



Regional Transit System (RTS) BRT Feasibility Study Project Kick-Off

Project Management Team Meeting
May 22, 2008



the city of
GAINESVILLE



SANTA FE
COMMUNITY COLLEGE



Tindale-Oliver & Associates, Inc.
Planning & Engineering

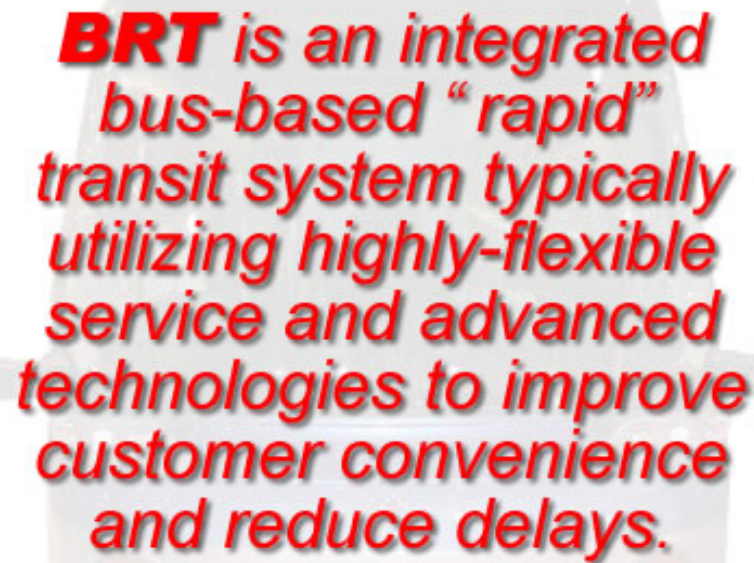


Agenda

- Welcome and Introductions
 - National Bus Rapid Transit Institute (NBRTI)
- Overview of Scope of Work
- Budget & Schedule
- Discussion
 - PIP
 - Corridors
- Next Actions

