

City Council
Workshop
June 22, 2010

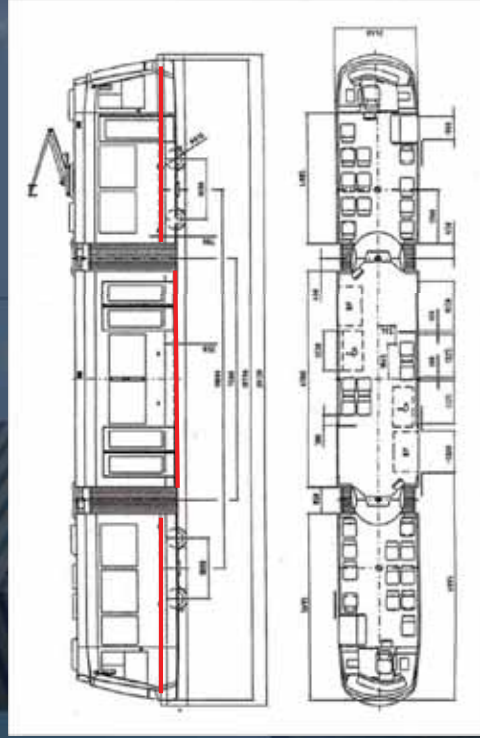


Modern Streetcar

- Electric powered streetcar operates on steel rails embedded in streets
- Runs in mixed traffic like a bus
- 8-12 mph avg. speed (35 mph max)
- Turning radius like bus or truck
- Pedestrian and bicycle friendly
- Stations/Stops spaced every 3-4 blocks
- Center running or outside lanes
- Runs adjacent to on-street parking
- Streetcar has signal priority at some intersections



Modern Streetcar



Modern Streetcar



Portland, OR



Seattle, WA



METRO Transit



Portland, OR

METRO Transit

FTA Alternatives Analysis

OBJECTIVES:

- Maintain eligibility for Federal funding
- Investment worthy project
- Decisions for Locally Preferred Alternative (mode and alignment)
- Capital and operating cost estimates
- Transportation benefits
- Financial plan
- Minimize Uncertainties

We are here

Fixed Guideway
System Plan

Alternatives Analysis

Project Development

Project Construction
Grant Agreement

Construction

FTA Small Starts Process

- Sec 5309 “New Starts” Program
- Evolving FTA rules & criteria
- “Small Starts” funding
 - < \$250 M total project costs
 - < \$75 M Small Starts funding
 - 50% typical federal funding
 - Environmental Assessment or EIS probable for NEPA
 - Longer timeline for FTA approval

Why Alternatives Analysis Matters?

- It sets the context for making informed decisions
- Answers the questions that need answers
- **Local questions:**
 - What do we want to do?
 - What are the benefits?
 - How much does it cost?
 - Do we have the necessary funding?
 - How do we make it happen?
- **FTA questions:**
 - What's the problem?
 - Were all reasonable alternatives considered?
 - How solid is the LPA decision?
 - Were the New Starts criteria developed correctly?
 - How does the project rate?
 - Should FTA fund it?

Guiding Principles

- Achieve community consensus
- Enhance mobility
- Be fiscally responsible
- Consider alternative technologies and alignments
- Consider effects on downtown Oklahoma City, the surrounding community and the region
- Promote economic development

Alternatives Identification

Which circulator technologies and alignments are to be considered?

AA STUDY AREA



1. LRT Modern Streetcar
2. Bus Circulator
3. Trolley Bus
4. Baseline Alternative / Transportation System Management (TSM) Option
5. No Build Option

#1 - Modern Streetcar

- Operating in Portland, Tacoma, Seattle
 - Made by Skoda in Czech Republic
 - United Streetcar partnering with Skoda for US manufacture of same vehicle
- 25 communities in planning and design
- Articulated -- it bends
- Double ended -- it travels either direction



#2 - Bus Circulator

- Los Angeles, Orlando, Washington D.C., Denver
- Rubber tired circulator buses
- Smaller, low-floor buses
- Frequent service
- Longer operating hours
- CNG fueled
- Special paint scheme, shelters and branding
- Signal priority



#3 - Trolley Bus

- Oklahoma City, Fort Worth, San Antonio
- Rubber tired diesel or CNG fueled buses
- Expanded routes and service hours
- More frequent service
- Special shelters



#4 - Transportation System Management Option

- Baseline option for comparison to the Build Alternatives
- “The best you can do without significant capital investment”
- Use existing METRO buses and Spirit Trolleys
- More frequent service
- Longer service hours

Alternatives Analysis Work Plan

Develop Alternatives and Detailed Operating Plans

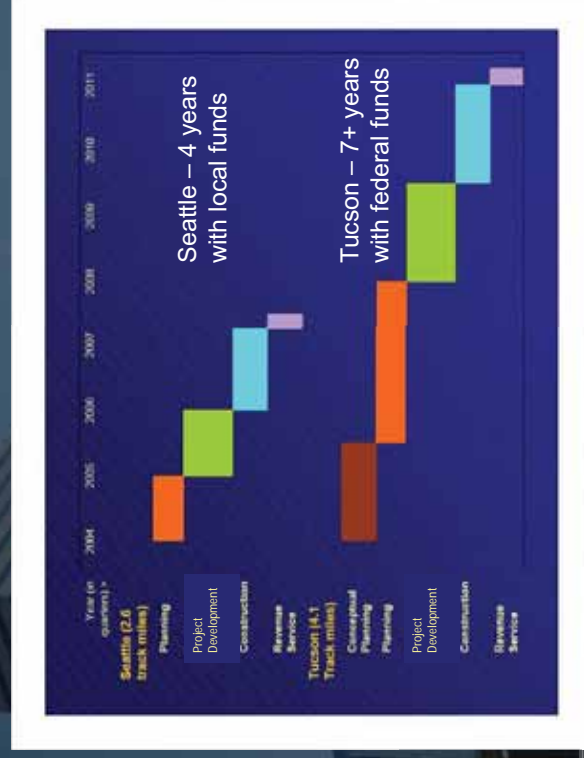
Phase I Screening of Alternatives

Develop Capital and Operating Costs

Phase II Screening of Alternatives

Select Locally Preferred Alternative

Example Timeline for Development



Vehicle Procurement

- Selection of modern vehicle type with 'off-the-shelf' design
- Long lead time (24-30 months for 1st car)
- Small quantity
- Limited suppliers
- Wireless technology options?
- Joint procurement with other communities?
- Buy America

Procurement Schedule

Specification Development	3-4 months
Procurement, Award and NTP	3-6 months
Manufacture first car	24-30 months
Manufacture 2-4 cars @ 2 cars/month and testing	6-8 months
Total	36-48 months

U.S. Examples



Foreign Manufacturers



Metrom - France, Spain



AnsaldoBreda - Italy



Bombardier - Germany, Mexico



Siemens - Germany

Coordination with MAPS Streetcar

- Coordinate schedules and activities for MAPS and AA
- Early consideration of circulator alignment for Project 180 Streetscape improvements
- Complete Alternatives Analysis in advance of MAPS Streetcar beginning construction
- Complete NEPA review (Environmental Assessment) for MAPS Streetcar
- Long lead time for vehicle procurement
- Seek Letter of No Prejudice from FTA for locally funded MAPS streetcar project

Questions and Discussion

