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Building Better Bus Stops with Public Accessibility

MCDITE Annual Meeting
April 25, 2025

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Today's Presenters



Mark Cassel, AICP
Project Manager - Transit



AJ Jordan
*Director of Planning & Scheduling
Lehigh and Northampton
Transportation Authority (LANTA)
Allentown, PA*

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Agenda



- Building Better Bus Stops Resource Guide
- PROWAG Appendix
- Agency Perspective
- Is it Compliant? Is it Useful?
- Q&A

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Building Better Bus Stops Resource Guide (BBBSRG)

- **Sponsors:** PennDOT/PA Public Transportation Assoc. (PPTA)
- **Purpose:** Common set of tools & resources for planning, designing, constructing
- **Application:** New or upgrading existing fixed route bus stops
- **Audience:** Municipalities, transit agencies, local planning & engineering staff, development community



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BBBSRG Elements

- Planning & Policy Resources
- Design Resources
- Bus Stop Typologies
- Model Ordinance Language
 - Zoning
 - Subdivision & Land Development

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Planning & Designing a Transit Stop

1. Identify

- Nearby transportation improvement project
- Nearby land development
- Community requests

2. Evaluate

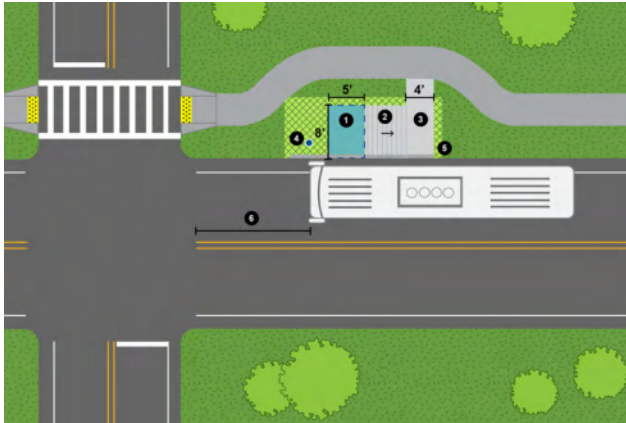
- Coordinate: transit agency
- Determine need & location

3. Design

- Coordinate: transit agency, roadway owner, municipality, abutters
- ID placement & configuration
- ID elements & amenities
- Advance permits & approvals

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Bus Stop Typologies



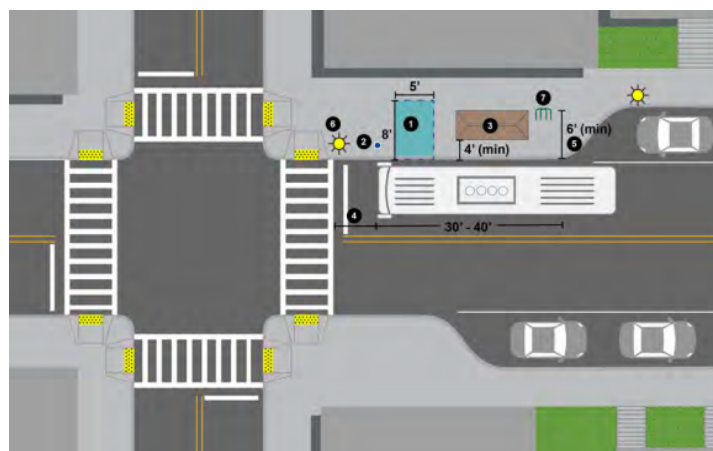
- **Rural – lower density, less frequent service**
 - Focus on basic amenities (seating, shelter), accessibility
- **Suburban – higher ridership, more frequent service**
 - May have more amenities, require more connectivity to adjacent uses

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Bus Stop Typologies

- **Urban – high density, frequent service**
 - May have a full range of amenities
 - Curb space may be more complicated
- **Appendix includes design checklist for engineers**



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BBBSRG – Model Ordinances

• Zoning

- Allowing bus stop infrastructure as by-right use in all districts as accessory use/structure
- Potential for credit against off-street parking requirements
- Exempting bus stop signs, passenger information from municipal sign ordinances
- Outlining municipal permit requirements

Section XXX. Bus Stops and Shelters for Fixed Route Public Transit Service

The following general provisions shall apply to all bus stops for fixed route public transit services.

