Portland North Alternative Modes Project

Project Closeout Public Meeting December 13, 2010



Agenda

- Introductions
- Summary of Alternatives
- Recommended Alternative
- Next Steps
- Questions





Alternatives Analysis

PHASE 1

- Developed Initial Range of Alternatives
- Met with Stakeholder groups and communities
- FTA coordination
- Alternative refinement
 - Alignment
 - Station
 - Cost
 - Ridership
- Screened from alternatives 30 to 6 (with terminus options)





Alternatives Analysis (cont.)

PHASE 2

- Refine data
 - Station locations
 - Station layouts
 - Rail and Road infrastructure
 - Economic
 - Environmental
 - Costs
- Stakeholder Coordination
- FTA coordination
- Screen range of alternatives to 1





Phase 1 Service Area

- Three service alternatives
 - Yarmouth
 - Brunswick (Bath)
 - South Auburn (Lewiston)
- Three route alternatives:
 - Saint Lawrence and Atlantic Railway (SLR)
 - Pan Am Railway
 - Highways (Bus)
- Five Portland terminal alternatives:
 - Bayside (SLR)
 - India Street (SLR)
 - Union Station (Pan Am)
 - Center Street (Pan Am)
 - Monument Square (Express Bus)





Phase 1Operating Framework

- 22 Roundtrips per Weekday (Train/Bus)
- Service Headways
 - 30 minute peak
 - 60 minute off-peak
- First trip arrives Portland: 6:45 AM
- Last trip departs Portland: 10:55 PM
- Shuttle Bus Service in Portland from all but Center Street rail station





