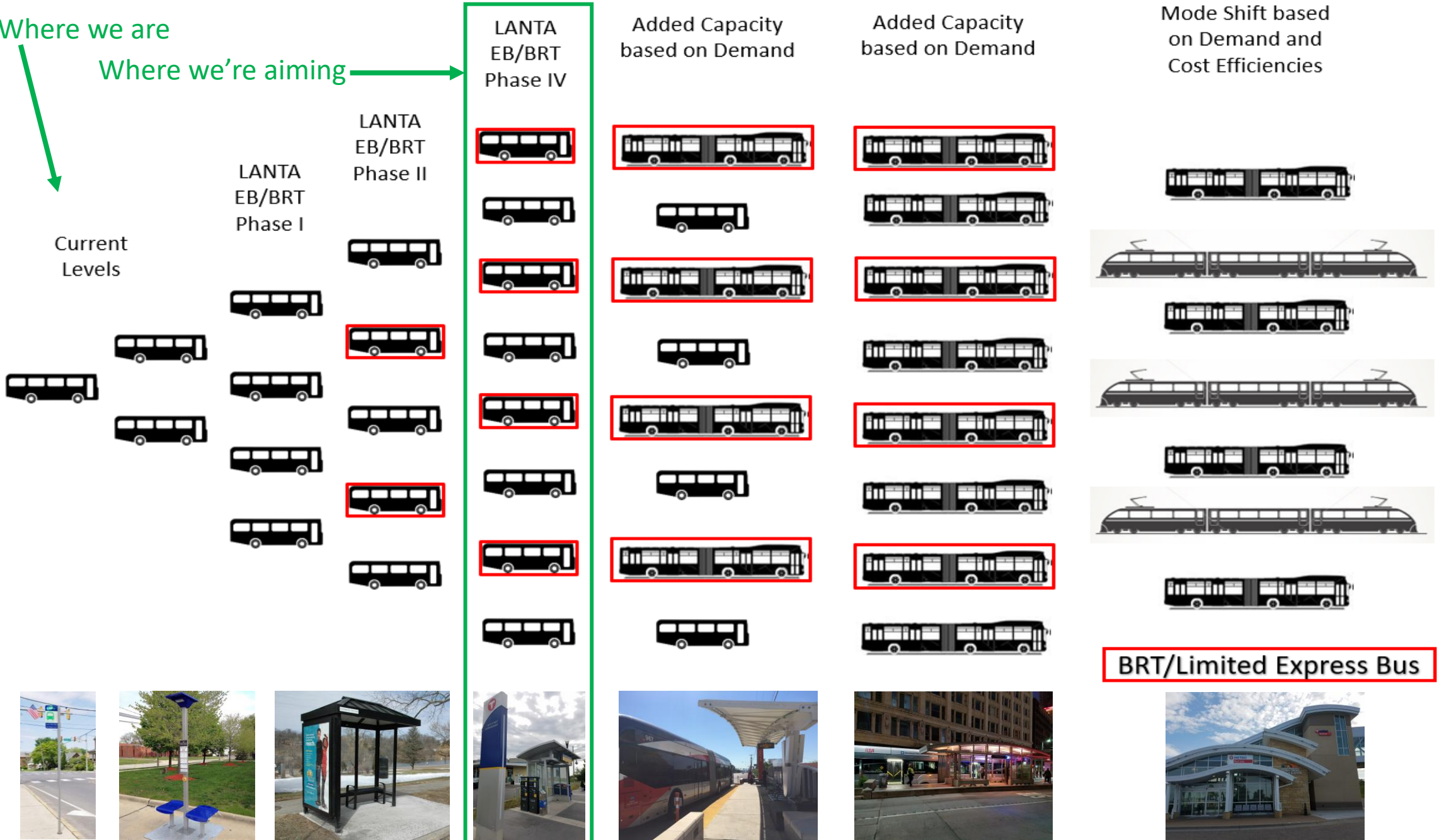
Transit Service Progression

Where we are

Where we're aiming

Buses per Hour along Corridor

Stop/Station Scale & Amenities

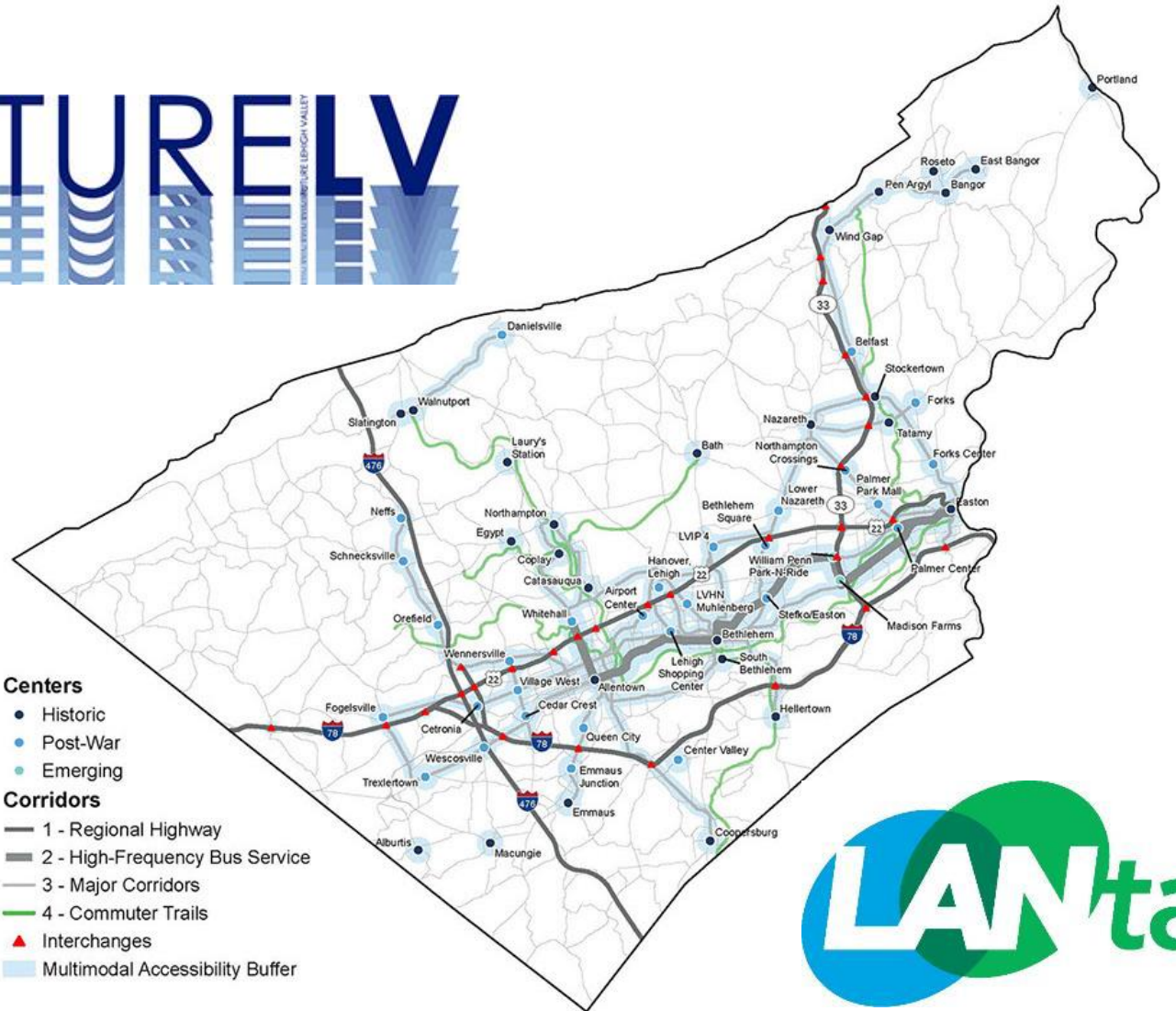


**MacArthur Road Concept
MacArthur Road, Whitehall Township**

High-Frequency Bus Service, bike lanes and good sidewalks expand transportation options and move people around the region efficiently. This new infrastructure can be supported by planning for the decline of in-store shopping and repurposing developed land for new housing and mixed-use development, a transformation that is key to maintaining and growing the economy. Areas like MacArthur Road are good places to start because the concentration of people, jobs and large lots make them good candidates for new and expanded uses.



EBS and enhanced transit play an integral role in key regional plans, including FutureLV, LRTP, Eastern RMTC ROP, and various municipal plans.



2.3

Encourage enhanced transit connections to improve mobility and job access.

- Enhance public transit service and pedestrian and bicycle facilities
- along corridors.
- Link growing job and population centers.
- Strengthen mixed-transportation access to regional transit hubs.
- Improve connections between mass transit and pedestrian and bicycle infrastructure.
- Support mass transit access to neighboring regions.



Implementation Partners
Lehigh Valley Planning Commission, Pennsylvania Department of Transportation, US Department of Transportation, Lehigh and Northampton Transportation Authority, Lehigh and Northampton Counties, 62 Municipalities, Workforce Board Lehigh Valley, Community Advocates



Questions?



Upcoming Meetings

Next WorkshopLV Environment/Transportation Meeting:

- **December 20th at 11AM (in-person) at the LVPC office**