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BBBSRG – Model Ordinances

• Subdivision & Land Development

- General provisions about coordination requirements with transit agency
- Codifies compliance with ADA, PROWAG, any transit agency guidelines
- Outlines requirements for
 - ADA loading pad
 - Bus shelter
 - Street furniture
 - Bus stop location, passenger information signs



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BBBSRG – PROWAG Appendix

- **Addresses Public Right-of-Way Accessibility Guidelines**
 - **Federal Register – U.S Access Board final rule 8/23/2023**
 - **USDOT adopts final rule 12/18/2024 for transit stops, initiated enforcement 3/20/2025**

ARCHITECTURAL AND TRANSPORTATION BARRIERS COMPLIANCE BOARD

36 CFR Part 1190

[Docket No. ATBCB 2011–0004]

RIN 3014–AA26

Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way

AGENCY: Architectural and
Transportation Barriers Compliance
Board.

ACTION: Final rule.

DEPARTMENT OF TRANSPORTATION

Office of the Secretary

49 CFR Part 37

[Docket No. DOT–OST–2024–0090]

RIN 2105–AF05

Transportation for Individuals With Disabilities; Adoption of Accessibility Standards for Pedestrian Facilities in the Public Right-of-Way

AGENCY: Office of the Secretary (OST),
U.S. Department of Transportation (DOT
or the Department).

ACTION: Final rule.

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BBBSRG – PROWAG Appendix



**USDOT: New or altered bus stops
shall be made compliant with
PROWAG**

**Further defining alterations vs.
maintenance**

**Greater onus on agencies to
inventory, manage bus stop
facilities/conditions**



**USDOJ adoption TBD for
pedestrian access route
compliance**

**Third-parties responsible for
pedestrian access routes**

**Enforcement other than by
private action pending USDOJ**

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BBBSRG – PROWAG Appendix

- Provided additional impetus for coordination with engineers representing DOT's, municipalities, developers
- Provided case study of inventory work planned by CATA in State College, PA



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BBBSRG – PROWAG Appendix

Transit Agency Accessibility Sample Checklist for Better Bus Stops

This checklist is intended to assist the transit agency in identifying existing conditions at a bus stop ("transit stop"* is used in the PROWAG Final Rule) as part of a general, corridor, or individual inventory process. In implementing accessibility improvements, the agency should understand the existing conditions as a baseline for formulating options. The checklist can be stored as an attachment to a database and updated periodically.

- **Inputs**
 - **Transit Service/Location**
 - **Transit Stop Function**
 - **Access**
 - **Potential Alterations**

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BBBSRG – PROWAG Appendix

Technically Infeasible Form

Sample ADA Technically Infeasible Form (TIF)

[Agency Name]

Related to Transit Stops for Fixed-Route Transit Services

This form is used by [agency name] to address alterations to pedestrian infrastructure associated with transit stops, where the alterations involve pedestrian infrastructure that is outside of the transit agency's jurisdiction or control.

This form should be used if the infrastructure may not be in full compliance with the minimum Department of Transportation ADA Standards for Transportation Facilities (2006) or the Public Right-of-Way Accessibility Guidelines (PROWAG) Final Rule (2023) due to existing physical or site constraints. Completion does not assume regulatory agency approval that "maximum extent possible" has been achieved, as outlined in PROWAG.

This form also documents [agency name] coordination with the owner of the transportation infrastructure regarding potential improvements.

Location and Project Information

Transit Stop ID (if available)		Latitude/Longitude	
Roadway Name (Number)		Nearby Intersecting Roadway Name (Number), if applicable	
Direction of Travel		Transit Routes Served at the Location	
Municipality		Location Description (if needed)	

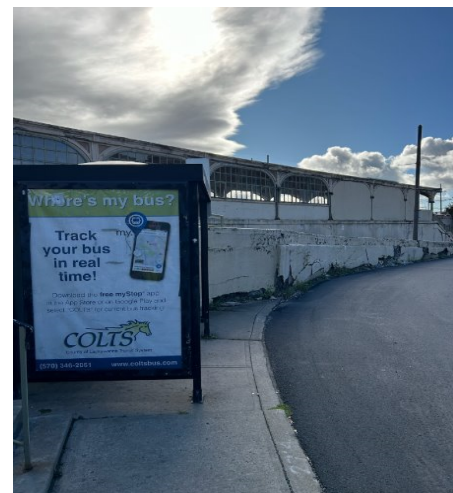
Does the agency own or control the sidewalk, pedestrian path, or roadway associated with access to the transit stop?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Owner(s) of the sidewalk or pedestrian path	
Shelter Agreement(s) (if present)		Owner(s) of the roadway	
Description of Proposed Transit Stop Alterations			

- **Technical infeasibility checklist**
 - **Design engineers may be asked to provide data**
 - Cross slopes
 - Utilities
 - Stormwater/drainage
 - Vaults, etc.
 - Design alternatives

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Is it compliant? Is it useful?