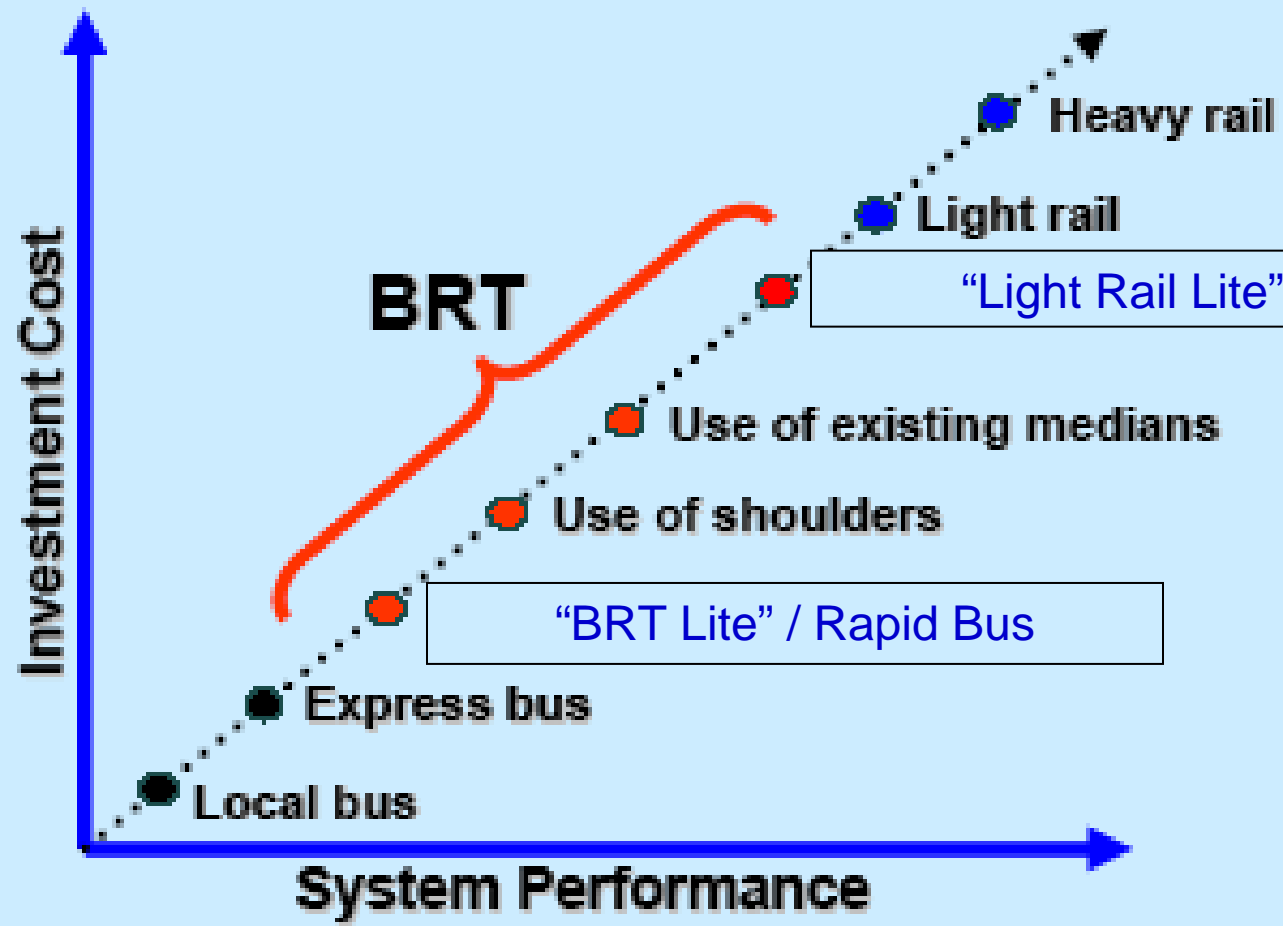


What is a *BRT* system?



BRT is an integrated bus-based “rapid” transit system typically utilizing highly-flexible service and advanced technologies to improve customer convenience and reduce delays.

BRT and LRT





The National Bus Rapid Transit Institute (NBRTI)

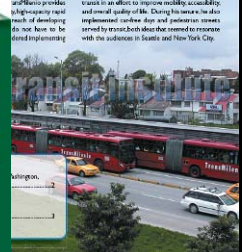
The National Bus Rapid Transit Institute



- Housed at the Center for Urban Transportation Research (CUTR), University of South Florida (USF)
- Established in 2001 to work in partnership with the Federal Transit Administration to support the development of BRT in the U.S.
- Core Program Areas:
 - Clearinghouse and Outreach
 - Technical Assistance and Support
 - Research and Demonstration

Clearinghouse

- Brochure
- Quarterly Newsletter
- Website www.nbrti.org
- Journal of Public Transportation – Special Edition
- Articles in trade magazines
- Nationwide Survey



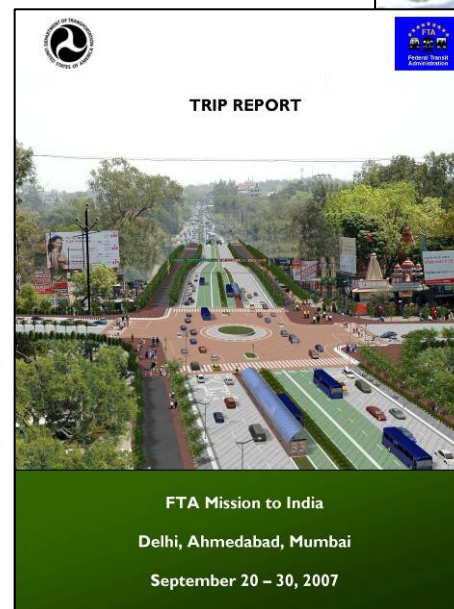
Technical Assistance and Support

- Immediate response to requests from FTA and the transit industry
- Industry committee and conference support
- BRT college-level curriculum
- Peer-to-Peer program
- Field visits
- Project evaluations

