

# Seattle Bicycle Advisory Board

## October 3, 2012

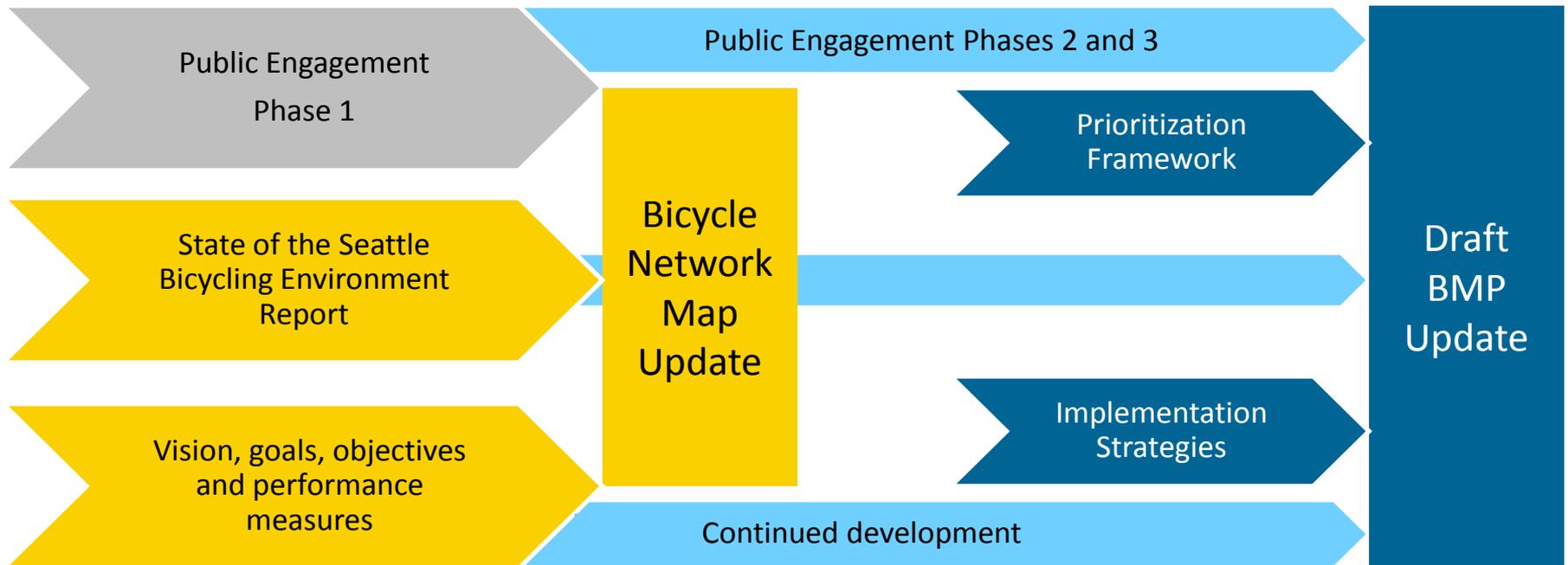


# AGENDA

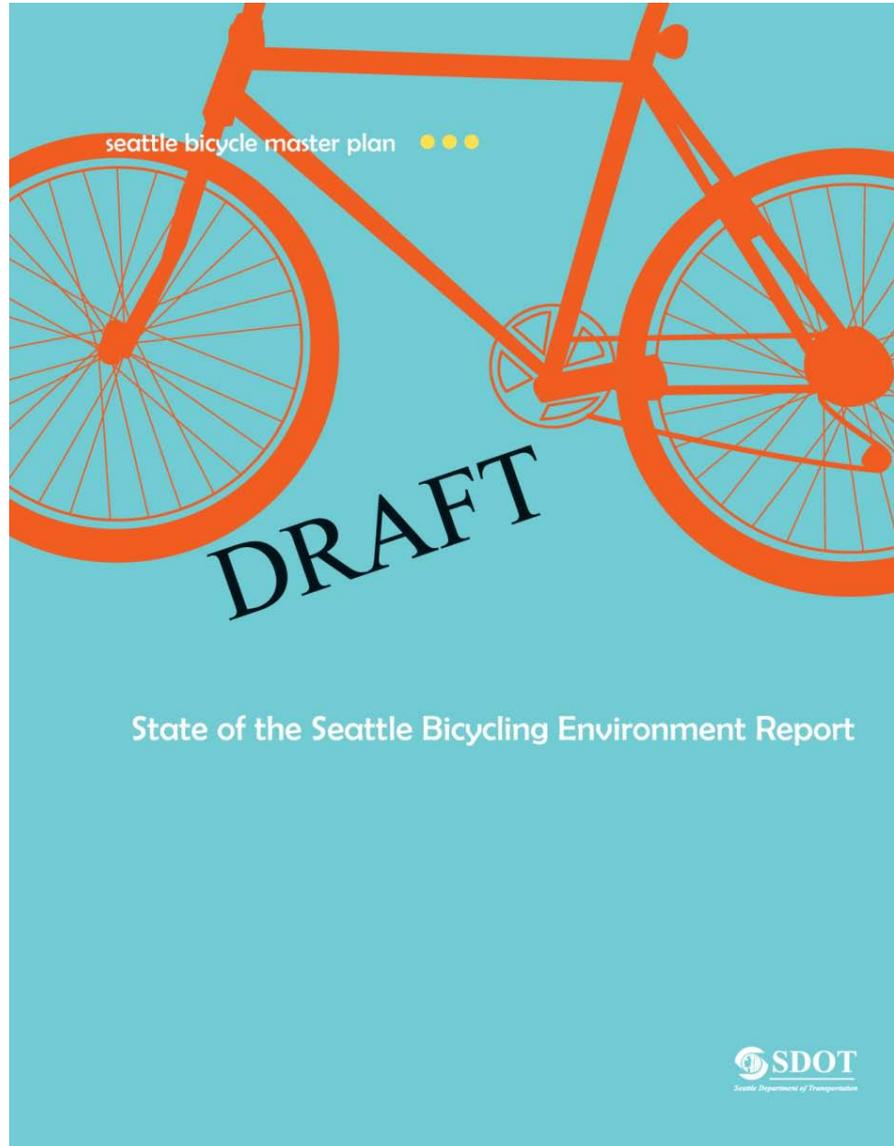
- BMP Update Roadmap
- Draft “State of Seattle Bicycling Environment Report”
- Bicycle Facilities Network Map Development
  - Methodology
  - Progress achieved to date
- Summary of September 11 Transportation Council Committee Briefing
- Next Steps
  - State of Seattle Bicycling Environment Report (finalize)
  - Bicycle facility network map development
  - November public open houses



# BMP Update Roadmap



# State of the Seattle Bicycling Environment Report



# State of the Seattle Bicycling Environment Report

## Purpose

- Progress report on implementation of 2007 BMP
- Highlights key accomplishments and innovations, issues and needs
- Sets the stage for creating policy, project, and program recommendations



# State of the Seattle Bicycling Environment Report

## Key Topic Areas

- Policy and planning
- Accomplishments and innovations
- Bicycle facility network gaps and opportunities
- Ridership
- Programs
- Operations
- Moving forward – what's next



# State of the Seattle Bicycling Environment Report

## Accomplishments – implementation progress

- 454 miles in planned network (includes 68 miles of existing facilities)
- 240 miles of bicycle facilities installed since 2007



# State of the Seattle Bicycling Environment Report

## Accomplishments - Innovations



# State of the Seattle Bicycling Environment Report

## Accomplishments – performance tracking

- 8 performance measures in 2007 BMP
- On-track in meeting most measures
- Some measures difficult to track (e.g., data availability issues, inconsistent data collection)

MORE BICYCLISTS	x
FEWER COLLISIONS	✓
NETWORK COMPLETION	✓
MORE BIKE RACKS	✓
DISTRIBUTE BIKE MAPS	✓
INCREASE STAFF TRAINING	?
INCREASE GRANT FUNDING	✓
MORE SPOT IMPROVEMENTS	?