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Agency Perspective – AJ Jordan

- LANTA dedicates a staff lead to land development/ bus stop improvement coordination

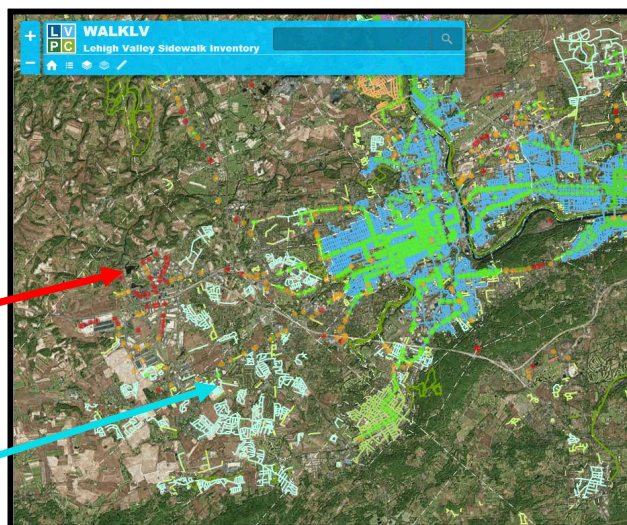
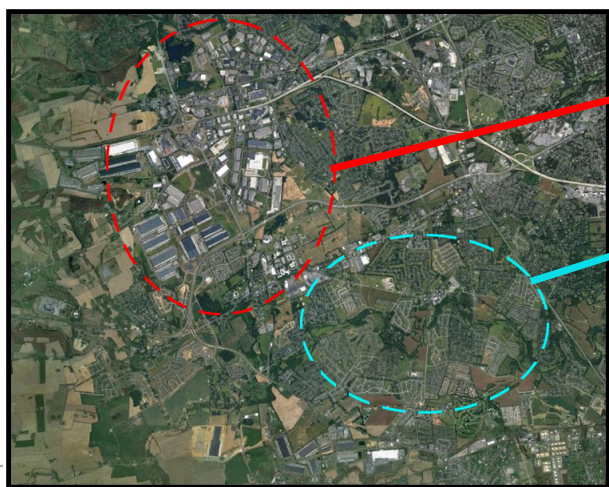


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The Land Use Disconnect

- Sidewalk dichotomy in residential & employment land uses
 - Sidewalks & residential
 - Bus stops & employment

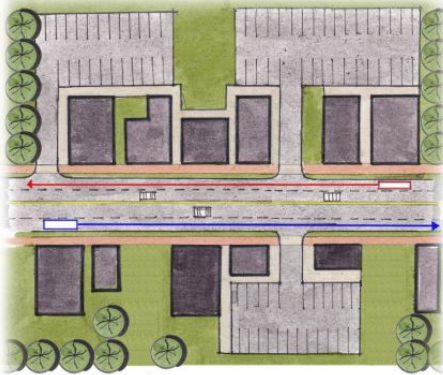


One of LANTA's main goals for transit supportive land use is to ensure the transit rider has a safe connection from the transit stop to the main entrance of their destination

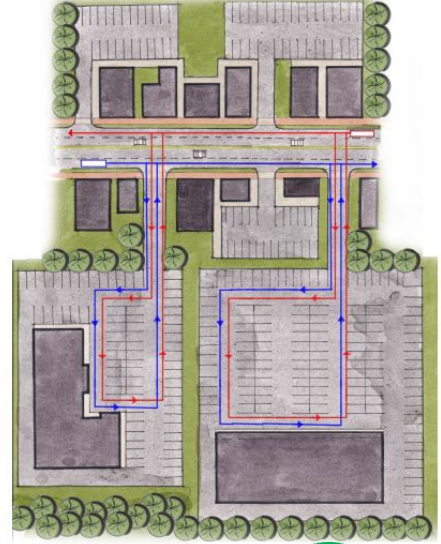
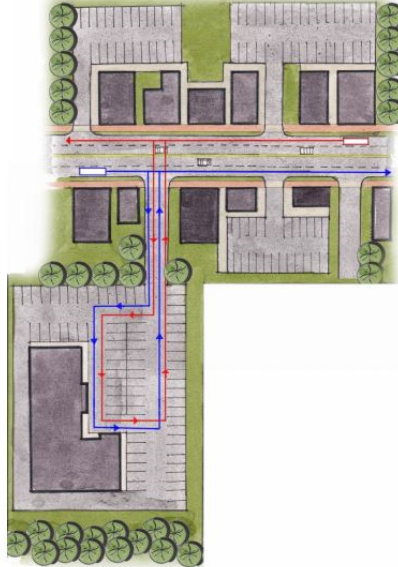