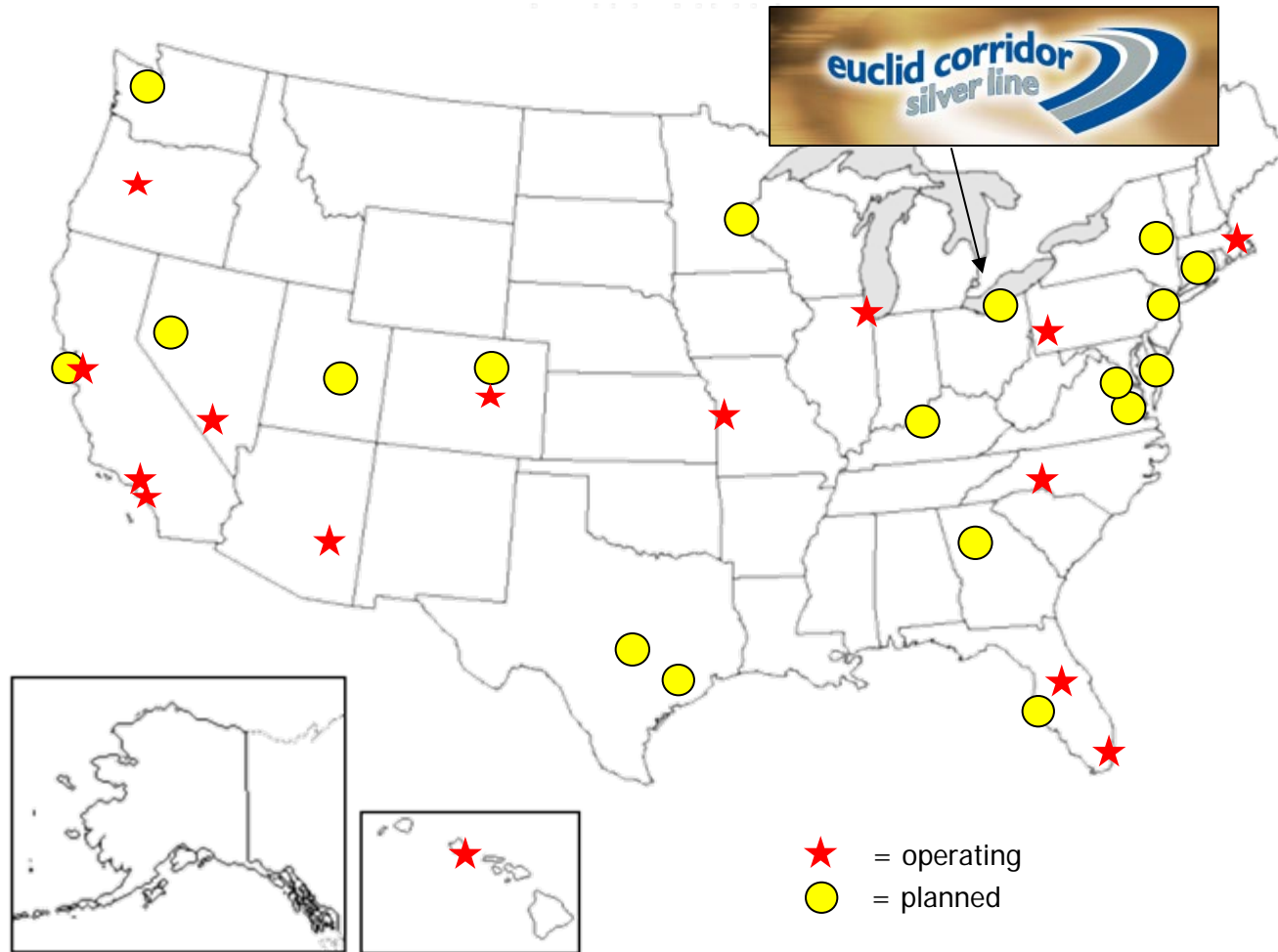


Technical Assistance and Support - Field Visits

- Planned in conjunction with FTA and other partners
- Facilitates knowledge transfer and documentation of international best practices
- Domestic locations:
 - Las Vegas
 - Los Angeles
 - Boston
- Overseas locations:
 - South America
 - China
 - India



At least 12 U.S cities are operating BRT and more than 100 are planning or implementing



BRT Systems

United States:

- Alameda, CA
- Albany, NY
- Boston, MA
- Charlotte, NC
- Cleveland, OH
- Chicago, IL
- Dulles Corridor, VA
- Eugene, OR
- Hartford, CT
- Honolulu, HI
- Louisville, KY
- Miami, FL
- Montgomery County, MD
- San Juan, PR
- Pittsburgh, PA
- Santa Clara County, CA
- Los Angeles, CA
- Las Vegas, NV



...and more

World:



- Curitiba, Brazil
- Brisbane, Australia
- Adelaide, Australia
- Ottawa, Canada
- Leeds, England
- ...and more

A Systematic Approach to Harnessing the Benefits of BRT

BRT Elements

- Running Ways
- Stations
- Vehicles
- Service and Operation Plans
- Fare Collection
- Intelligent Transportation Systems (ITS)
- Marketing and Branding



