Designing for Streets with Purpose

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Presentation Overview

• Background / Trends
• Street Typologies
• Street Examples
Seattle Background

• 217 sq km, 730,000 people

• Largest city in King County
  6,000 sq km, 2.2 m people

• **26% of Seattle land area** is in public street right-of-way

• 97.5% of Seattle’s population lives within ¼ mile (0.4 km) of a transit stop

• Ranks 6th of the 50 largest cities for walkability
Seattle Background

• Population 23%
• Collisions -21%, ADT -5%
Seattle Background

• Transit Ridership 46%
Seattle Ridership Comparison

Change in bus ridership in U.S. urbanized areas since 2004

- Baltimore, MD
- Boston, MA-NH-RI
- Chicago, IL-IN
- Los Angeles-Long Beach-Anaheim,
- Miami, FL
- New York-Newark, NY-NJ-CT
- Philadelphia, PA-NJ-DE-MD
- San Francisco-Oakland, CA
- Seattle, WA
- Washington, DC-VA-MD

Created by Yonah Freemark @ The Transport Politic | Source: FTA

City of Seattle
Seattle is growing

5th and Columbia – 48 story tower
528,000 SF Office Space
184 Room Hotel
~300 Parking Garage

Seattle No. 1 for growth this decade
Since 2010, Seattle’s population has increased by 18.7 percent, the fastest growth rate among the 50 largest U.S. cities.

Sources: U.S. Census
MARK NOWLIN / THE SEATTLE TIMES
Seattle is growing
Setting the Policy Foundation

“Because Seattle is a fully built city with a mature street system, the City uses a full range of non-single occupant vehicle transportation facilities to support the desired redevelopment pattern within Urban Villages”...

- 2004 Comprehensive Plan Update
Comprehensive Plan Transportation Element key themes

- Safe, reliable, affordable, equitable, and high quality travel options
- Ensure goods movement
- Use right-of-way for multiple purposes
Seattle’s Growth Strategy

- Focus growth to more efficiently serve it
  - Urban centers
  - Manufacturing & industrial centers
  - Urban villages

- 80% of city growth in centers/villages since 1994

- Future Comprehensive Plan growth targets 2016-2035
  - 70,000 additional housing units
  - 115,000 additional jobs
Seattle’s Growth Strategy

- State Growth Management Act (GMA) requires:
  - Comprehensive plans to address growth
  - Level-of-service standards (LOS) to gauge transportation system performance

- GMA concurrency: *allow development* if:
  - LOS is met
  - Or commitments are in place to ensure system capacity within 6 years

- Puget Sound Regional Council (MPO)
  - Certifies local comprehensive plan certification
  - Wants *multi-modal* LOS emphasizing people-moving capacity
Level of Service: V/C to Modeshare
Measuring Space efficiency

Drive alone: 0%

Moving a trip from drive alone to:
- Carpool: 55%
- Bicyclist: 93%
- Transit: 97%
- Walking: 99.9%

frees up this much street capacity:
200 people can fit in...

177 cars

3 buses

1 light rail train

on their bikes

2nd Avenue in Seattle
Employment Density

How Commuters Got Downtown in 2017

- **48%**: Transit
- **10%**: Ride Share
- **8%**: Walk
- **3%**: Bike
- **6%**: Other
- **25%**: Drive-alone

Commuters surveyed arrived to work 6-9am.

- **Transit**: Includes bus, rail, and walk-on ferry passengers.
- **Ride Share**: Includes carpool and vanpool.
- **Other**: Includes telecommute, compressed work week, and other as noted by survey participants.

2018 PSRC Estimates

- Downtown Seattle: 196,648 Jobs
- Eastside (Redmond and Bellevue): 201,528 Jobs
- Total: 301,000 Jobs

Figure 6. What 200,000 jobs looks like: Downtown Seattle vs. Eastside
Source: Based on Puget Sound Regional Council Covered Employment Estimates, 2011
Jobs Up, Drive-Alone Rate Down 2010 to 2017

- DOWNTOWN JOBS:
  - 2010: 202k
  - 2012: 220k
  - 2014: 228k
  - 2016: 247k
  - 2017: 262k

- DRIVE ALONE RATE:
  - 2010: 35.2%
  - 2012: 34.2%
  - 2014: 31.1%
  - 2016: 29.7%
  - 2017: 25.4%
Seattle’s Safety Trends

• One of safest cities in US
• 25% reduction fatalities from 2017 to 2018
• 14 fatalities
Safety Trends

- **7%** of total crashes involved people walking, biking, and on a motorcycle.
- **89%** of total fatalities.
- **90%** of all serious and fatal crashes occur on arterial streets.
- **60%** of pedestrian fatalities in the last 3 years were people age 55+.
Street Types

- Supplements functional classification
- Provides street function for support land use and people
- Vision for street

25-35 mph (40-55 kph)
20-30 mph (30-50 kph)
15-20 mph (25-30 kph)
Downtown Streets have a vibrant streetscape that supports active street-level uses and provides access to downtown businesses, residences and transit services.

2nd Ave

• Principal Arterial
• Downtown Design Standards
• 25 mph (40 kph)
2nd Ave

• Two-way PBL
• Bus Only Lane
• Flex Curb Lane
2nd Ave

• Focus made at Intersection

• Signal separation of turning cars

• Reduced pedestrian left turn crashes by 80%

• Plant/Railing for people comfort
2nd Ave

• More families travelling accessing downtown by walking and biking
Dexter/7th Ave

- Downtown Neighborhood
- Downtown Design Standards
- 25 mph (40 kph)
Dexter Avenue

- 2011 Paving Project
- 1.5 Miles (2.3 km) in Length
- 4 lanes to 2 lanes
- Bus and Bike Improvements
In-lane Transit Islands

Before

After

Before

After
Results

• 19% increase in traffic volume
• 11,800 AWDT Before
• 14,100 AWDT After
• 19% decrease in collision rate
• ~40% increase in bus ridership
• Bus travel time approximately same (+0.4 sec)
Dexter Avenue

ELEVATION PROFILE

NICKERSON ST

ALOHA ST

DEXTHER

WESTLAKE
Dexter Avenue

Sales index is trending at a positive 5% annual growth rate

Impacts to Retail Businesses along Dexter Ave North

- Amazon moves to South Lake Union
- SR 99 Tunnel (construction starts)
- Mercer East (construction completed)

Sales Index is trending at a positive 5% annual growth rate
Dexter Avenue
Amazon
Vibrant Complete Streets
Dexter onto Mercer
Mercer to Seattle Center
Westlake

Yellow tactile strip to designate space for people walking and people biking

18 formal ADA pedestrian crossings

One-way circulation and angled parking in some locations

Stop signs and speed humps in parking area

Pavement markings and rumble strips to slow bicycle speeds at pedestrian crossings
Westlake
Questions?

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https://www.seattle.gov/visionzero