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Transit Supportive Land Use – Corridor Patterns



Measure	Requirements
Round Trip Running Time	0:50
Recovery Time	0:10
Total Cycle Time	0:60
Frequency of Service	Every 30 mins
Buses needed to maintain frequency	2

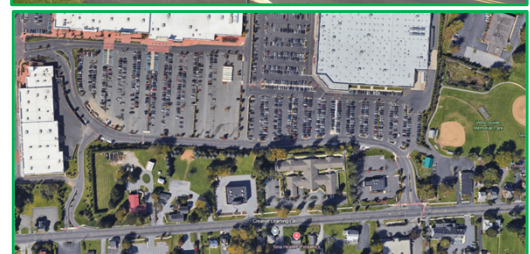


- **SMART PLANNING!**
 - SIDEWALKS WITHIN A SITE CONNECTING TO SIDEWALKS ON MAIN CORRIDOR
 - BENEFITS NON-VEHICLE USERS AND KEEPS TRANSIT SERVICE EFFICIENT
 - EVERY DEVIATION ADDS SIGNIFICANT TIME TO A ROUTE

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Establishing Partnerships with Public and Private Sectors

- **MUNICIPALITIES**
 - Get on initial checklist to review submitted plans
 - Frequent meetings and correspondence:
 - Public Works/Engineering/Planning Departments
 - Transit Agency evaluates where growth is feasible
 - Short/Medium/Long-term
 - Know municipality's vision and leverage their support
 - Understand community needs
 - Know the end user, and how will they get there
 - What type of land use? How large is the development?
 - How many jobs? How many residents?
- **DEVELOPERS AND ENGINEERS:**
 - Can we serve on the corridor or do we have to circulate on the property? **Internal Circulation only when necessary.**
 - Where is the existing bus stop, and where is the proposed front entrance? **Connect to Pedestrian network.**
 - Are there opportunities for bus shelters, bus pull-offs, and other transit amenities? **Are these amenities necessary?**
 - What unique features can we use to our advantage?
 - Place the stop on a slip road island?
 - Can landscaping encourage waiting nearby?



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How does it Connect and How is it ADA Compliant?



- Navigate the site plan as a pedestrian
- What needs to be done to make it fully accessible



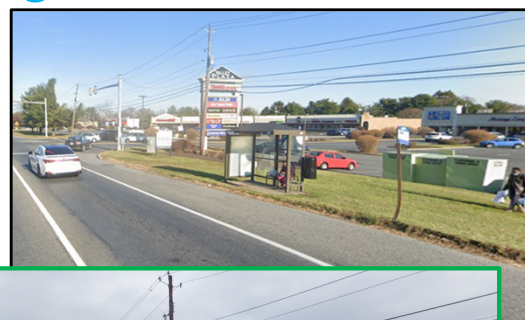
- ADA Standards require all bus stops to have sufficient space for boarding/alighting:

- Connected to streets, sidewalks, or paths
- Raised curb helps the bus ramp deploy
- Running slope of pad parallel to roadway
- Cross slope – maximum 2% perpendicular to roadway



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Establish Understanding of Needs



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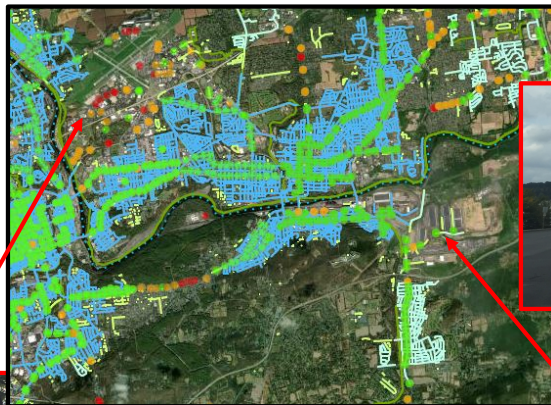
Establish Understanding of Needs



