

Remaking Streets for Better Outcomes: The Seattle Experience



New Partners for Smart Growth
February 15, 2014

Complete Streets

- **16% of households do not have a car**
- **Seniors**
- **Youth**
- **Transit riders**
- **Safety for everyone**



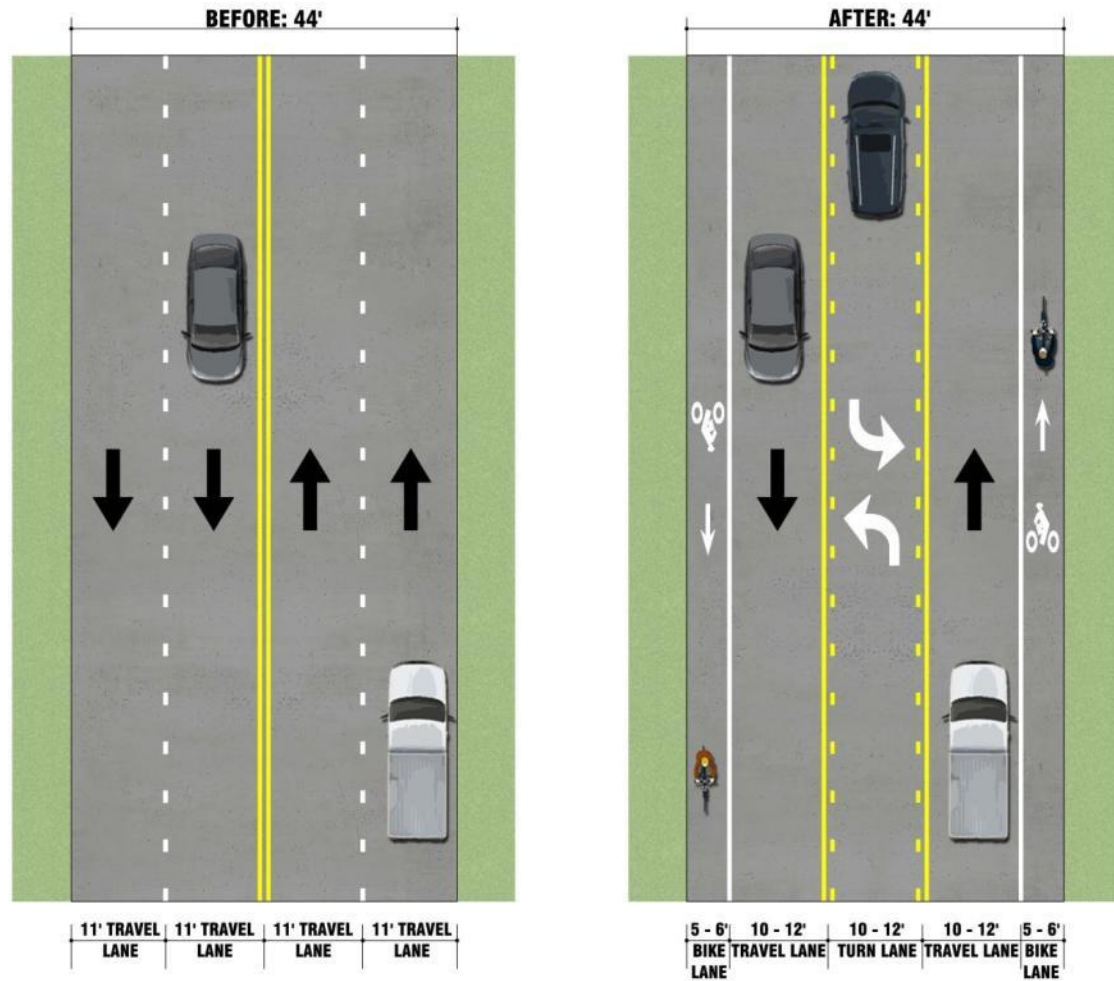
Ultimately, we all need complete streets

Seattle's Complete Streets Approach

- **Vision:** Streets that are safe, convenient and accessible for everyone
- **Plans:** Bicycle, Pedestrian, Transit, Freight
- **Funding:** Bridging the Gap, state, federal grants
- **Implementation:** Complete Streets checklist
- **Outreach:** Community collaboration
- **Opportunities:** Redesigning city streets