Phase 1 Terminus Options



Yarmouth Rail Service







Yarmouth Express Bus Service

Exclusive ROW

Highway Shoulder Running



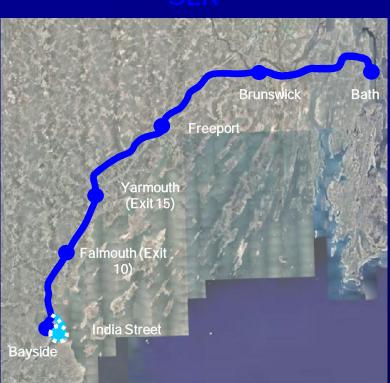




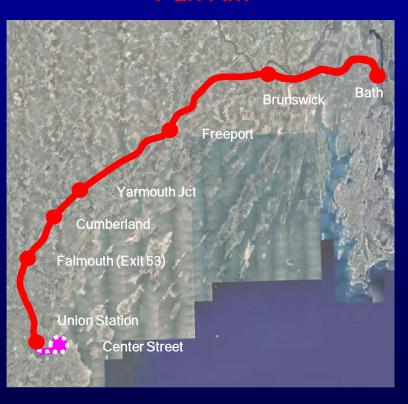
ECOM

Bath Rail Service

SLR



Pan Am





Bath Express Bus Service

Exclusive Bus ROW



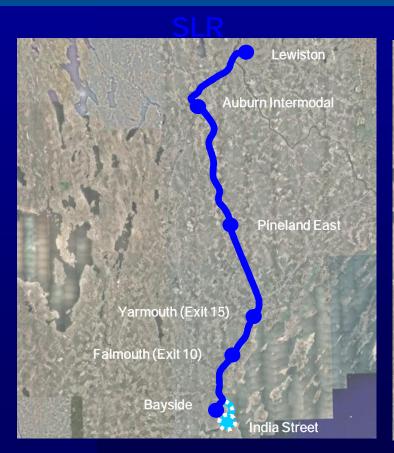
Highway Shoulder Running

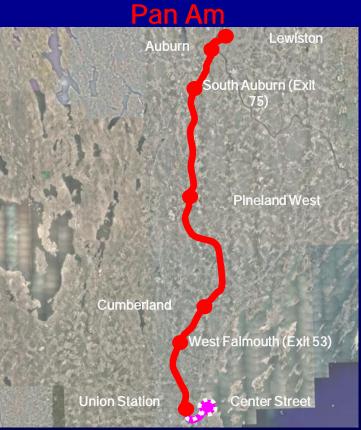






Lewiston Rail Service









Lewiston Express Bus Service

Exclusive Bus ROW

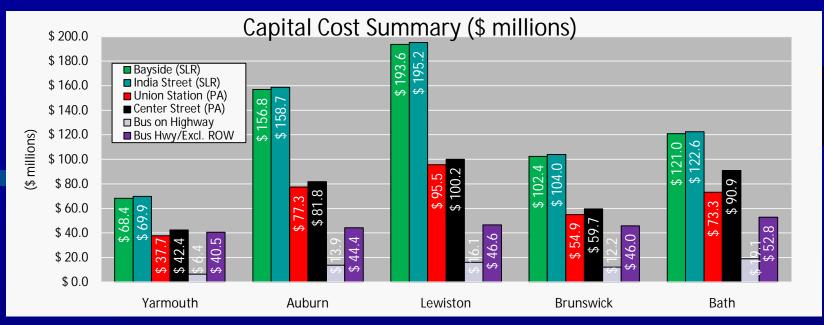
Lewiston New Gloucester South Auburn (Exit 75) Gray Falmouth (Exit 10) Monument Square

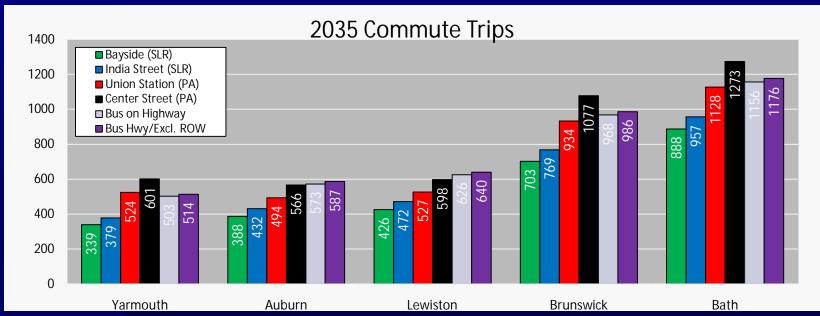
Express Bus













Phase 2 Alternatives

Rail:

- Pan Am to Yarmouth
- Pan Am to Auburn/Lewiston
- Pan Am to Brunswick/Bath

• Bus:

- Portland to Yarmouth on Highway and Shoulder
- Portland to Auburn/Lewiston on Highway and Shoulder
- Portland to Brunswick/Bath on Highway and Shoulder

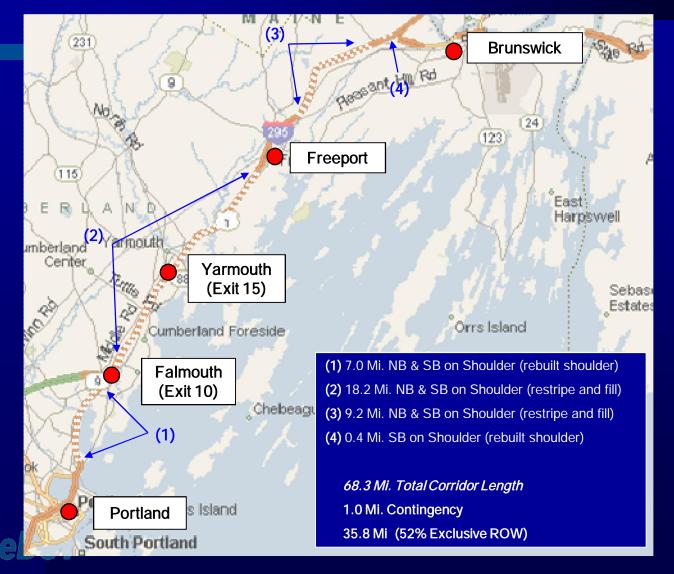


Bus on Shoulder

- Minimum of 10' Lanes
- Maximum 35 MPH (or no more than 15 MPH > Mainline)
- On Shoulder Ops (Only to Avoid Congestion)
- Examples
 - Minneapolis/St. Paul
 - Virginia/Maryland
 - Columbus
 - Miami Dade (Pilot)
 - Ottawa
- Some Costs Vary with Funding Source