# State of the Seattle Bicycling Environment Report

## Accomplishments - Considerations for BMP Update

- Revisit policy framework and existing performance measures; add/update as needed (currently underway)
- Expand use of innovative infrastructure and pilot projects
- Evaluate existing bicycle facilities (e.g., are upgrades needed?)
- Introduce new bicycle facility types



# State of the Seattle Bicycling Environment Report

## Gap Analysis and Opportunities

Gap analysis:

- Crossing gaps
- Network gaps
- Corridor gaps
- System-wide area opportunities
- Upgrade opportunities
- Equity analysis



# State of the Seattle Bicycling Environment Report

## Ridership

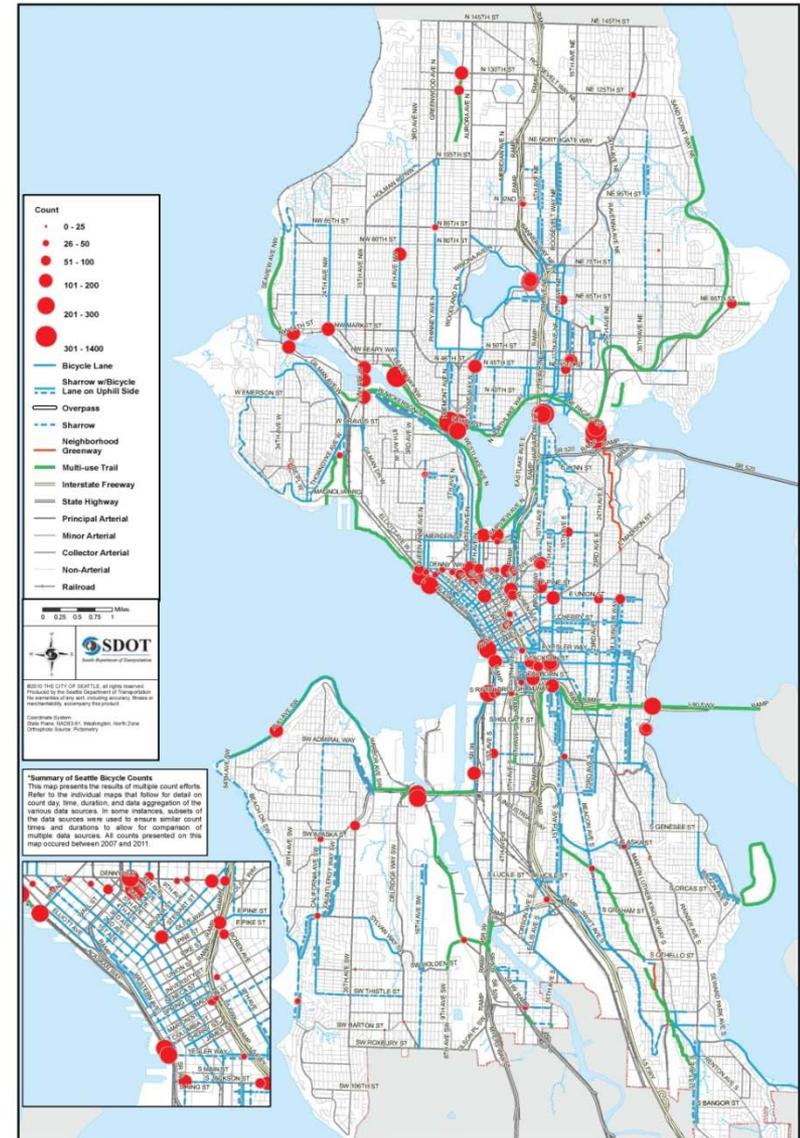
- Bicycle counts (many sources):
  - Downtown counts since 1992 (SDOT)
  - City-wide locations throughout Seattle added in 2008 (SDOT)
  - Quarterly counts added in 2011 (SDOT)
  - 25 citywide count locations (PSRC and CBC)
  - Bikes-on-transit counts (Sound Transit and King County Metro)
  - SDOT streamlining its count procedures for consistency



# State of the Seattle Bicycling Environment Report

## Ridership

- Highest count locations:
  - Fremont Bridge
  - University Bridge
  - Burke Gilman Trail between the Fremont Bridge and Aurora Bridge
  - Burke Gilman Trail and 8th Avenue NW
  - Montlake Bridge
  - Dexter Avenue N and Bell Street



