Integrating planning, architecture and engineering

Dave Unsworth
TriMet
Senior Project Development Manager

Rail-volution
October 2008
Collaboration

- System planning
- Corridor plans
- Alignment Alternatives
- Station locations
- Station design
Collaboration

• TriMet’s staff includes planners, urban designers, architects and engineers
• Partner agencies participate in planning and design
• Consultant teams hired to augment staff
• Location, location, location
• Corridor planning, alignments, station design
Project Planning Process

- System wide Regional Plan:
  - Define problem and need
  - Potential strategies and alternatives

- Corridor level:
  - Mode - Bus, Busway, LRT, Hov, HOT
  - Alignment and Terminus locations

- Mode and alignment specific:
  - Draft Statement
    - Design Options impacts, benefit & cost
  - Final Statement
    - Commit to mitigation. Respond to comments

Timeline:
- 1 to 1.5 years: Engineering
- 1 year: Sketch
- 6 - 8 months: 5 to 10% to 30%

PUBLIC INVOLVEMENT
Project Construction Process

Final Design
Plan for utilities, fleet management, public outreach, and procurement method.

Funding Agreement
US government commitment to the project. 60% fed/40% local

Construction
Move utilities, civil and track, station finishes, system installation, mitigation, testing and opening

8 months
3.5 years

30% 65% 100%

Engineering

PUBLIC INVOLVEMENT
Collaboration

- System planning
- **Corridor planning**
- Alternatives Analysis (modes)
- Alignment Alternatives
- Station locations
- Station design
Corridor Planning

• Understand travel demand
  • Existing markets
  • Potential future markets
• Define significant opportunities/problems
  • Transportation
  • Land uses
• Ridership, transit travel time and key connections
Collaboration

- System planning
- Corridor planning
- **Alignment Alternatives**
- Station locations
- Station design
Potential Alignments

- Freeway ROW
- Railroad
  - abandoned
  - shared rail corridor
- Arterial
- Downtown streets
- Tunnel
Willamette Shore Line near SW Richardson St.
Willamette Shore Line near SW Richardson St.
Trolley Terminus
Albertson Terminus
Collaboration

- System planning
- Corridor planning
- Alignment Alternatives
- Station locations (stations can move)
- Station design
Station location

- Neighborhood fit
- Re-development opportunities
- Activity centers
- Existing and future land uses
- Connections to pedestrian network, bicycle network, bus network, street network
- Construction staging
- Safety – CPTED
- Ridership and user benefits
  - Station spacing
  - Cost
The Clinton Street Station will be a place that is integrated into the surrounding neighborhood, is easily accessible by people on bikes, foot, and bus, and helps to improve connectivity to the riverfront. The station will be active with a vibrant mix of industrial, employment, retail, services, and housing that successfully integrates with the character of the surrounding area.
Orenco 1994

Construction Begins July 1993

Hawthorn Farm Intel Plant
Orenco 1998

*Westside MAX LRT Opens September 1998*

1,229 new housing units

(Orenco Station TOD)

Additional commercial
Orenco 2000

202 Housing Units

New Offices

Old Oregon Nursery Company (ORENCO) Town – New rehab, elementary school and townhouses
Orenco 2002

New Intel Plants –
15,000 employees;
$2 billion in investment

1,000 new housing units
Orenco
2004

235 new housing units
Collaboration

- System planning
- Corridor planning
- Alternatives Analysis (modes)
- Alignment Alternatives
- Station locations
- Station design
Station Design

• Details matter
  • Signage
  • Fit and pedestrian scale
  • Station identity
  • Natural surveillance
  • Station activity and connections
• Include art
• Include partners
• Incorporate neighborhoods, businesses and developers
Existing - SW Lincoln Street with high-density office and residential land uses in urban setting.
Collaborative design

- Internal teams
- Partners – design commission, planning commissions, AIA, urban renewal agencies
- Regulators
- Operators
- Developers
Dave Unsworth
TriMet
503-962-2147
Unsworthd@trimet.org
Trimet.org