Proposed Bus On Shoulder Operations



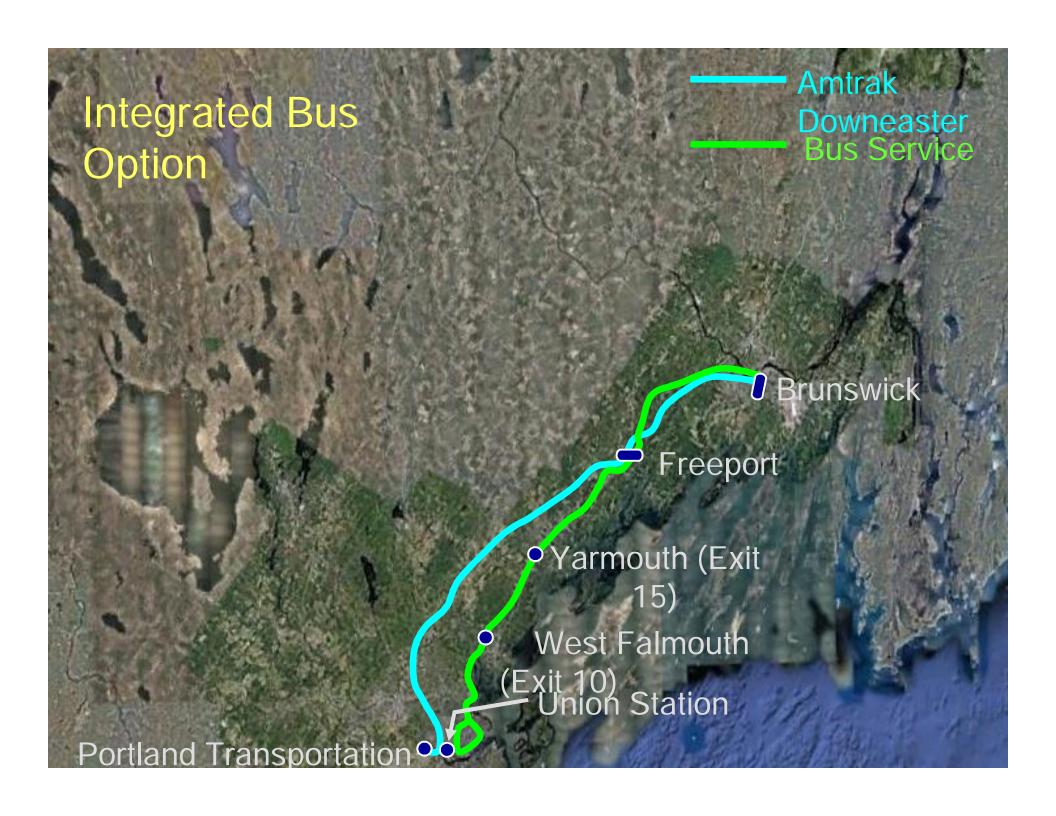


Phase 2 Alternatives

• Integrated Bus:

- Utilizes Proposed Amtrak Service
- Amtrak Deadhead Train Converted to Revenue Service
- Portland Union Station (for Amtrak Stop)
- I-295 ROW (including shoulder when congested)
- 295 Stations at Exits 10 and 15
- 12 Bus Round Trips
- 3 Amtrak Round Trips
- As Ridership Grows Trains Replace Buses



