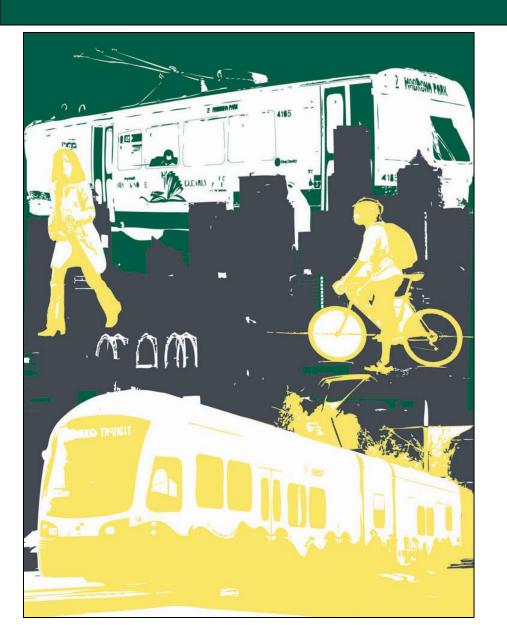
# Seattle Transit Master Plan



Seattle Design Commission

Briefing
December 2, 2010

Tony Mazzella & Jennifer Wieland SDOT Policy and Planning







#### **Seattle Transit Plan '05**

- Framed transit vision for Seattle
- Established ability to negotiate with Metro
- Updated transit classifications
- Linked urban villages along key routes (UVTN)
- Estimated funding needed for additional service
- Set performance measures and goals



### **Emerging Issues**

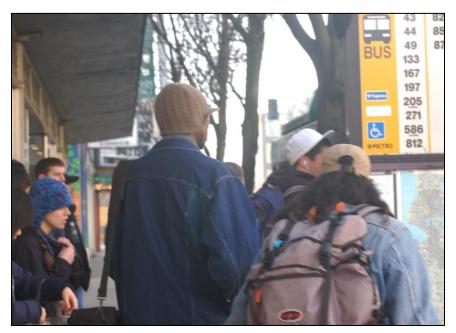
- Update policy framework
- Document current conditions
- Prioritize network for investments
- Explore funding resources
- Address city's role in providing transit service





#### **Vision and Goals**

- Make it easier and more desirable for people to take transit
- Respond to the needs of vulnerable populations
- Meet sustainability, growth management, and economic goals
- Create great places where modes connect
- Balance implementation with constraints





#### **TMP Work Plan**

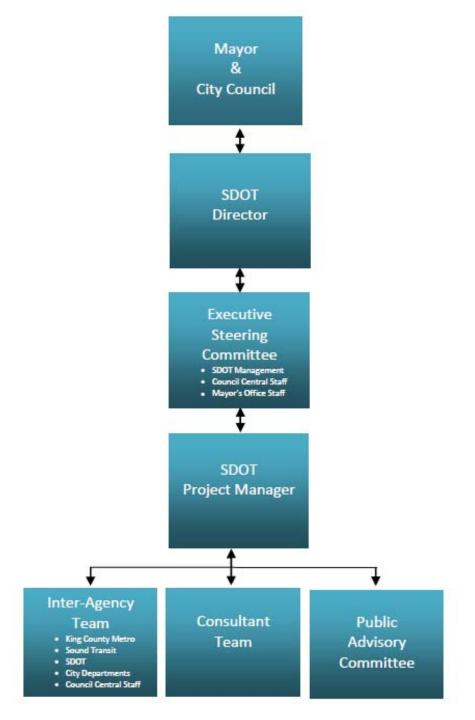
- Briefing Book
- Evaluation framework
- Corridor prioritization
- Modal assignment
- Funding scenarios
- Capital project lists
- Policy and programmatic actions
- Continuous public outreach





## **Project Organization**

- Consultant team led by Nelson\Nygaard
- Regular interactions with public and technical advisory teams
- Council and Mayoral engagement in and oversight of project