Performance

Travel Time Savings and Reliability

System Capacity

Accessibility

Safety and Security

Identity and Image



Benefits

Ridership Increase

Capital Cost Effectiveness
Operating Cost Efficiency

Env. Quality
Land Use Impacts
Economic Impacts

BRT as an Integrated System of Elements

**RUNNING
WAYS**



**STATIONS
AND LAND USE**



VEHICLES



**SERVICE AND
OPERATIONS PLAN**



FARE COLLECTION



ITS



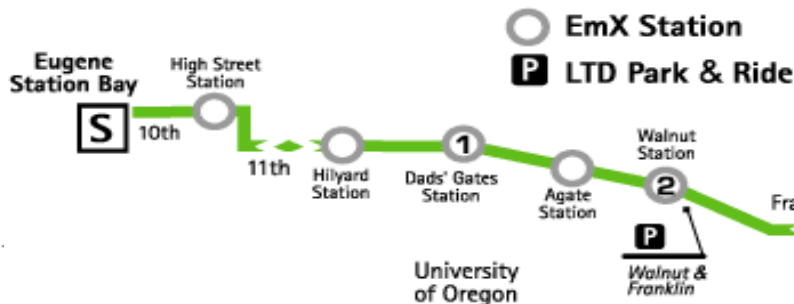
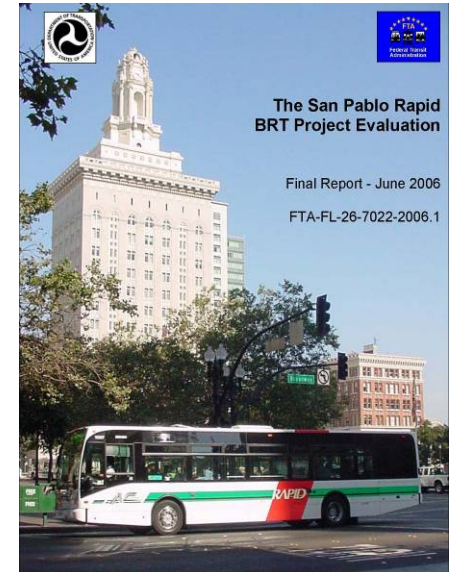
**MARKETING AND
BRANDING**



Integration of Elements

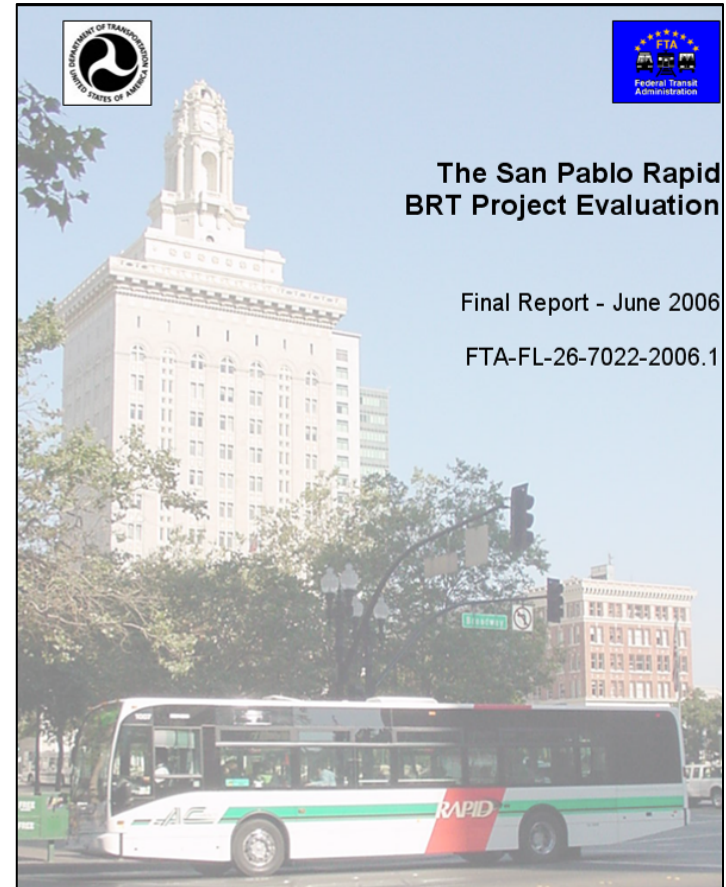
Technical Assistance and Support - Project Evaluations

- Full evaluations of completed BRT projects, documenting successes and lessons learned
- Completed evaluations of systems in Miami and Oakland
- Evaluations of Metro Orange Line in LA and EmX in Eugene are underway



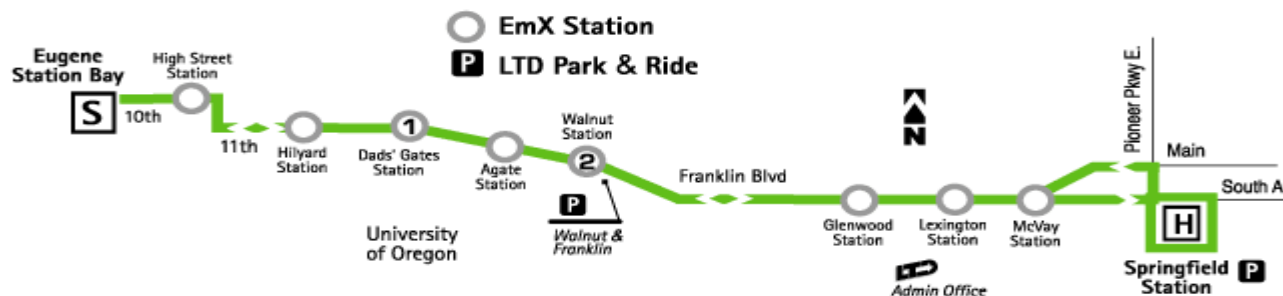
Oakland San Pablo Rapid BRT Evaluation

- Operation began June 2003
 - Replacement of 72L (local route)
- 14 miles in length
 - Provides service to 7 cities
- Operates in mixed traffic
- 26 stops at major intersections
 - Spaced average of 0.54 miles apart
- Runs 6 am to 7 pm on headway-based schedule of 12 minutes
- Total project capital cost approximately \$3.2M (or \$228,571/mile)