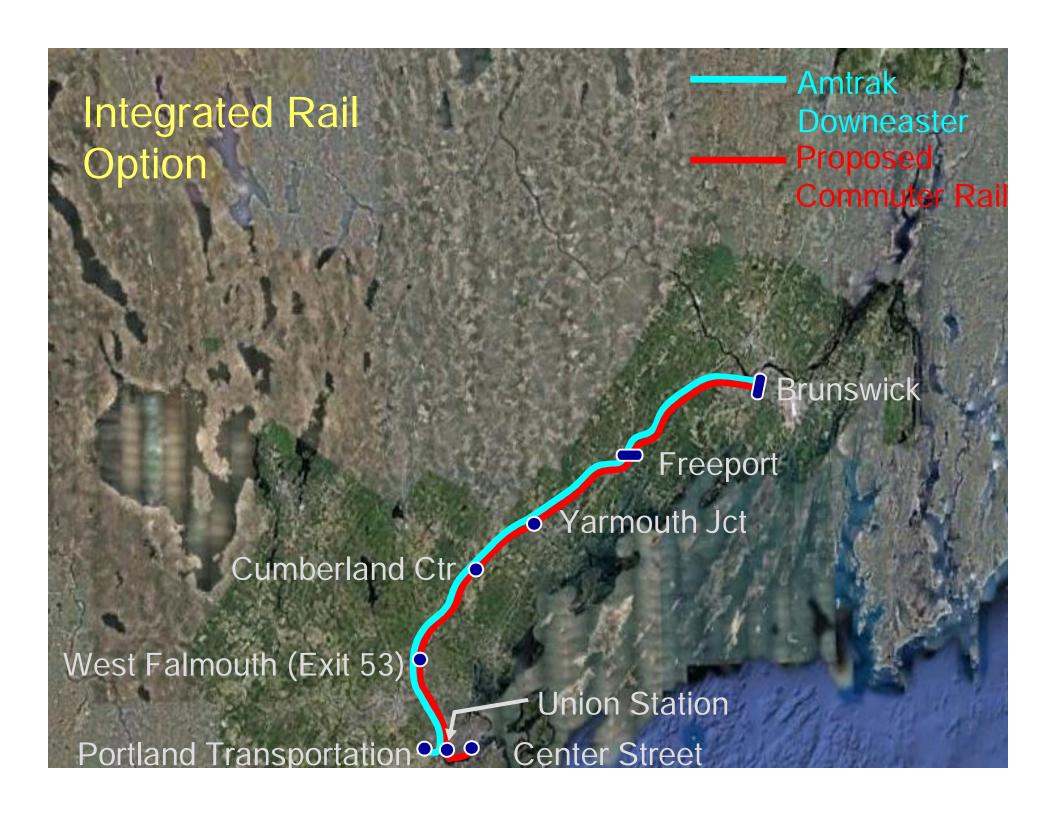


Phase 2 Alternatives (cont.)

Integrated Rail:

- Utilizes Proposed Amtrak Service
- Amtrak Deadhead Train Converted to Revenue Service
- Portland Union Station (for Amtrak and State Rail)
- Pam Am ROW
- Stations @ Yarmouth, Cumberland, Falmouth, Union Station, Center Street
- 7 Commuter Rail Round Trips
- 3 Amtrak Round Trips





Phase 2 Alternative Comparison

Measure	Integrated Bus Option	Integrated Rail Option
Weekday Boardings	815	298
Annual Operating Days	254	254
Annual Boardings	207,010	75,692
Annual Operating Costs	\$802,096	\$1,924,696
Capital Costs	\$21,461,954	\$26,353,472
Operating Costs/Boarding	\$3.87	\$25,43
Capital Cost/Boarding	\$26,334	\$88,434