Standard Road Diets

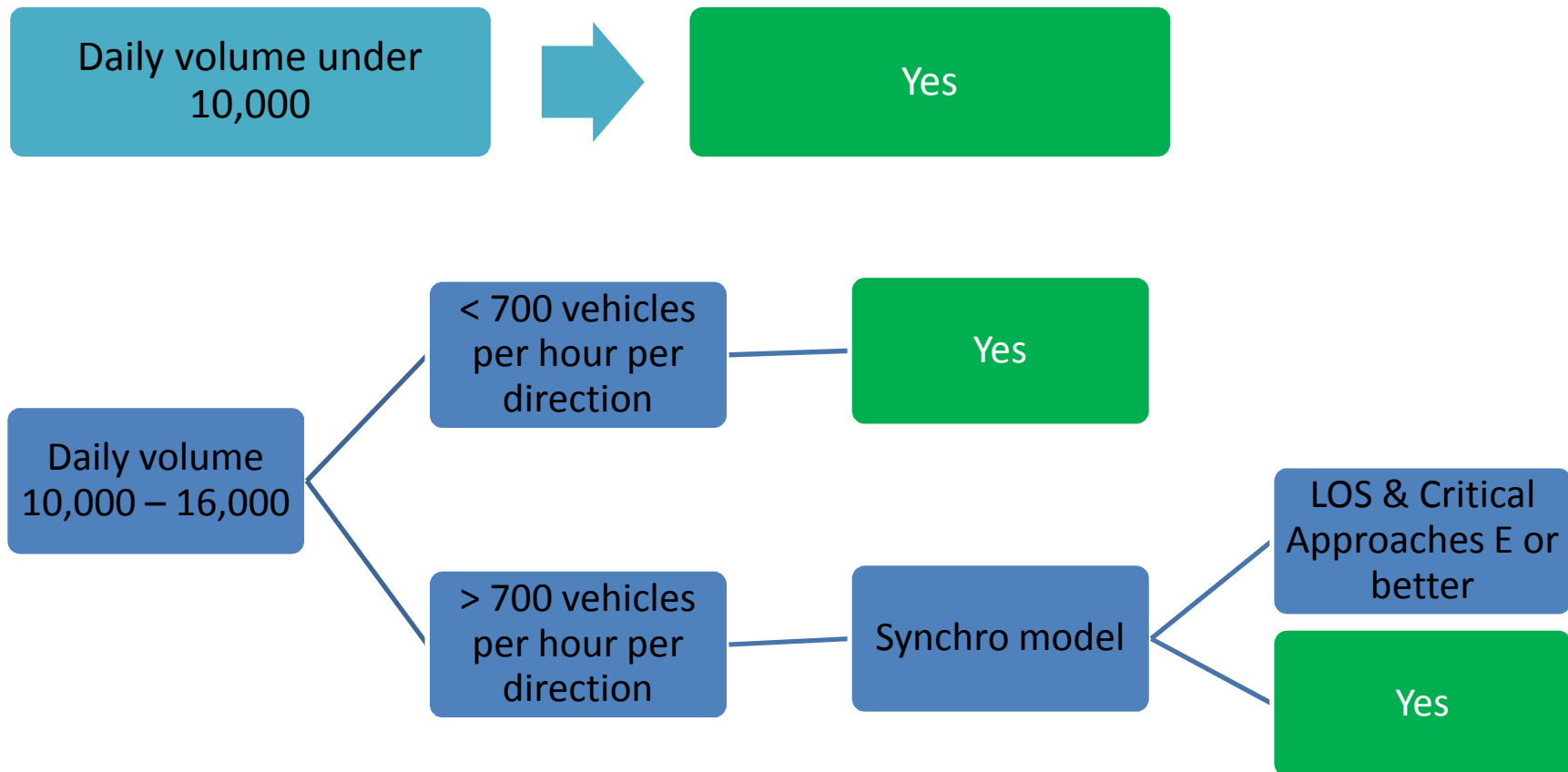




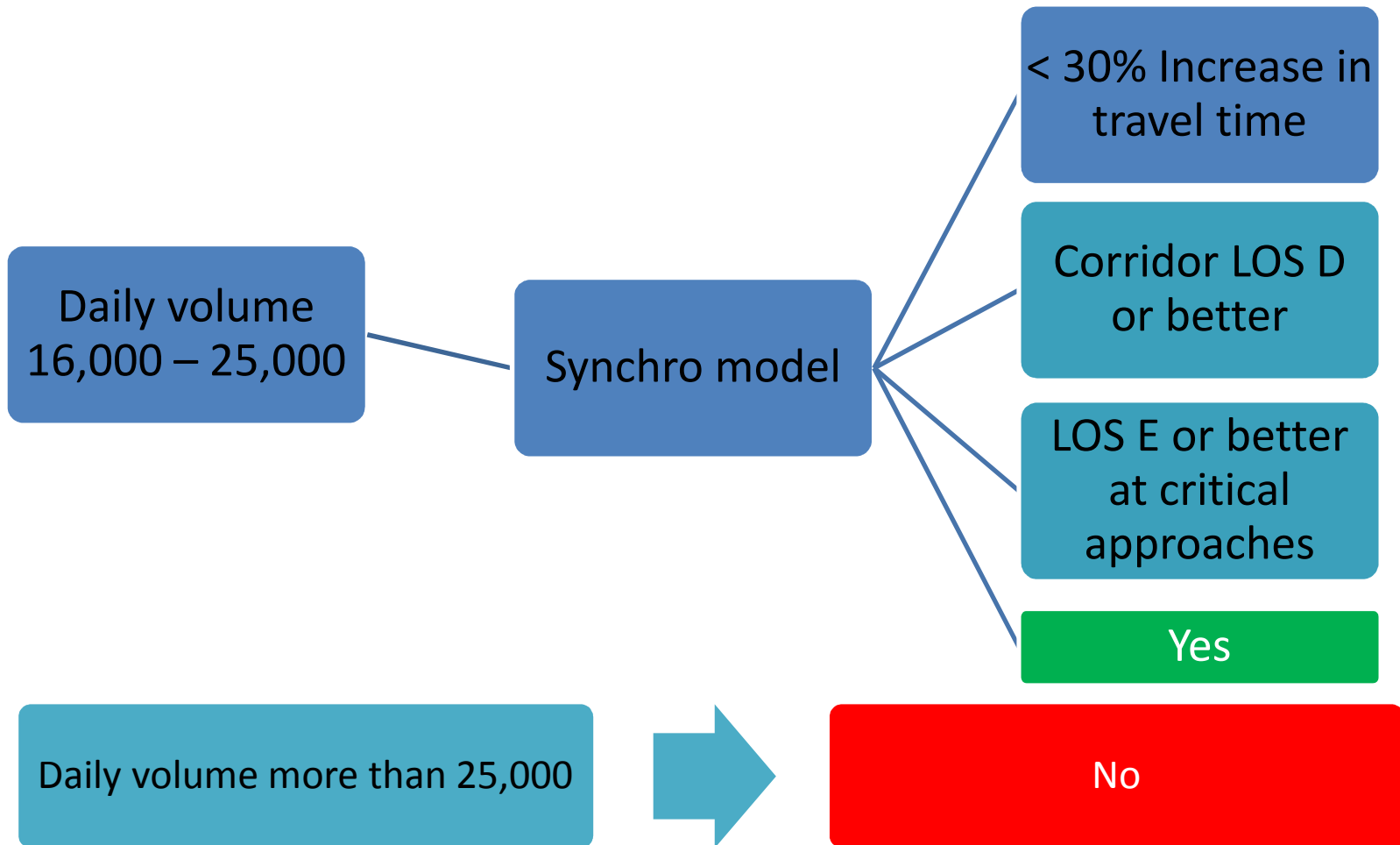




Seattle's Guidelines for Road Diets