#### **Schedule**

Plan Development

September 2010

January 2011

September 2011

September 2011

Public Engagement

Recommend Plan to Mayor

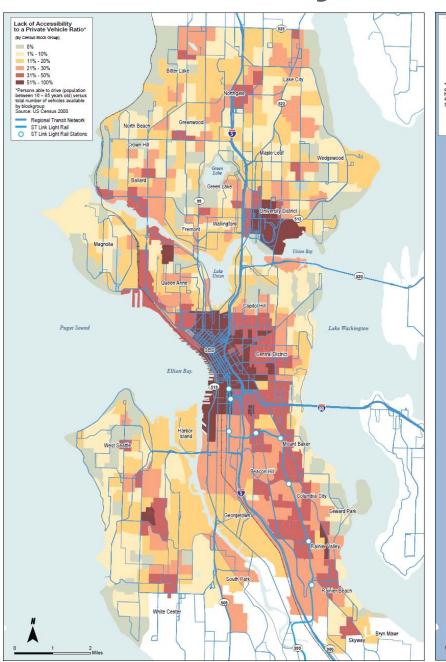


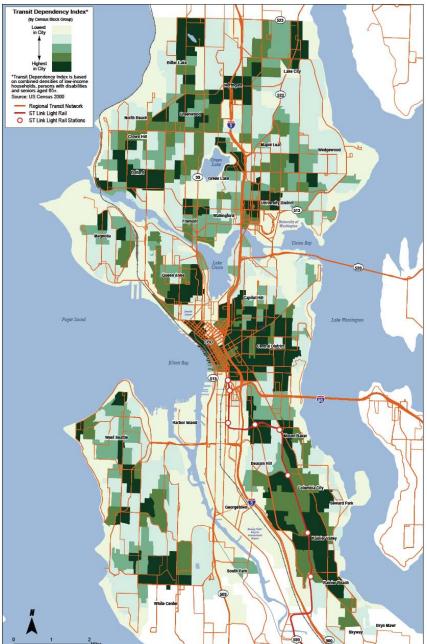
**Council Adoption** 



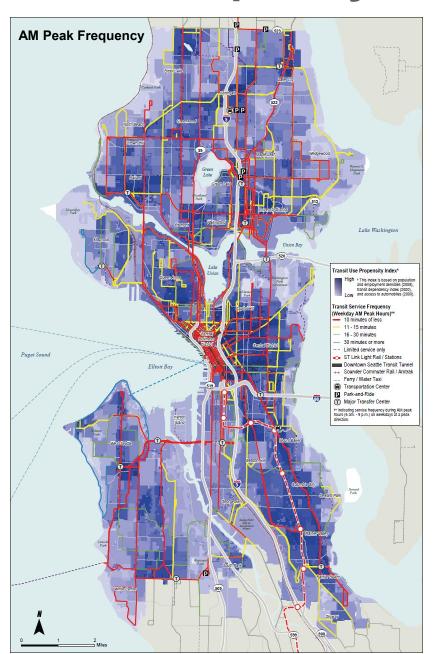


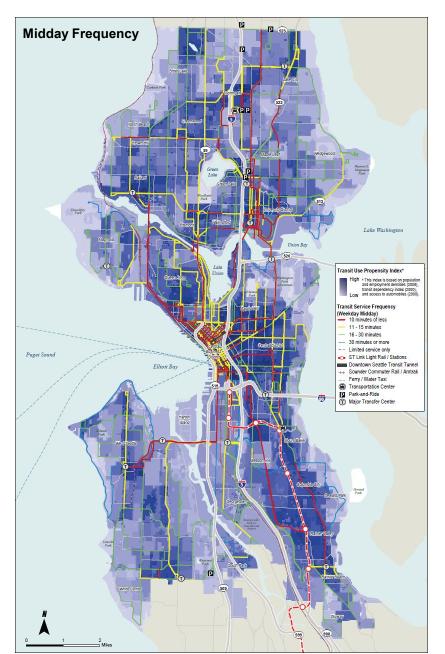
### **Auto Accessibility and Transit Dependency**



