

Memorandum



To: Ellen Vanderslice, *Portland Bureau of Transportation*

From: Adrian Witte and Drew Meisel, *Alta Planning + Design*

Date: May 16, 2011

Re: North Williams Avenue Traffic Operations Safety Project – Open House #1 Summary

The Portland Bureau of Transportation (PBOT) is exploring transportation improvements along North Williams Avenue to make movement for all modes safer and more comfortable. The scope of the project extends approximately 2.0 miles from Weidler Street to Killingsworth Street.

Initial concepts and strategies were presented at a Public Open House held on Saturday 16th April at Immaculate Heart Church from 1:30 – 4:00 p.m. The materials displayed at the open house are included in **Appendix A**.

In total, 117 people signed in to the event and a further 40 people provided comments after viewing the “virtual open house” on the project website. Comments and feedback were obtained through a number of means, including conversations with the project team and PBOT staff, comments made on the maps and display materials, responses to a series of questions posed at the open house and subsequently made available on the project website, and through written comments submitted to the project manager.

This memorandum summarizes the outcomes of the public open house including the key themes of public comment and the results of the questionnaire.

Key Themes

A range of comments and suggestions were received from the public open house. A complete record of comments are included at **Appendix B** but are summarized below (in no particular order):

1. There was strong support for the conversion of parking and/or travel lanes to provide space for enhanced bikeway and bus treatments. Although in Segment 4 a number of business owners (and others) were concerned about any possibility of reducing the amount of on-street parking (see below for more discussion on Segment 4).
2. There were some feelings that this project was addressing the concerns of people (primarily cyclists) that pass through the neighborhood and was not necessarily representative of local interests and the established community in the area.

3. Traffic calming and travel demand management strategies should be used to discourage through traffic from using North Williams Avenue and encourage these movements onto alternate routes that are designated for this function such as Martin Luther King Jr. Boulevard or Interstate Avenue. “Temporal measures” such as peak hour parking restrictions could be explored to address the short periods of time that traffic capacity is an issue for the street.
4. Develop a strategy to effectively manage traffic flows coming off the Fremont Bridge (I-405) including improving safety at the North Williams Avenue / Cook Street intersection.
5. Address a number of pedestrian crossing concerns and implement more signalized and un-signalized pedestrian crossings along North Williams Avenue.
6. Adopt a consistent roadway/bikeway configuration throughout the entire corridor to ensure continuity and predictability e.g. one travel lane, two parking lanes, and a cycle track.
7. Re-examine the potential to improve bicycling conditions in Segment 4, from Cook Street to Skidmore Street, with an enhanced bikeway (this area received the most complaints regarding parking/loading/unloading in the bike lane, “dooring”, inadequate bike lane capacity, and difficult pedestrian crossings). Business owners (and some others) were more inclined to trade a travel lane than on-street parking, however were still concerned about the impact that change would have on their business.
8. The future of North Williams Avenue needs to be considered. This includes shaping the street in such a way as to encourage economic development and having a strategy for managing additional travel demand.
9. Consider neighborhood and community concerns regarding gentrification and the potential for an undesirable outcome for residents who will continue to drive and park in the neighborhood post-project.
10. Need for increased enforcement along the corridor to reduce auto speeds, improve crosswalk and traffic control compliance, and encourage good behavior from all road users.

Response to Questionnaire

A series of questions were asked at the open house and subsequently made available on the project website along with a copy of the display materials used at the meeting. Responses to the following questions are summarized in the section below:

- How do you travel on North Williams Avenue?
- Which (pedestrian) treatments would you like to see used more on North Williams Avenue, and where?
- As a cyclist, which of the following treatments would you like to see used more to solve bus/bike conflicts?

- Do you support the trade-offs being proposed on North Williams Avenue?
- Would you like to see PBOT provide traffic signals at any of the following locations?
- Which one or two of the proposed bikeway options do you most support?