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Example: Industrial Development and Transit

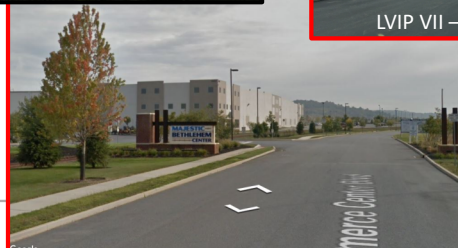
- Older industrial park:
 - Lack of sidewalks
 - Can't replace shelters
 - No connectivity
- Newer industrial parks:
 - Pedestrian network
 - Private investment for enhanced bus stops



LVIP VII – Commerce Center Blvd

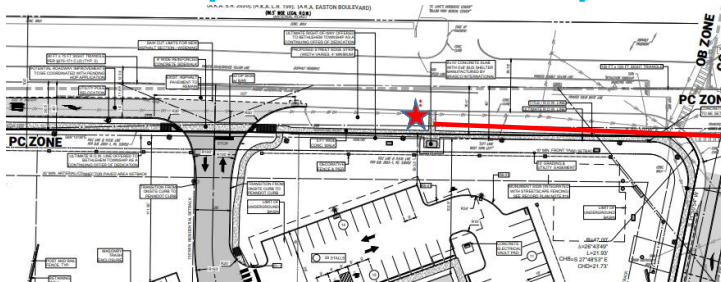


LVIP III - Marcon Blvd



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Example: New Development along Existing Routing



• SMALL SUCCESS STORIES ADD UP

- The municipality supports our initiatives
- Connect the dots / communicate gaps
- The developer and project engineer includes our recommendations
- One site at a time....



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Example: The Bus Pull-off vs Bus Bulb-Out

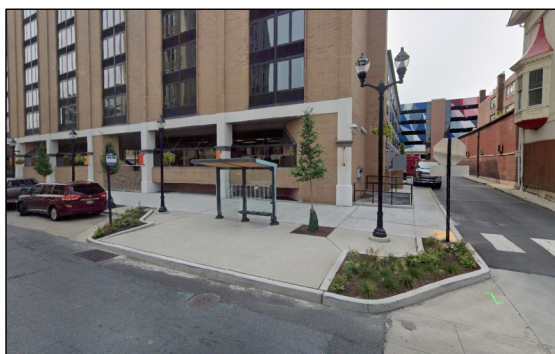
▪ BUS PULL-OFF:

- Far-side bus stop location
- Urban/suburban corridors
- More traffic volume
- Wider ROW
- Example: Rt. 412, Bethlehem



▪ BULB-OUT:

- Near-side bus stop location
- Urban core
- More density
- Tighter ROW
- Allows space for transit amenities like shelters, benches, etc.
- Example: Hamilton and Fountain Streets, Allentown

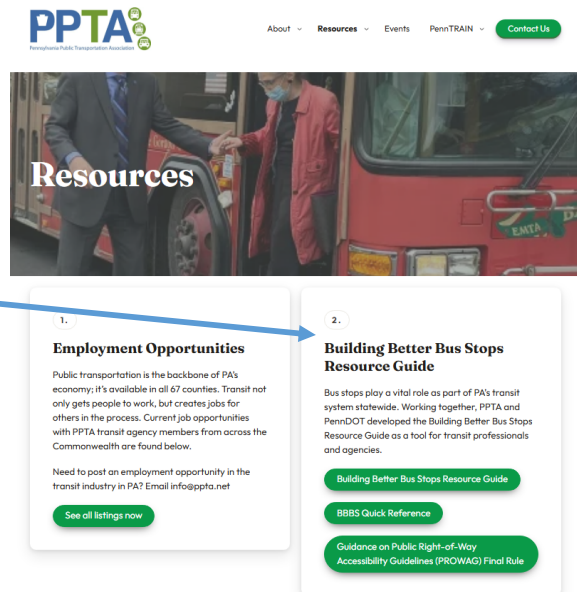


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- On the Pennsylvania Public Transportation Association (PPTA) website

<https://ppta.net> – click on Resources



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Q&A

Contacts:

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