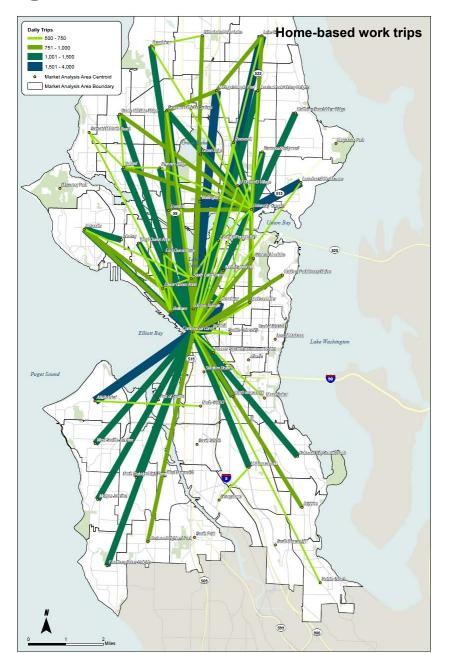


# Service Frequency vs. Transit Use Index

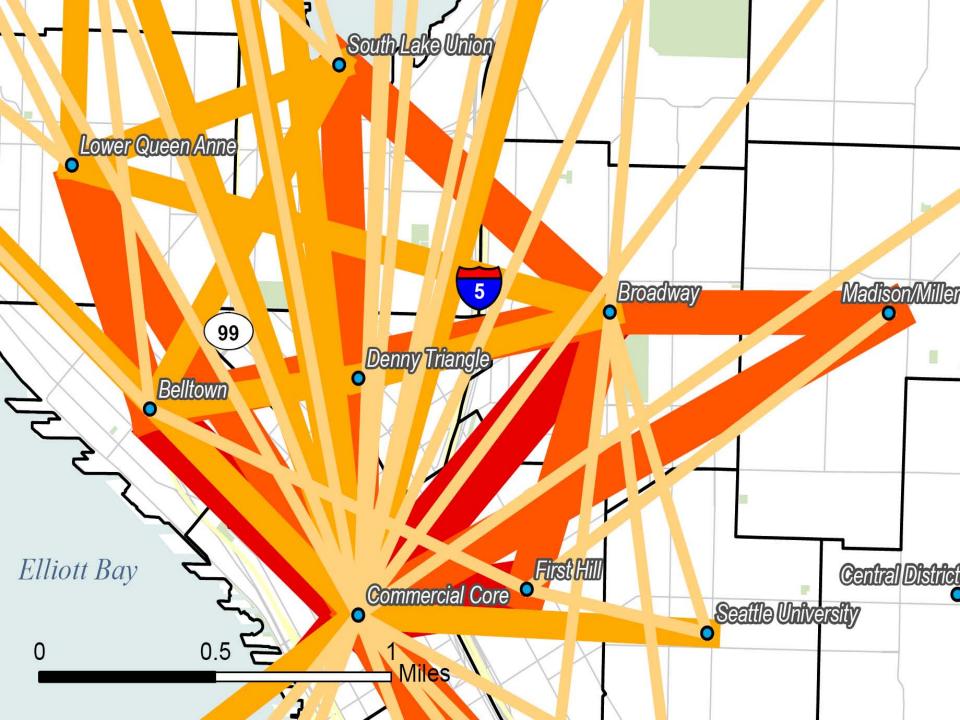




## Major OD Travel Demand in Seattle (2010)









#### Framework for Urban Transit Mode Review

#### **Modes Being Considered**

RUBBER-TIRE

- · Local Bus/Trolley Bus
- Rapid Bus/Trolley Bus w/Priority
- BRT/Trolley BRT w/Priority and ROW RAIL
- · Streetcar/Tram in Mixed Traffic
- Tram w/Priority and Exclusive ROW
- · Light Rail

#### **City Goal Framework**

- · Environmental Sustainability
- · Economic Vitality
- · Safety and Health
- · Livable Neighborhoods

#### **Modal Choice Factors**

- · Passenger Experience
- · System Performance
- · Energy Use/Emissions Reduction
- · Land Use/Economic Impacts
- · Safety/Health/Livability Benefits
- · Cost-Effectiveness

#### Passenger Experience Measures

- Speed
- · Reliability
- Ride quality/ comfort
- Multimodal integration (e.g., bike accommodation)
- Access (e.g., ease of boarding vehicle)
- Accessibility (for mobility-challenged)
- Stop/station amenities

# System Performance Measures

- · Capacity
- Connectivity

   (i.e.,
   seamlessness)
- Speed (i.e., coverage)
- Reliability
- Traffic/parking Impacts

#### Energy Use/ Emissions Measures

- CO2/passenger mile
- Energy Use/ passenger mile
- Lifecycle carbon emissions
- · Land use impacts
- Potential to reduce VMT

#### Land Use/ Economic Measures

- Ability to shape development
- Ability to shape pedestrian environment
- Land value benefits/impacts
- Tax base
- · Parking impacts

#### Safety/ Health/ Livability Measures

- Collisions (vehicle conflicts)
- · Air quality
- Noise
- Pedestrian conflicts/safety
- Bicycle conflicts/ safety

#### Cost Measures

- Operating cost (per passenger, per hour, per mile, or combinations thereof)
- Capital cost per mile
- Total (annualized operating and capital) cost (per passenger, per hour, per mile, or combinations thereof) (including projected energy cost growth)
- External (social) costs