# State of the Seattle Bicycling Environment Report

## Ridership - Considerations for BMP Update:

- Consider existing and new count procedures concurrently for a few years (will allow comparisons between older and new data)
- Continue to collect additional data in new count procedures (e.g., gender, helmet use)



# State of the Seattle Bicycling Environment Report

## Programs - Considerations for BMP Update:

- Program evaluation (e.g., which programs are working most effectively?)
- Increase outreach to targeted audiences (e.g., interested, but concerned bicyclists)
- Sharing the road (understanding the rules of the road)
- Marketing: How bicycling benefits everyone



# State of the Seattle Bicycling Environment Report

## Operations

- Modify bicycle facilities design standards based on national and international best practices
- Expand bicycle facility toolkit to include emerging/innovative treatments



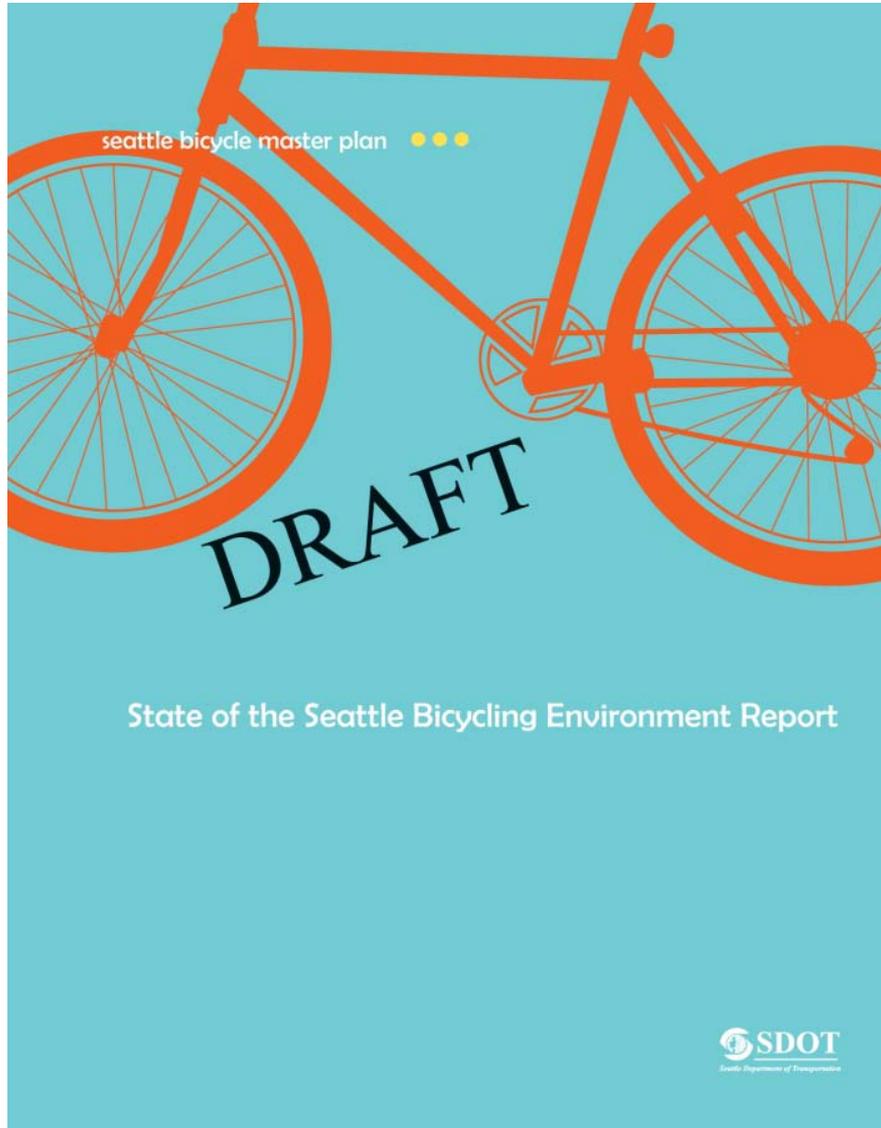
# State of the Seattle Bicycling Environment Report