Travel Mode

Open house attendees reported using a variety of means to travel on North Williams Avenue with the highest represented travel modes being walking and biking (see Table IA). The variety of modes represented illustrates the importance of finding the appropriate balance for infrastructure / system improvements to serve all users. The stated purpose of the North Williams Avenue Traffic Operations Safety Project is to develop the street into one that is attractive and safe for all roadway users. One comment at the public workshop that was particularly pertinent was, “I’m comfortable with the existing conditions, but my family is not. The more separation we can get from traffic, the better”.

Table IA: “How do you travel on North Williams Avenue?”¹

Mode	Responses	Percentage
Walk	29	24%
Bike	48	39%
Bus	17	14%
Drive	26	21%
Other	2	2%
Total	122	100%

¹ Multiple responses were allowed.

Pedestrian Treatments

Respondents demonstrated a strong desire for improved pedestrian infrastructure along North Williams Avenue and for enhanced crossings (see Table IB). Two particular intersections were consistently identified as problematic for pedestrian crossings - Beech Street and Failing Street. It is noted that many responses included enhancing crosswalks “as often as possible” or “at every intersection”.

A number of other crossings, including at the intersections with Tillamook Street and Stanton Street, were identified as having particular challenges, particularly as they are frequently used by vulnerable pedestrians (including elderly and less mobile pedestrians) crossing from residences to the Legacy Emmanuel Hospital and other uses on the west side of Vancouver Avenue.

Table IB: “Which treatments would you like to see used more on North Williams Avenue, and where?”

Treatment	Yes	No	Location(s) in order of most votes*
Marked Crosswalk	26	0	All intersections, Beech Street, and Failing Street
Curb Extension	24	9	All intersections, Beech Street, and Failing Street
Signal	23	6	Failing Street and Beech Street

* See Appendix B for complete list of locations.

Bus/Bike Conflicts

Conflicts between buses and bicyclists emerged as one of the most common issues heard from bicyclists at the public workshop with numerous references to “leap-frogging” and “bus blocking bike lane” amongst the responses. When asked for input regarding the facility that would best resolve bus/bike conflicts, respondents overwhelmingly supported the concept of a cycle track (see Table IC) because it offers complete separation of buses and bicyclists.

Eliminating bus/bike conflicts with a left-side bikeway received mixed response with some feeling it was awkward and dangerous and others believing that its safety benefits far outweighed its disadvantages. There may be enough support to re-consider this as an alternative.

Table IC: “As a cyclist, which of the following treatments would you like to see used more to solve bus/bike conflicts?”

Treatment	Yes	No
Cycle track	41	4
Left-side bikeway	13	16
Separate buses and bikes using signals	18	9
Manage conflicts at bus stops (this may not remove all conflicts)	22	3

Tradeoffs

The greatest number of public comments came from the question asking whether they would support or not support the tradeoffs associated with each project segment. The majority of respondents were in support of the tradeoffs being proposed to enhance pedestrian, bicycle, and transit facilities (see Table ID).

In Segment 4, many of the respondents that supported the addition of traffic signals in this segment caveated their response saying that they believed more should be done to enhance the bikeway (note: many of the cyclists at the meeting consider this to be the most dangerous segment of North Williams Avenue). Other respondents chose to leave the ‘support/not support’ section blank and instead provided comments similar to the above. The choice to not convert parking or motor vehicle travel lanes in Segment 4 was the single most popular comment at the workshop and also created significant discussion on local bicycling blogs.



Figure 1. Participants were encouraged to leave comments on the boards

Table ID: “Do you support the trade-offs being proposed on North Williams Avenue?”