Eugene EmX Green Line BRT Evaluation

- Operation began January 2007
- Replacement of local route 11
- 4 miles in length
- Total project capital cost approximately \$24M (or \$6M/mile)
- Backbone of future EmX lines
 - Links downtown Eugene and downtown Springfield
 - High traffic, pop density, transit ridership



Website

www.nbrti.org



Eugene Oregon / University of Oregon









Franklin Corridor Summary Statistics

Objective	Phase 1 Year 2020 Predicted Result
Corridor transit mode share	+44%
Transit travel time	-43%
Transit time vs. auto time	-6%
Transit operating cost in corridor	-21%
Auto travel time on corridor	-1%

+55%

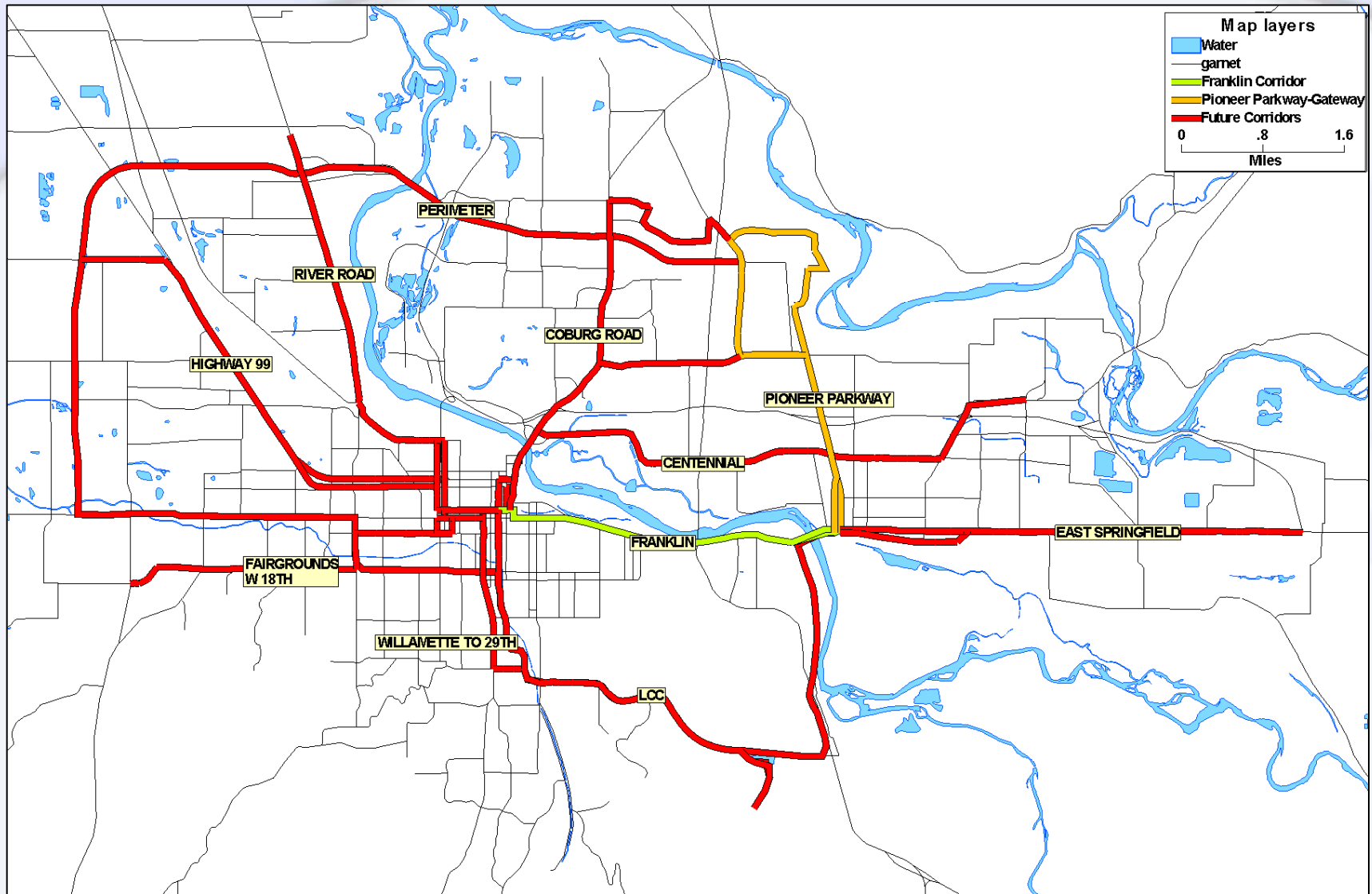


a service of
LANE TRANSIT DISTRICT

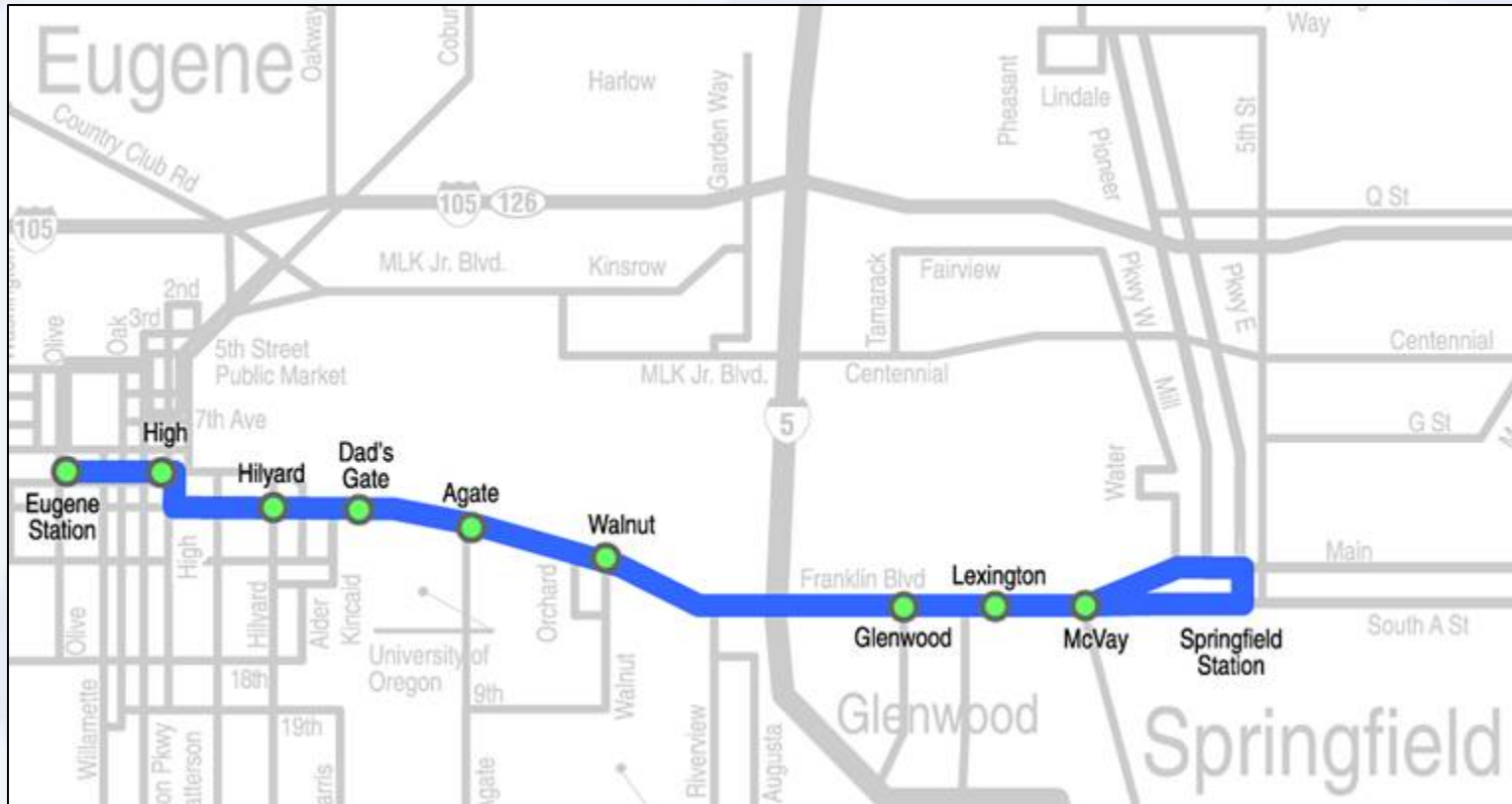
Lane Transit District Background

- LTD began service in 1970
- 220,000 metro area population
- 9,200,000 annual boardings, ridership doubled in 15 years
- High service level and ridership per capita
- 1,100 bikes/day and 8,500 wheelchairs/month (same as Seattle)

