Hierarchy of Bikeway Facilities & Lessons Learned from Pilot Test

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Hierarchy of Bike Facilities

Separate Pathways
Protected Bike Lanes
Buffered Bike Lanes
Conventional Bike Lanes
Shared Roadway Space
Separate Pathways
Federal Way
Protected Bike Lanes
(Cycle Tracks)

Tubular Markers
Movable Planters
Raised Curbs
Floating Parking
Landscaping Buffer
Elevated Bike Facility
Tubular Markers
Floating Parking
Curb and Island for Separation

Source: Seattle Times
Two-Way Cycle Track
Buffered Bike Lanes
Partially Buffered Bike Lane on Idaho Street in Boise
Conventional Bike Lanes
Shared Roadway Space

- Sign: May Use Full Lane
- Image: Bicycle symbol on roadway
Dual Sharrows
Major Issues

- Community/Driver Acceptance
  - Turn Restrictions
  - Lane Reductions
  - Congestion/Delay
- Cost
- Business Acceptance
- Parking Removal
- Maintenance
- Deliveries/lane encroachments
- Safety – intersections and driveways
- Bikes on Sidewalk
Pilot Test Network
## Peak Hour Summary of Volumes and Travel Times

Comparing “Before” Conditions with “During” Conditions

<table>
<thead>
<tr>
<th></th>
<th>Volume Change</th>
<th>Travel Time Change</th>
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<tbody>
<tr>
<td>Capitol</td>
<td>Down 9%</td>
<td>Down 6%</td>
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<tr>
<td>Main &amp; Idaho</td>
<td>No Change</td>
<td>Up 20%</td>
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Technical Challenges Encountered

- Changing Conditions and Applications along Routes
- Transitions at End of Routes
- Intersection Conflicts
- Stop Bar Box Compliance
- Turn Box Placement
Things to Consider

- Curbs are Set
- Deliberate Staged Implementation is Our Friend
- No One Cookbook Solution
- Land Use and Physical Conditions Vary along Routes
- Cost is a Consideration
- Maintenance is Perpetual
Bicycle Volumes Up 21–68% on 1-Way Lanes
No Observed Collisions or Near-Collisions
  ◦ 144 Hours of Video with 12,900 Bicyclists
Perceived Safety (Stated by Nearby Residents)
  ◦ 80% said it Increased for Bicycling
  ◦ 37% Increased/26% Decreased for Driving
  ◦ 33% Increased/13% Decreased for Walking
Most Attractive to Less Confident Riders
Overall Support
- 75% Support More Protected Bike Lanes in Their City
  - 69% of Respondents that Primarily Drive
- 56% – Street Works Better for All People/26%–Less Well

Economic Consideration
- 12% – More Likely to Stop at Business on Street/ 9% – Less Likely

Drivers
- Parking is Biggest Concern (30–55%)
- Bicyclists and Drivers Act More Predictable (53%)/12% – Less Predictable