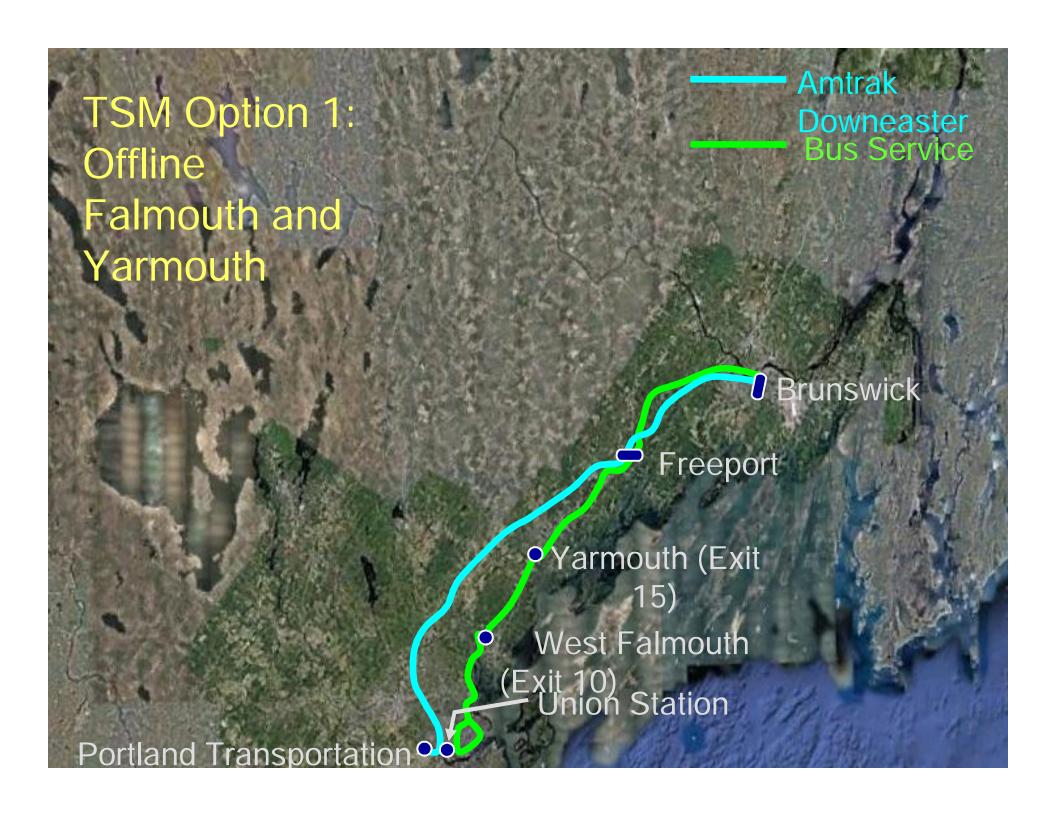


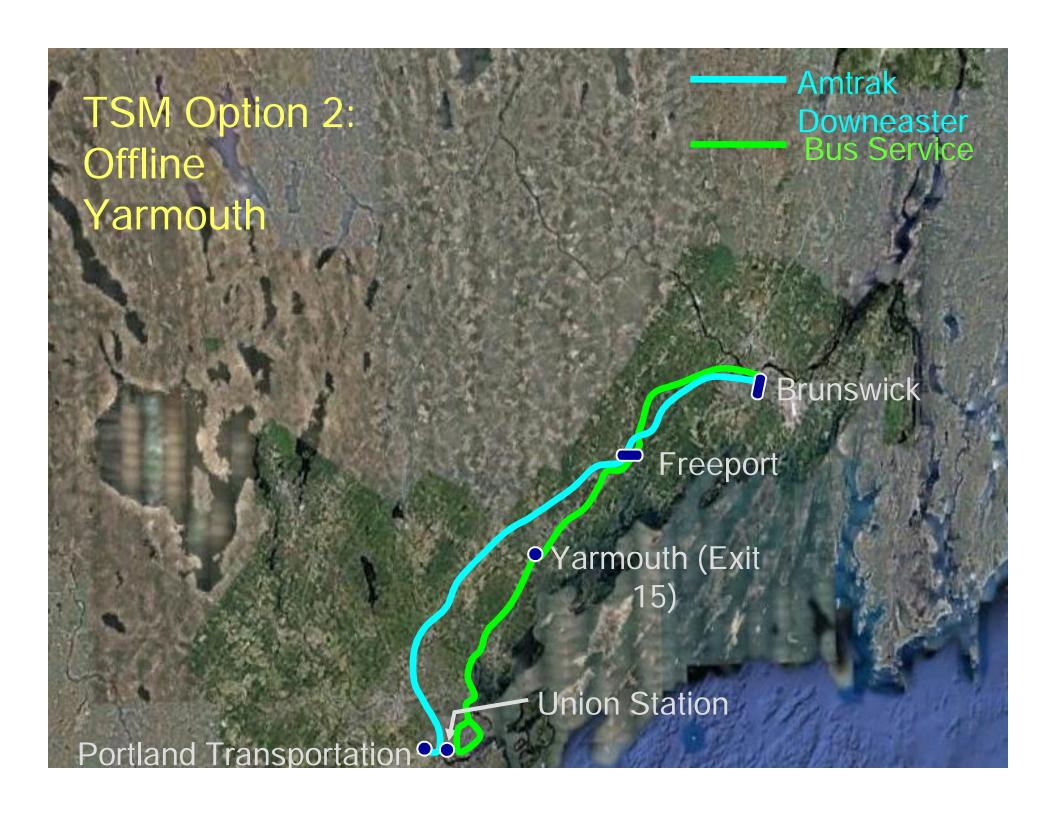
TSM Alternatives/Phase 3

- Option 1: Offline Falmouth and Yarmouth Stations
 - No upgrades to existing road network
 - No travel on shoulders.
 - Bus operates in mixed traffic
 - 10 Bus Round Trips, 3 Amtrak Round Trips
- Option 2: Offline Yarmouth (Only) Station
 - No upgrades to existing road network
 - No travel on shoulders.
 - No Falmouth station
 - 10 Bus Round Trips, 3 Amtrak Round Trips





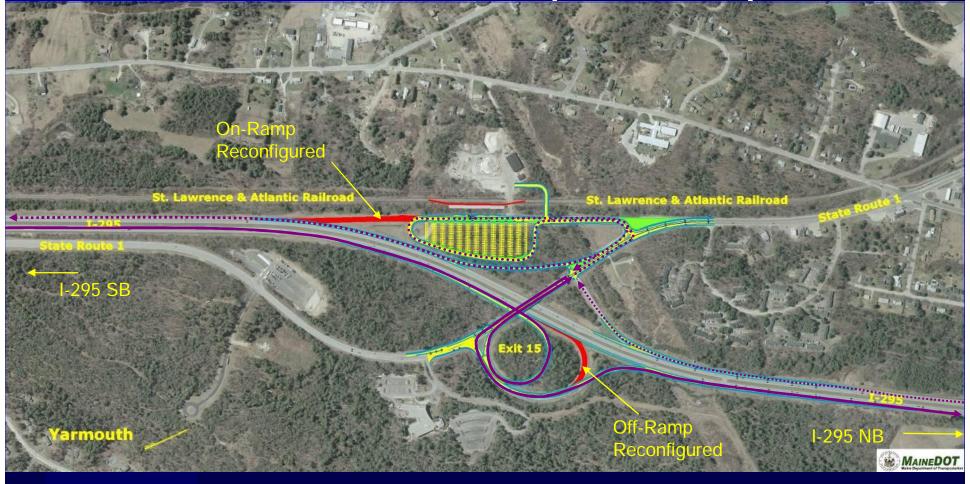




Offline Falmouth (Exit 10)



Offline Yarmouth (Exit 15)







TSM Alternative Comparison

Measure	Option 1	Option 2
Weekday Boardings	665	557
Annual Operating Days	254	254
Annual Boardings	168,910	141,478
Annual Operating Costs	\$740,467	\$737,710
Capital Costs	\$9,800,000	\$8,600,000
Operating Costs/Boarding	\$4.38	\$5.21
Capital Cost/Boarding	\$58.01	\$60.78



Recommended Alternative

- TSM Option 2
 - Bus service in traffic
 - Connections to Brunswick, Freeport,
 Yarmouth and Portland
 - Integration with Amtrak Downeaster





Potential Funding Sources

- Capital
 - Federal
 - New/Small Starts
 - Section 5309 Bus Program
 - Tiger3
 - HSR
 - EPA/Housing
 - Match
 - Bonding
 - In-Kind
 - Other?
- Operating
 - Section 5311
 - Rental Car
 - CMAQ





Next Steps

- Enhance/Confirm Station Logistics
 - Brunswick
 - Freeport
 - Yarmouth (Exit 15)
 - Portland
- Develop implementation plan
 - Operations management
 - Vehicle acquisition
 - Maintenance facility
- Develop Funding Plan
 - Capital
 - Operating
- Distribute Final Report (January 2011)



Questions?