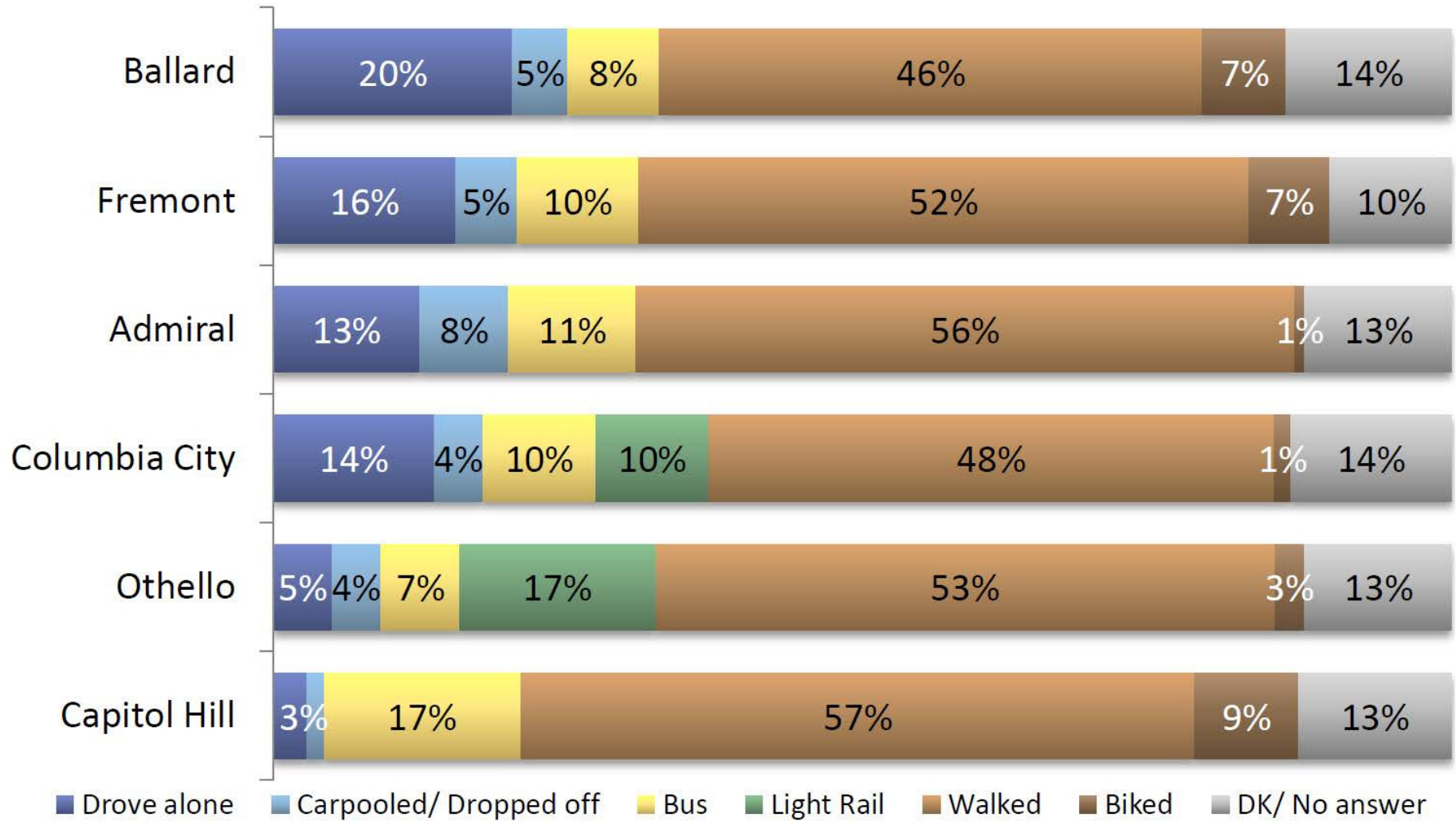
Seattle's Guidelines for Road Diets



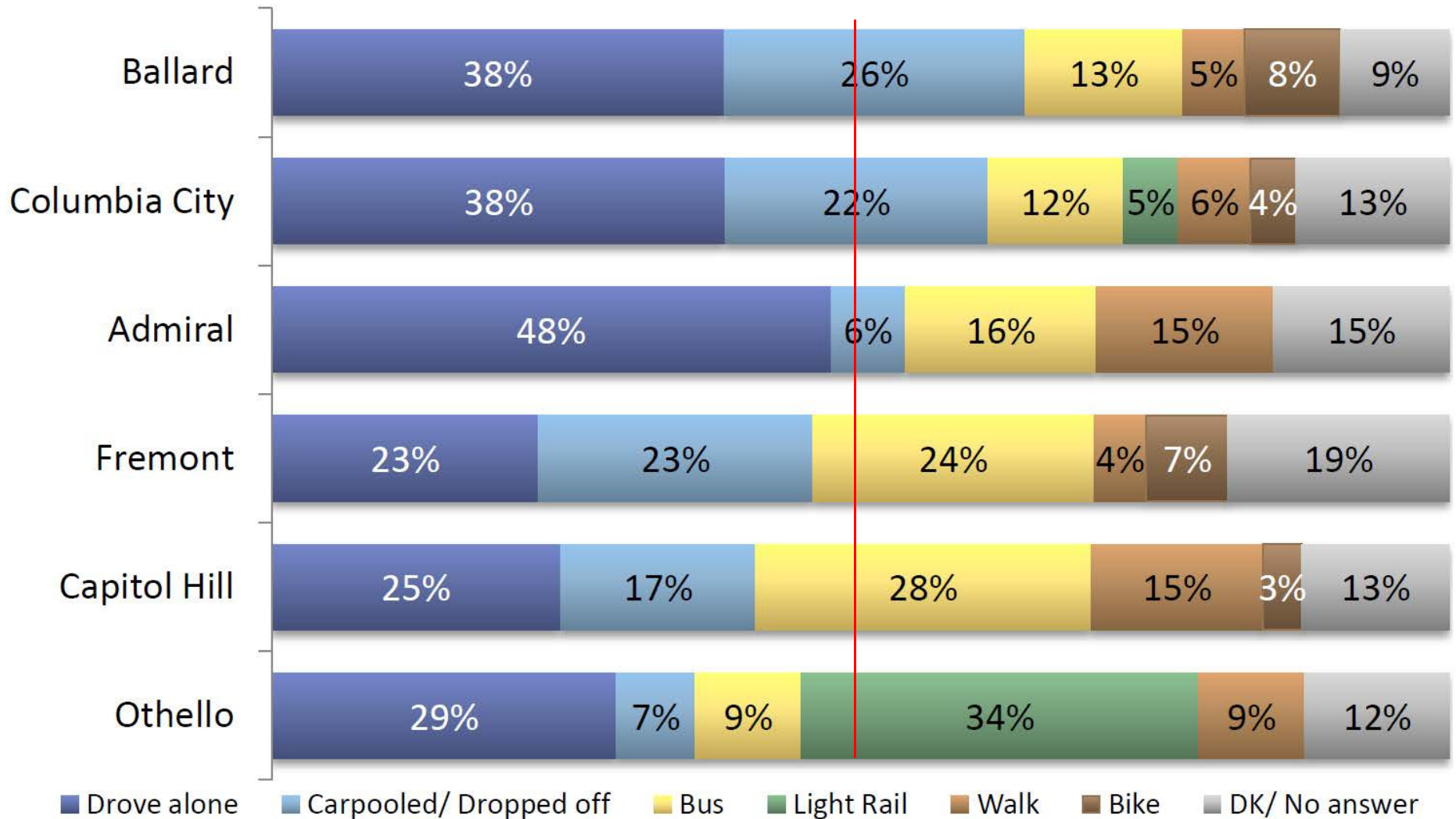
Every street is different, these are just guidelines



Customer Mode Choice – Outside the Neighborhood



Customer Mode Choice – Inside the Neighborhood



How are Corridors Identified?

- Complete Streets for capital projects
- Modal Plans
- Equity
- Community requests for neighborhood plan implementation



What Factors are Considered?