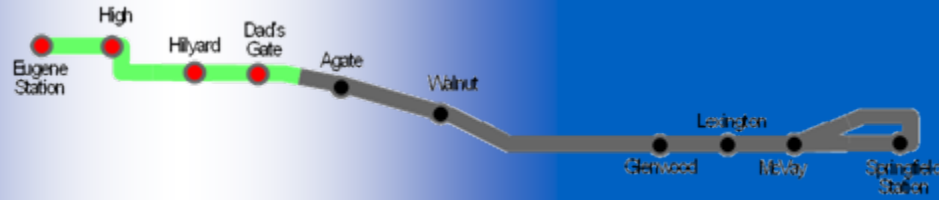
EmX System Map



Franklin EmX Corridor



Roadwork



Eugene Segment



Roadwork



Franklin Segment









Public Art



EmX Stations



EmX Vehicle Exterior



EmX Vehicle Interior



Ramp



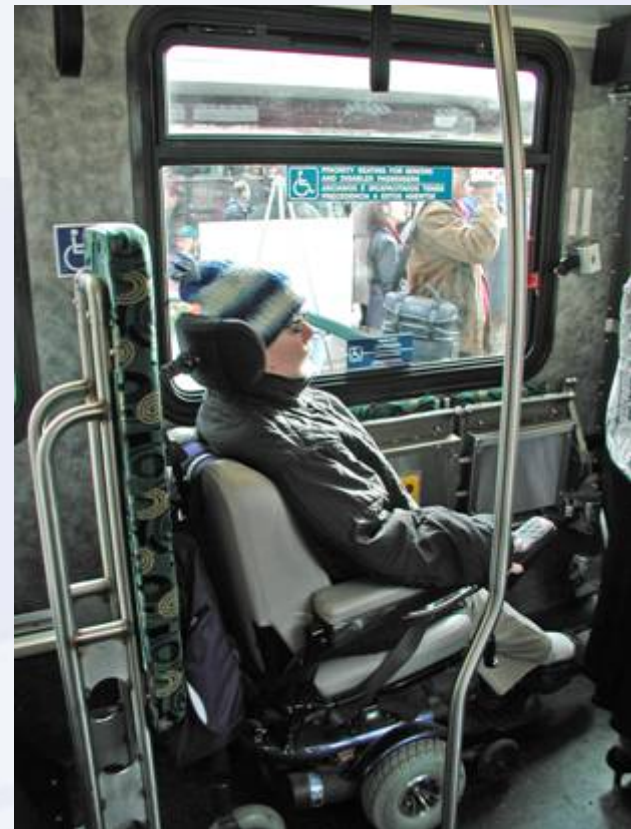
Stowed Position



Deployed Position

Wheelchair securement

Forward facing and rear facing



Bikes



- Bikes use back door
- Designated, marked bike area

Green Transit



Tasks

Task 1: Project Management & Coordination

Task 2: Develop a Public Involvement Plan (PIP) and conduct public workshops

Task 3: Collect Data and coordinate with local transportation organizations

Task 4: Identify Potential Corridors for Rapid Transit Consideration

Task 5: Develop Criteria Screening Process for Corridor Evaluation

Task 6: Conduct Technology Assessment

Task 7: Conduct Corridor Selection and Refinement

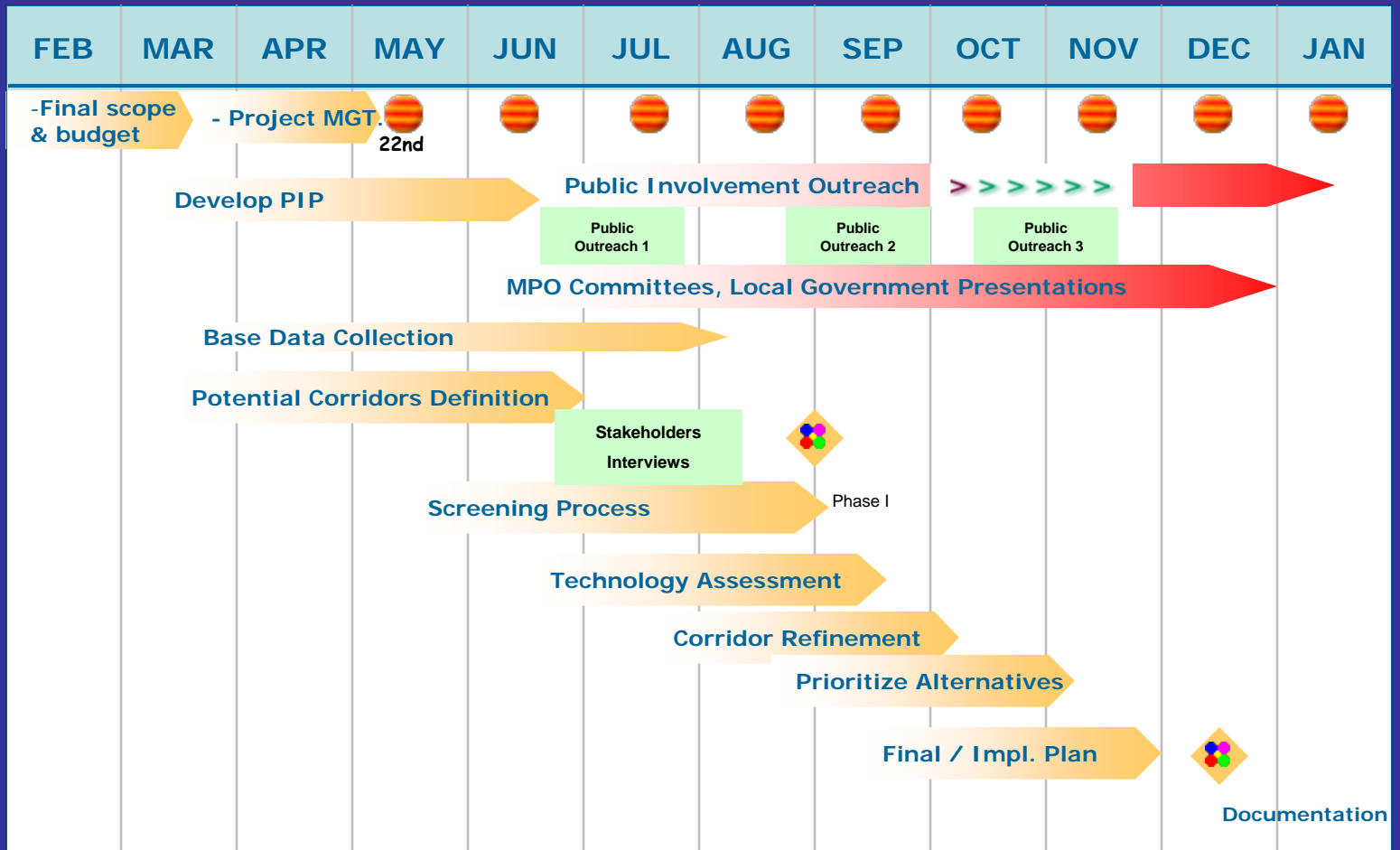
Task 8: Prioritize Alternative Service/Configurations

Task 9: Select Final Priority Corridors and Prepare Implementation Plans

Task10: Develop BRT Project Schedule and Milestones

Task11: Prepare Draft – Final Report

RTS BRT Study Schedule



Public Involvement Program (PIP)

- Workshops
 - What is it?
 - Where, Why, How?
 - Priority Corridors / Recommendations
- Presentations
- MTPO Process
- What is it? CH 12 Access TV
- Videos
- Expectations
- Setting Stage
- Relevance
- “system plan”

Pre Selected Corridors

- 1) SW 20th Avenue/SW 62nd Boulevard
- 2) University Avenue/Newberry Road
- 3) 13th Street
- 4) SW 23rd Terrace and SW 35th Place
- 5) Archer Road (from Tower Road to SW 13th Street)
- 6) Depot Avenue (from SW 13th Street to Waldo Road)
- 7) Waldo Road (from Depot Avenue corridor to Airport industrial Park)
- 8) Hawthorne Road/State Road 20 (from Waldo Road to SE 43rd Street)

