

Priority Bus Implementation Guidelines

Project Overview

»» August 3, 2010

Objective

- ▶ Provide information about Priority Bus treatments that could be applied to improve operations – but are not under the control of the transit system operator.

Information in the form of:

- Descriptions
- Drawings
- Examples

Target audiences:

1. Traffic engineers
2. Public officials
3. Public

Priority Bus Treatments

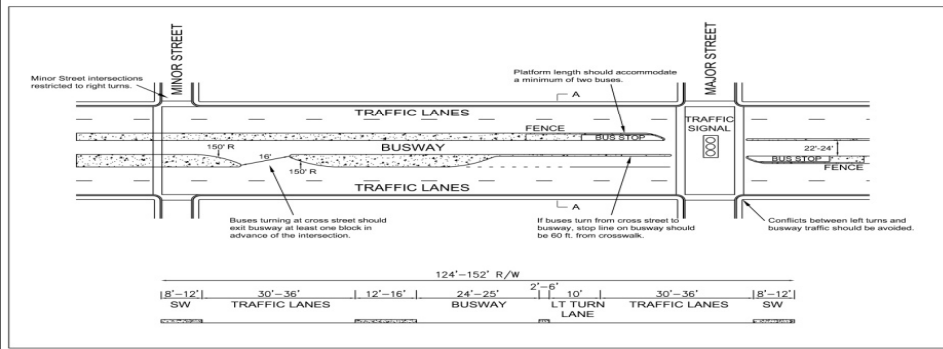
- ▶ Running Way
 - On Street Exclusive Bus Lane
 - Lane Operations
 - Lane Vehicle Restrictions
 - Lane Markings
 - Mixed Traffic Bus Lane
- ▶ Bus Stops
 - Stop Location
 - Stop Design
 - Bus Bays
 - Bus Bulbs/Nubs

Priority Bus Treatments

- ▶ Intersections
 - Crosswalks
 - Transit Signal Priority
 - Passive Signal Priority
 - Active Signal Priority
 - Queue Jumps
- ▶ Sidewalks
 - Width
 - Length
 - Height
- ▶ Shelters

Example Treatment

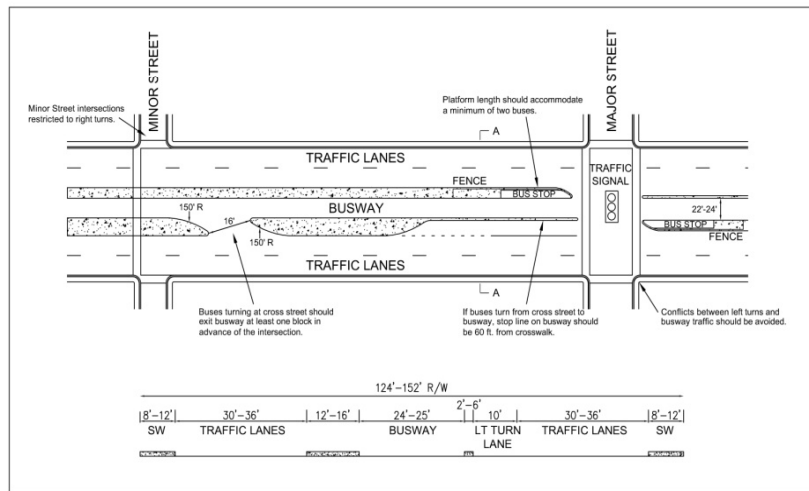
- **Q: WILL THE ENTIRE TRANSIT CORRIDOR NEED TO HAVE AN EXCLUSIVE BUS LANE?**
- **A: NO, EXCLUSIVE BUS LANES DO NOT NEED TO SPAN THE ENTIRE LENGTH OF A GIVEN TRANSIT CORRIDOR TO ACHIEVE THE DESIRED BENEFITS OF THE TREATMENT. SECTIONS OF A CORRIDOR WHERE IT MAKES SENSE FROM A FINANCIAL AND OPERATIONAL STANDPOINT SHOULD BE CONSIDERED FOR EXCLUSIVE BUS LANES.**



Photos of Concepts



Diagrams



Examples

- ▶ **BUSES OPERATING IN THE CENTER LANE (THE HEALTH LINE IN CLEVELAND, OHIO)**
- ▶ THE GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY (RTA) BEGAN OPERATING THE HEALTH LINE IN OCTOBER, 2008. THE HEALTH LINE RAPID TRANSIT VEHICLES OPERATE ALONG EUCLID AVENUE FROM DOWNTOWN TO EAST CLEVELAND, A LENGTH OF APPROXIMATELY 7 MILES. THE TOTAL PROJECT COST \$200 MILLION INCLUDING VEHICLES, CONSTRUCTION, DESIGN, ENVIRONMENTAL, ART, MANAGEMENT AND STREETScape. THE FIVE MILES OF THE CORRIDOR WHICH REQUIRED THE MOST RECONSTRUCTION COST \$110 MILLION OR APPROXIMATELY \$20 MILLION A MILE.



Guidance Tables

BUS STOP LOCATION ALTERNATIVES

	ADVANTAGES	DISADVANTAGES
FAR-SIDE	<p>Minimizes conflicts between right turning vehicles and buses</p> <p>Provides additional right turn capacity by making curb lane available for traffic</p> <p>Minimizes sight distance problems on approaches to intersection</p> <p>Encourages pedestrians to cross behind the bus</p> <p>Creates shorter deceleration distances for buses since the bus can use the intersection to decelerate</p> <p>Results in bus drivers being able to take advantage of the gaps in traffic flow that are created at signalized intersections</p>	<p>May result in the intersections being blocked during peak periods by stopping buses</p> <p>May obscure sight distance for crossing vehicles</p> <p>May increase sight distance problems for crossing pedestrians</p> <p>Can cause a bus to stop far side after stopping for a red light, which interferes with both bus operations and all other traffic</p> <p>May increase number of rear-end accidents since drivers do not expect buses to stop again after stopping at a red light</p> <p>Could result in traffic queued into intersection when a bus is stopped in travel lane</p>

Schedule

- ▶ Distribute Draft Priority Bus Implementation Guidelines to TAC in August
- ▶ Hold TAC meeting in late August or early September
- ▶ Begin Meeting with Stakeholders in September and October
- ▶ Revise and Finalize Guidelines in November