Safety/Collisions



Outreach: Common Concerns

Street	Before Comments	After Comments	Requests to remove
NE 125 th St	394	7	3
Nickerson St	66	8	0

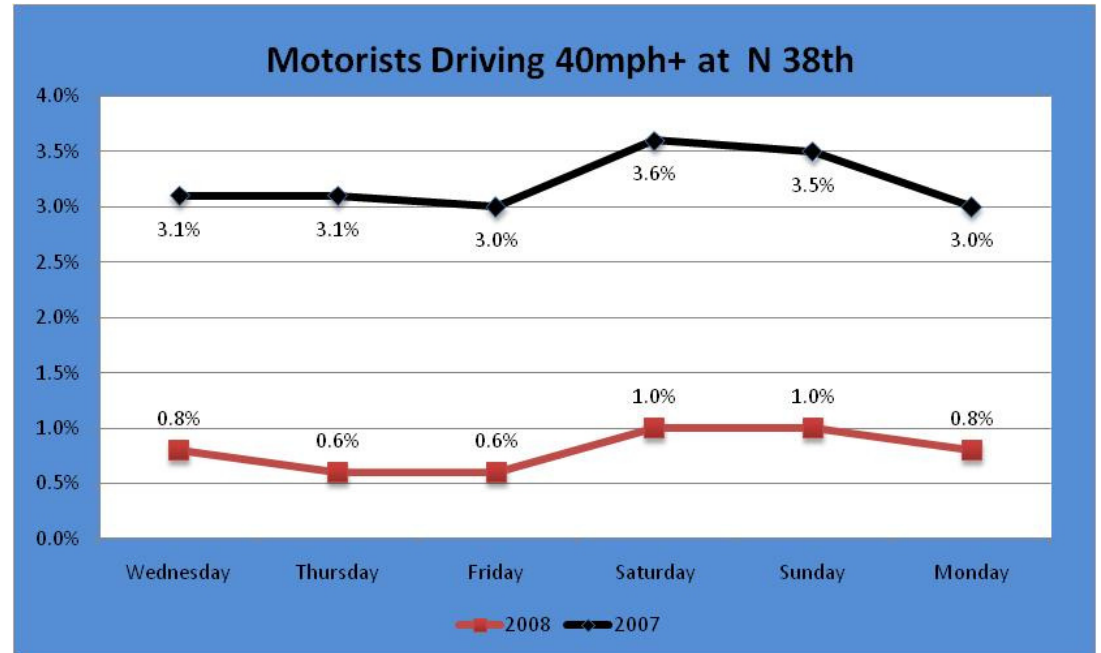


Before & After Studies

Data needs	Before Study	After Study (>1 year)
ADT	√	√
Bike and Ped Counts	√	√
Injury collisions	√	√
10+ over the speed limit	√	√
85 th percentile speed	√	√
Transit operations	√	√
Turning vehicle counts	√	√
Parking use	√	√
Side street diversion	√	√
Vehicle classification	√	√
Resident satisfaction	√	√
Business satisfaction	√	√