## Moving Forward

- Utilize findings from existing conditions analysis to inform project and program recommendations
- Potential improvement opportunities:
  - Develop data-driven approach for selecting the most appropriate bicycle facility types
  - Enhance bicycle/transit integration
  - Work with partner agencies to streamline bicycle education and outreach activities
  - Be opportunistic with project implementation



# State of the Seattle Bicycling Environment Report



## Questions and Discussion



# Bicycle Facilities Network Development

Purpose: to update the bicycle network map in a manner that is consistent with updated plan vision, goals and objectives

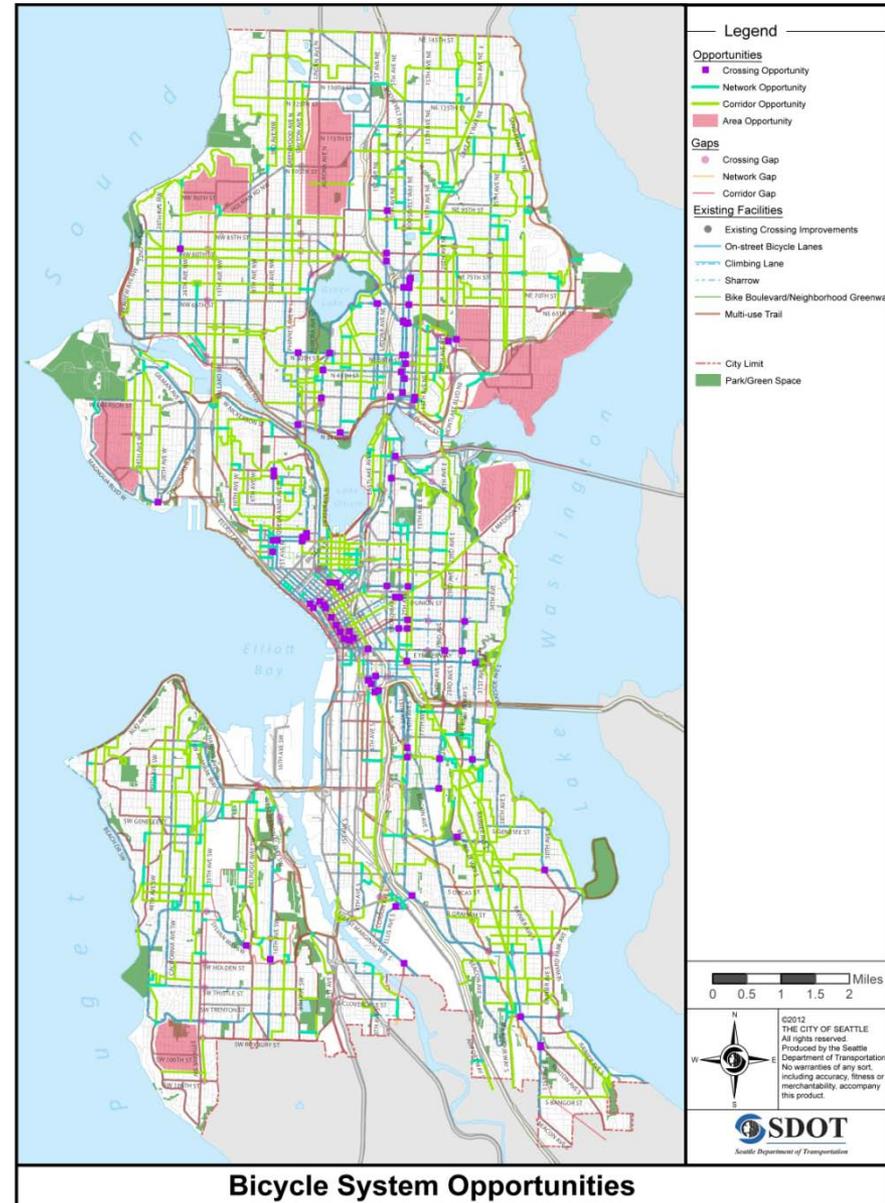
- Principles:
  - Considers land use (destinations and demand rankings)
  - Emphasizes network connectivity
  - Improves conditions for bicyclists of all ages and abilities



