

Bi-State Coordination Committee

Agenda Item 4

I-205 Bus on Shoulder Feasibility Study

Background

- ◆ Follow up to I-205 Access and Operations Study recommendations adopted by the RTC Board in November 2014
- ◆ RTC staff developed draft scope of work for BOS Feasibility Study
- ◆ Under review by agency staff from WSDOT, ODOT, C-TRAN, Tri-Met, and Metro

Purpose

- ◆ Phase one will identify engineering, technical, operational and policy considerations for BOS
- ◆ Phase one will recommend whether the region should proceed with a comprehensive phase two BOS study
- ◆ If stakeholders agree to advance phase two, adopt regional BOS policies to guide how and when to consider BOS

Need

- ◆ Current traffic volumes exceed carrying capacity of corridor during peak period
- ◆ Reliability is highly variable
 - ◆ SB speeds between 15 to 35 mph from 7 and 8:30 at SR-14
 - ◆ NB speeds between 25 and 40 mph from 4 to 5:30 at Airport Way
- ◆ Congestion on I-205 is affects reliability and on-time performance for commuter service in the corridor

What is BOS?

- ◆ Transit vehicles can use the shoulder when mainline speeds fall below a predetermined speed or dynamic BOS
- ◆ Traffic speed threshold is generally 35 mph, with buses allowed 15 to 20 mph faster
- ◆ Different than hard shoulder running which can carry general purpose traffic and carpools with much higher vehicle volumes
- ◆ In 2012, 15 BOS systems in the US

Example BOS Systems

- ◆ Minneapolis-St. Paul
- ◆ Miami
- ◆ Atlanta
- ◆ Chicago

Minneapolis-St. Paul

- ◆ 300 mile network with no TOD restriction
- ◆ Outside shoulder system
- ◆ Bus shoulder use when freeway speeds drop below 35 mph
- ◆ First BOS lanes based on opportunity for easy implementation
- ◆ Shoulder width and pavement depth standards developed later

Miami

- ◆ 9 miles of BOS opened in 2007
- ◆ Outside shoulder system
- ◆ Bus shoulder use when speed drop below 25 mph
- ◆ Must move to general purpose lanes if shoulder is occupied for any reason
- ◆ Priority is always for emergency and law enforcement



Atlanta

- ◆ First BOS in 2006 with 6 mile segment; recently expanded 12 miles
- ◆ Outside shoulder system
- ◆ 5 to 7 minutes of savings during peak; up to 25 minutes during incidents
- ◆ Buses always stay in regular traffic lanes between exit and entrance ramps

Chicago

- ◆ 15 miles of BOS opened in 2011
- ◆ BOS use when speeds drop below 35 mph
- ◆ The only system restricted by TOD; 5 to 9 am northbound and 3 to 7 pm southbound
- ◆ The only inside shoulder system; minimizes ramp/interchange conflicts; less physical constraints

Johnson County Transit Kansas City, Missouri



PACE

Chicago, Illinois



Twin Cities

Moving onto shoulder



Triangle Transit Raleigh-Durham, North Carolina



Twin Cities

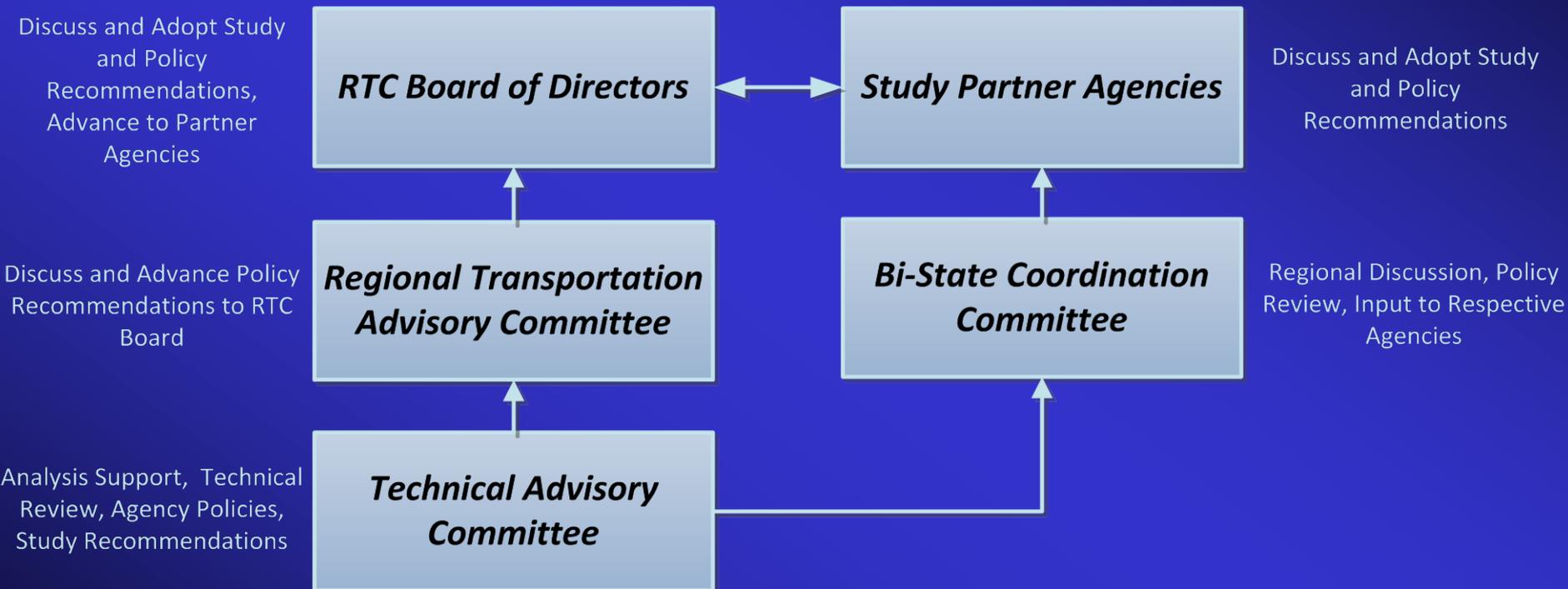
Around incident



Study Scope



Agency Roles/Decision Process



Next Steps

- ◆ Finalize Scope of Work
- ◆ Study Funding and Budget
- ◆ Develop and release RFQ
- ◆ Consultant Selection
- ◆ Begin Study