Stone Way Case Study : Speeding

- 75% reduction in percent driver 10+ mph over the speed limit



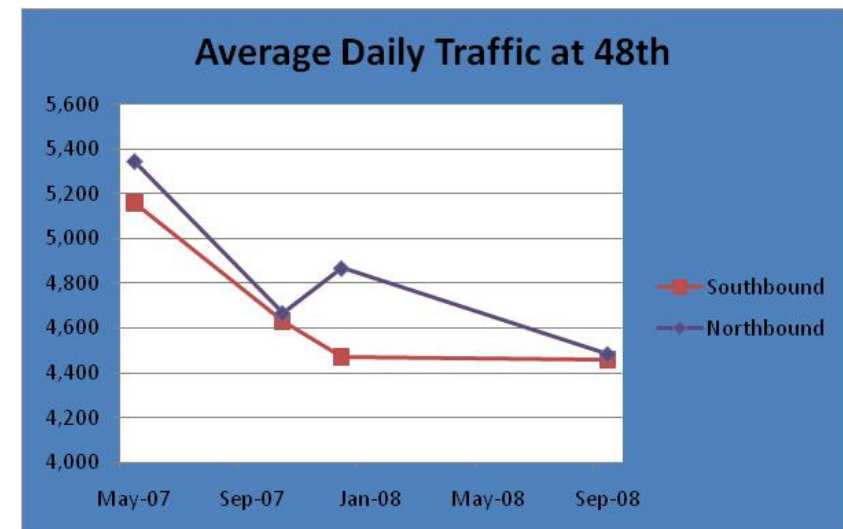
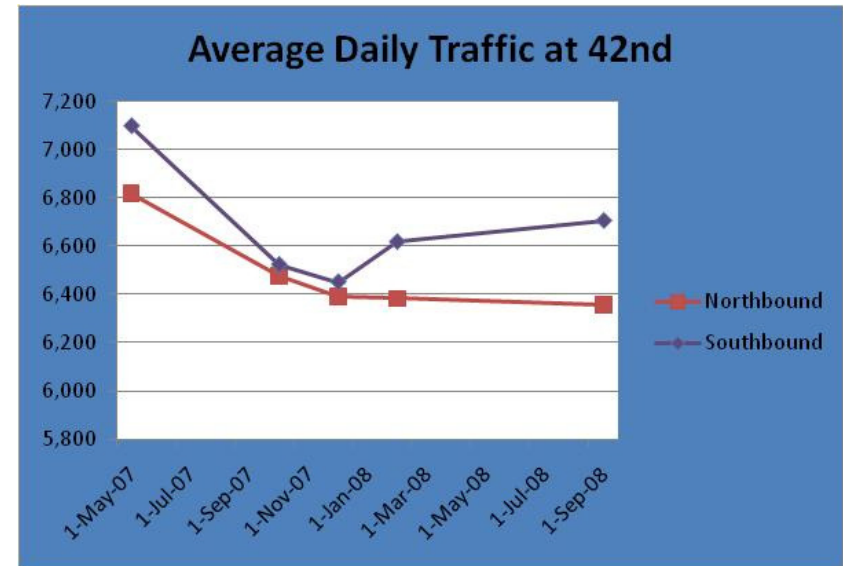
Stone Way Case Study : Bicycles

- Increased 35%
- Represents almost 15% of the peak hour traffic volume!



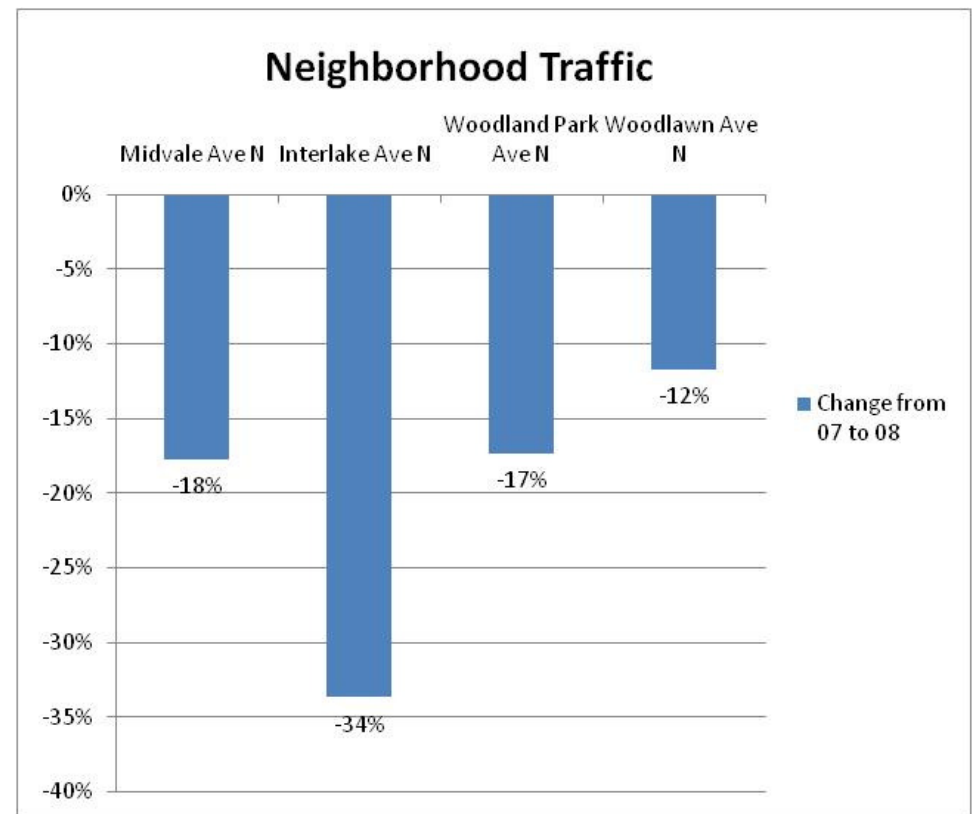
Stone Way Case Study : ADT

- ADT declined 6%
- Consistent with citywide trends
- Peak volume dropped 5%
- Off-peak volume increased south of 45th Street