### **Local Buses and Trolleys**

- Operate in mixed traffic
- Frequent, curbside stops
- Limited signal priority
- Various fuel sources, including electric trolleys



### **Express Bus**

- Long-haul routes
- Peak hour connections
- Center-to-center or point-to-point trips
- Often uses freeways





### Rapid Bus

- Features to improve performance (e.g., ITS, vehicle characteristics)
- Segregated ROW (e.g., Bus Only lane)
- Real-time information
- Wide stop spacing



## **Bus Rapid Transit**

- Exclusive ROW ("busway")
- ITS features
- Special design and branding
- Off-board payment



#### **Streetcar or Tram**

- Mixed, with traffic or in separate ROW
- Closely spaced stops
- Passenger "comfort" features





## **Light Rail**

- Exclusive ROW
- Street level or grade separated
- ITS features
- Higher speed than streetcar / tram





#### **Commuter Rail**

- Exclusive ROW (or shared with freight)
- High speed
- Limited stop

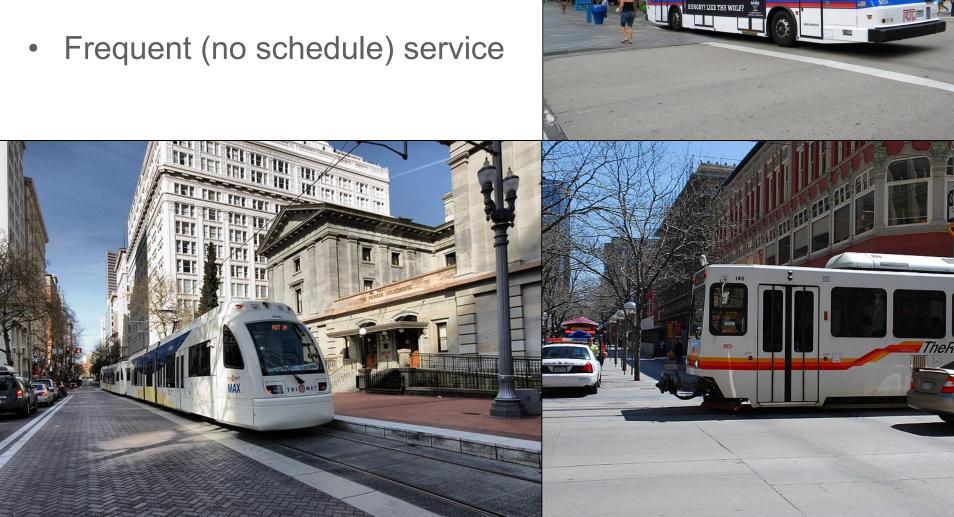






#### **Downtown Circulation**

- Connectivity between services