Criteria Consideration

- existing and future transit demand
- existing transit services and infrastructure
- future transit market potential
- existing and future corridor residential and employment densities
- existing and future roadway and intersection geometries
- existing and future traffic conditions and travel flows
- compatibility with regional and local plans
- environmental/ROW constraints
- environmental justice

Evaluation Criteria Example

Initial Screening Matrix

Initial Screening Matrix				Thresholds			Score
Objectives	Criteria	Measure	Weight	5	3	1	
A. Ridership	1. Current ridership	Average weekday ridership per mile	3	High	Med	Low	
B. Capital Cost Effectiveness	1. Right-of-way availability	Pinellas County GIS parcel data	1	High	Medium	Low	
	2. Potential for coordinated improvements	Percent of corridor with planned roadway improvements	2	High	Medium	Low	
C. Operating Cost Efficiency	1. Intersection delay potential	Number of signalized intersections per mile	2	High	Medium	Low	
	2. Level of congestion	Average roadway Level of Service in corridor	1	D or better	E	F	
D. Development Potential	1. Density Threshold Assessment	DTA index based on residential and employment densities	3	High	Medium	Low	
E. Accessibility	1. Neighborhood accessibility & transit dependency	TOI index based on Census demographic characteristics	1	High	Medium	Low	
	2. Transit connectivity	Number of transfer opportunities with existing non-parallel PSTA routes per mile (with focus on BRT network connectivity.)	1	High	Medium	Low	
	3. Regional connectivity	Number of transfer opportunities with inter-county services or connection to adjacent counties.	1	≥2	1	0	

PMT Insight?

Next Steps

- Schedule PMT Meets
- Define PIP
 - Education / Awareness Outreach Forum
- Data Collection

Pioneer Parkway (with transit lanes)