Stone Way Case Study : Neighborhood

- Streets mentioned as alternatives to Stone
- Volume decreased
- Traffic did not divert



Stone Way Case Study : Safety

- Total declined 14%
- Injury declined 33%
- Angle declined 56%
- Pedestrian collisions declined 80%



Stone Way N: Conclusions

- Aggressive speeding reduced
- Collisions have declined
- Pedestrian crossings are safer
- Bicycle volume has increased
- Traffic has not diverted to neighborhood streets



Nickerson Case Study



Nickerson Case Study



Improving Safety on Nickerson Street

Average Speed of Vehicles was 42 MPH, is now 33 MPH

Westbound



Eastbound



Legal
Speed Limit
30 MPH

Speeders

(Percent driving over the speed limit)

Westbound



Eastbound



Top End Speeders

(Percent driving 10 mph or more over the speed limit)

Westbound



Eastbound



Nickerson Case Study



Improving Safety
on
Nickerson Street

Change in Number of Collisions on Nickerson
(One-year after rechannelization)



Long-term citywide goal:
a city with zero traffic fatalities and serious injuries

Average Weekday Traffic Volumes

Before	After
18,563	18,364

NE 125th St Case Study

- ADT 16,200
- 4 lanes to 2 lanes with TWLTL and bike lanes
- Business district
- High bus usage
- High percent of injury collisions
- High speeds



NE 125th Street Case Study



Before



After

NE 125th St Case Study

SPEED			
	BEFORE	AFTER	CHANGE
85th Percentile	40.0	36.9	-8%
Driving Faster Than 30	87%	77%	-11%
Driving Faster Than 35	51.6%	29%	-44%
Driving Faster Than 40	16%	4.9%	-69%



NE 125th St Case Study

COLLISION RATE			
	Before	After	Change
Collisions per million vehicles	5.83	5.24	-10%
Injury collisions per million vehicles	2.41	1.99	-17%



BICYCLE AND PEDESTRIAN VOLUME			
5-hour Count (7-9AM; 1-2PM; 4-6PM)			
	Before	After	Change
	High Temp 56 Precipitation 0.14"	High Temp 49 Precipitation 0.03"	
Bicycles along NE 125th Street	7	15	+114%
Pedestrians in the crosswalks	330	676	+105%

Ellis Ave

Before



After



Recent Results

Street	ADT Before	ADT Change	Injury Collisions	85 th %	Aggressive Speeding (40+)
Stone Way N	13,900	-6%	-33%	-5%	-75%
Fautleroy Way SW	17,599	+0.3%	-72%	-1%	-13%
S Columbian Way	12,300	+15%	-19%	-6%	-46%
Nickerson Street	18,500	-1%	-20%	-21%	-93%
NE 125 th Street	13,600	+11%	-8%	-8%	-69%
N 130 th Street	13,298	+0.5%	-75%	-15%	-87%
Ellis Avenue S	9,855	-39%	-24%	-4%	-30%

Transit Islands

Before



After



Transit Islands

Before



After



Protected Bike Lanes



Protected Bike Lanes



Flex Posts



Bike Corrals

Before



After



Additional Resources

- Nickerson Street Before and After Study
 - <http://www.seattle.gov/transportation/nickerson.htm>
- Stone Way Before and After Study
 - <http://www.seattle.gov/transportation/docs/StoneWaybeforeafterFINAL.pdf>
- FHWA: Proven Safety Countermeasures
 - <http://safety.fhwa.dot.gov/provencountermeasures/index.htm>
- NACTO Guides
 - <http://nacto.org/>
- Complete Streets Coalition
 - <http://www.completestreets.org/>

Contact

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