- Access to destinations



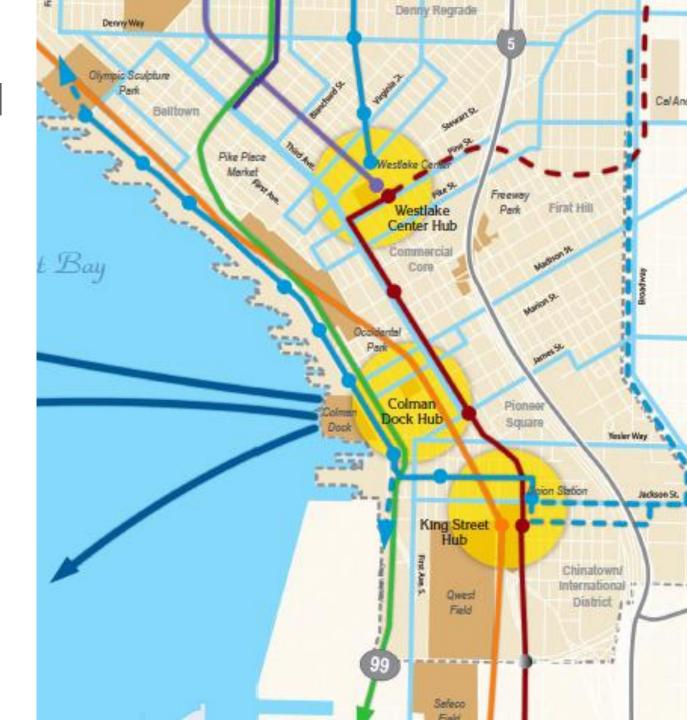
## **System Legibility**

- Inter-modal connections
- Clear and relevant information





# Seattle's Designated Hubs



### **Westlake Hub**



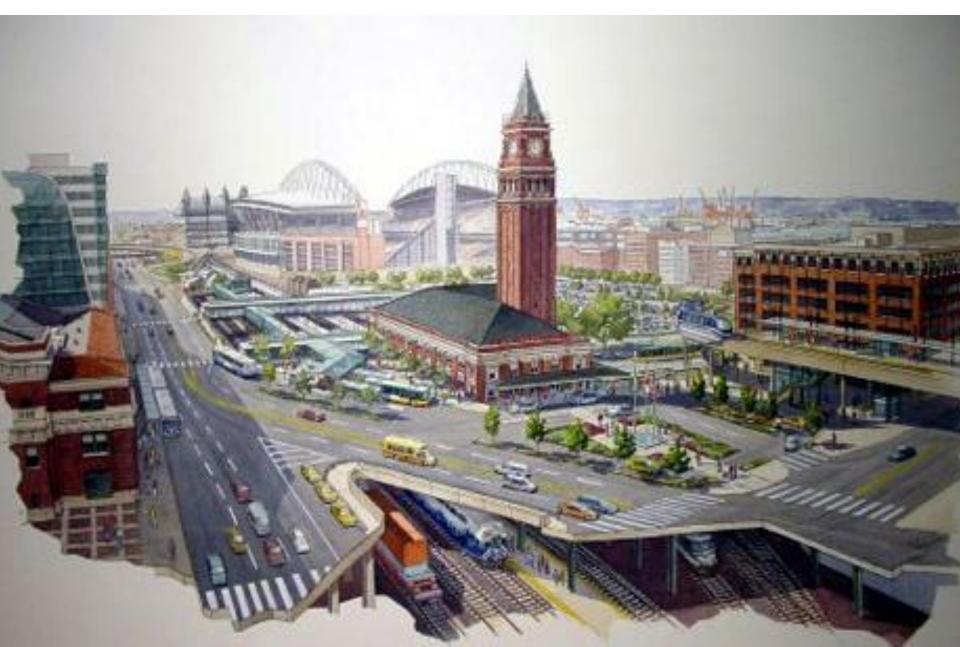
### **Westlake Hub**



## **King Street Station**



# **King Street Station**



### **Portland**









## **San Francisco**







#### **Future Seattle Hubs**

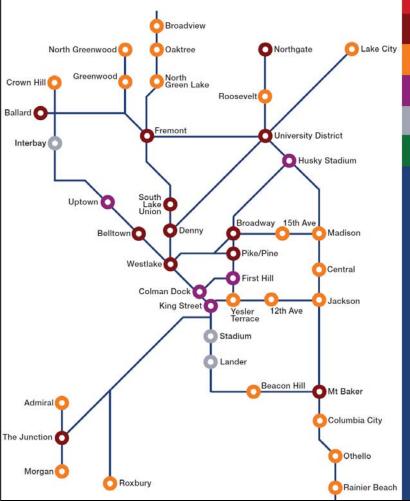
- Outside of center city
- Multi-modal interactions
- Transportation and land use connections



## Seattle Transit Communities

Integrating Neighborhoods with Transit

A report from the Seattle Planning Commission



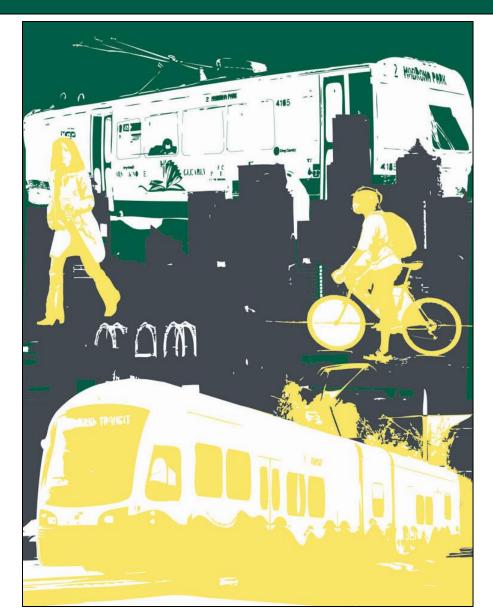
### **Next Steps**

- TMP web survey
- Ongoing outreach
- Advisory group coordination
- Briefing Book completion
- Contacts with elected officials





## **Questions?**



#### Website:

http://www.seattle.gov/ transportation/transitmasterplan

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