# Bicycle Facilities Network Development

## Network map update approach

- Step 1:
  - Data and inputs:
    - 2007 BMP recommendations
    - Gap analysis
    - Identified opportunities
    - Demand/land use destinations
    - Topography
    - Public input
    - Policy framework



# Bicycle Facilities Network Development

## Network map update approach

- Step 2:
  - Developing a draft network representing the ‘universe of possibilities’ based on step 1
    - Have a bicycle facility within a quarter-mile of every household



# Bicycle Facilities Network Development

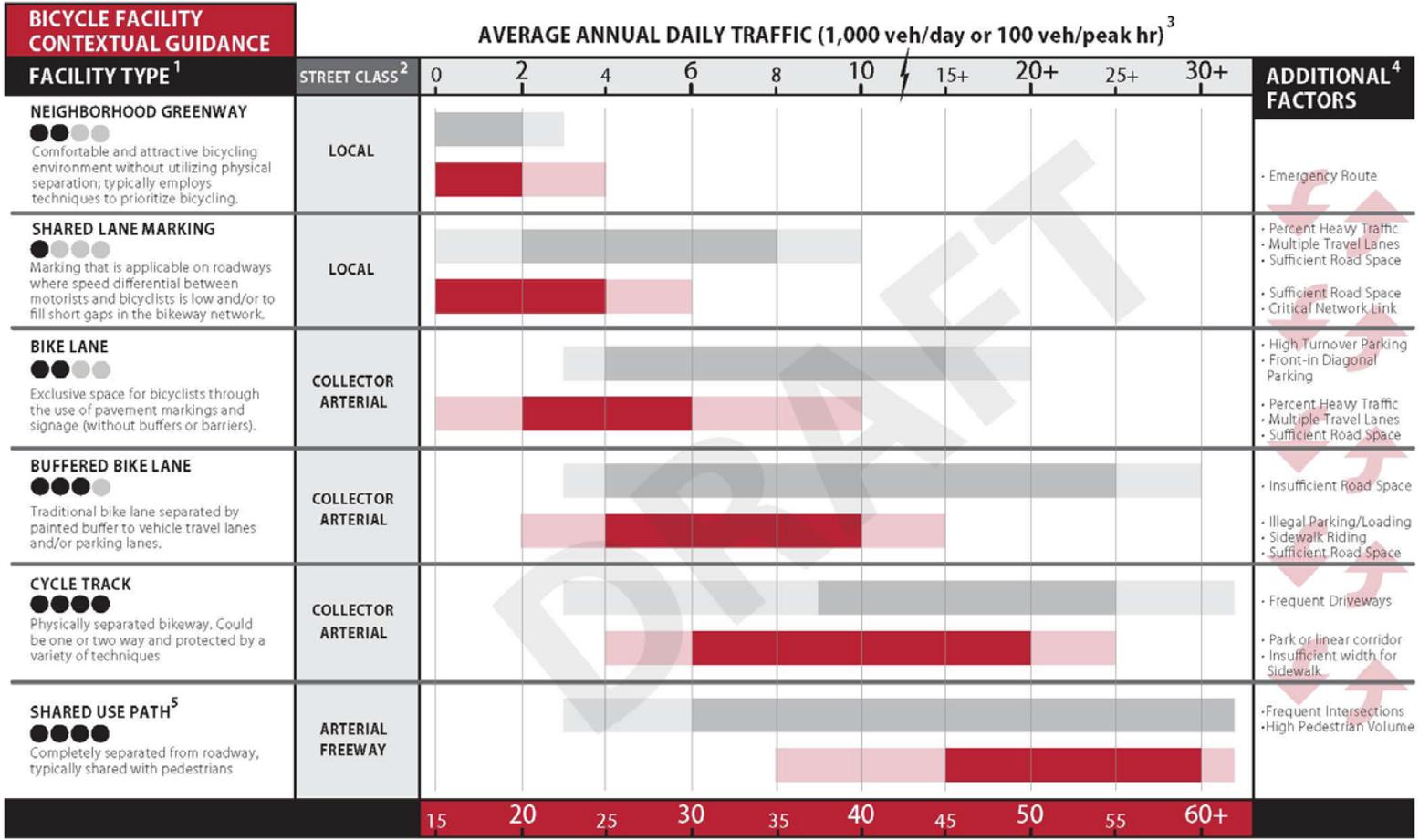
## Network map update approach

- Step 3:
  - Recommend facility types
    - Updated facility types (bicycle facility toolkit):
      - Condensed legend in updated network plan map
      - Inclusion of neighborhood greenways
      - Inclusion of cycle tracks and buffered bicycle lanes
      - Inclusion of intersection design improvements
    - Considering a tiered facility approach

Generalized Bicycle Facility Classification	Detailed Bicycle Facility Classification	Speed Limit	Functional Classification
Shared or Enhanced Shared	Neighborhood Greenway / Enhanced Shared Roadway	25 or less	Non-Arterial
In Roadway, Minor Separation	Advisory Bike Lane / Bike Lane	25 - 30	Collector Arterial
In Roadway, Major Separation	Buffered Bike Lane / Cycle Track	Greater than 30	Minor Arterial / Principal Arterial
Multi Use Trail	Multi Use Trail	N/A	N/A



# Bicycle Facilities Network Development



**LEGEND**

**SEPARATION<sup>6</sup>**

- Minimal Separation
- Moderate Separation
- Good Separation
- High Separation

min	VOLUME	max
min	SPEED	max
Acceptable	Desired	Acceptable

**INSTRUCTIONS:**  
 This chart offers guidance as to what types of treatments are recommended depending on street classification, speed, and volume. No matter where bikeway treatments are applied, special care needs to be paid to intersections, driveways, on-street parking, sight distance, and additional factors.

**NOTES:**

- Refers to specific bicycle facilities described in the NACTO Urban Bikeway Design Guide. See <http://www.nacto.org> for detailed design guidance. Many local roads function just fine as they are due to their low traffic volume and speed.
- Categories from [http://www.fhwa.dot.gov/planning/fcsec2\\_1.htm](http://www.fhwa.dot.gov/planning/fcsec2_1.htm). The use of functional classes provides some general context for the cases in which bicycle facilities are most likely to be implemented. Land use and additional factors (see 4) should always take precedence in determining which facility type to select.
- Urban peak hour factors typically range from 8 to 12 percent of AADT. For the purposes of this chart, the peak hour is assumed to be 10 percent of AADT.
- Noted additional factors include a selection of considerations that may influence the selection of bicycle facility type where roadway speed/volume values overlap over multiple facilities. Many of the factors that suggest increasing separation are common across multiple facility types like bike lanes, buffered bike lanes and cycle tracks.
- Design guidance for shared use paths can be found in the AASHTO Guide for the Development of Bicycle Facilities.
- Increased separation of bicycle facilities from motor vehicle traffic typically results in higher levels of user comfort and appeals to wider skill levels of bicyclists.
- This chart considers posted speed limit only. The 85th percentile speed may vary, and may change with implementation of a bikeway.



# Bicycle Facilities Network Development

## Network map update approach

- Step 4:
  - Validate approach
    - Modal plans and advisory boards
    - Neighborhood plans
    - ROW considerations
  - Refinement in response to feedback from public



# Bicycle Facilities Network Development

## Questions and discussion

- Network spacing?
- Tiered approach to facility types?
- Other?



# Summary of September 11 Transportation Council Committee Briefing

- Policy Framework presented to Council
  - Vision: Riding a bicycle is a comfortable and integral part of daily life in Seattle for people of all ages and abilities.
  - 5 goals
  - 6 objectives
  - Discussion about performance measures
- Key findings from the public engagement phase 1 summary report  
([http://www.seattle.gov/transportation/bikemaster\\_materials.htm](http://www.seattle.gov/transportation/bikemaster_materials.htm))
- Feedback and direction from the Council
  - Policy framework
  - Performance measures
  - Prioritization framework



# BMP Update Next Steps

- Finalize “State of the Seattle Bicycling Environment Report”
- Continue bicycle facility network map development work
- Public Meetings
  - Nov. 7 (in conjunction with SBAB meeting)
  - Nov. 8 (New Holly Gathering Hall)
  - Nov. 13 (University of Washington Gould Hall)
  - Nov. 15 (Online lunch and learn)