Section	Support	Not Support
Section 5: Skidmore to Killingsworth <i>Trade-off of one auto travel lane for an enhanced bikeway.</i>	46	9
Section 4: Cook to Skidmore <i>Adding traffic signals to slow traffic and improve pedestrian crossing safety.</i>	40	14
Section 3: Russell to Cook <i>Trade-off of parking on the west side of the street for an enhanced bikeway.</i>	41	10
Section 2: I-5 On-ramp to Russell <i>Trade-off of one auto travel lane for an enhanced bikeway.</i>	44	9
Section 1: Weidler to I-5 On-ramp <i>Trade-off of one auto travel lane for an enhanced bikeway?</i>	42	9

Traffic Signals

New traffic signals at the three listed intersections were viewed positively by most respondents (see Table IE). Additional comments requested that the signal timing be calibrated for average bicycle travel speeds to create a “green wave” (similar to riding along SW Broadway). Additional signals were also viewed as positive for improving pedestrian safety. As a bikeway enhancement, additional signals were not considered sufficient for addressing the issues of “dooring” and bus/bike conflicts.

Several additional locations that were suggested for signals included: Cook Street, Fargo Street, Stanton Street, Tillamook Street, and Shaver Street. Signalizing these intersections was viewed largely as a way to better manage traffic flows from I-405/Fremont Bridge and increasing safety and comfort for pedestrians

crossing North Williams Avenue. A smaller contingent felt that traffic signals were too expensive and that other options should be explored to achieve the desired effects of slowing down traffic and improving overall safety.

Table 1E: “Would you like to see PBOT provide traffic signals at any of the following locations?”

Location	Yes	No
Cook Street	23	7
Beech Street	20	8
Failing Street	24	6
Other:	11	N/A

Preferred Bikeway Concept

Many of the cyclists attending the open house felt that the proposed options did not go far enough to protect or improve comfort for cyclists, particularly those less comfortable in mixed traffic environments. Those that did have a preference tended to favor the cycle track concept (62-percent) as it provides some level of separation from moving traffic (See Table 1F). The enhanced bikeway concept, which included dual bike lanes and buffered bike lanes, had the next highest support with 27-percent, and the choice to keep conditions the same as existing received approximately 11-percent of the vote (note: respondents were given two votes and could use both to support one option or split their choice between two options).

Other comments shared by attendees of the open house regarding the preferred bikeway concepts included:

- The segment with the greatest perceived level of danger for cyclists (Segment 4) should be re-considered for the development of an enhanced bikeway facility. In particular, respondents felt that the decision not to convert a travel lane in Segment 4 should be re-considered.
- Questioning the need for two parking lanes, even in Segment 4, and why one could not be converted to space for an enhanced bikeway.
- Wanting to see the dual bike lane option from the enhanced bikeway concept included in the cycle track concept for Segment 1.
- Concerns that a left-side bikeway was not thoroughly considered and prematurely dismissed as an option.

Table 1F: “Which one or two of the proposed bikeway options do you most support?”¹

Option	Support	Comments (summary)
Existing (leave the street as it is)	21	Retain motor vehicle access: parking and travel lanes
Cycle track	120	Most separation, minimizes bus, dooring, capacity issues
Enhanced bikeway	53	Minimizes dooring and capacity issues
Total	194	

¹ Respondents were allowed two votes and could use two votes to support one option or split votes between options.

Summary of Additional Comments

Why Williams?

There was some discussion at the open house about the discrepancy between the appearance and use of North Williams Avenue compared to its classification as a neighborhood collector. Many attendees supported changes to the roadway such as converting a motor vehicle travel lane, converting parking, or introducing other “traffic calming” measures to discourage traffic that didn’t need to be on the street onto an alternative route such as Martin Luther King Jr. Boulevard (designated as a major arterial) or Interstate Avenue.

There were conflicting opinions regarding the impact of reduced motor vehicle capacity on businesses in the commercial district. Some believed enhancements to bikeways and the pedestrian environment would increase patronage. Others, including business owners, believed that fewer passing motorists and increased congestion would be harmful to their business.

There was also some discussion about whether Rodney Street would be a more appropriate bikeway than North Williams Avenue. Rodney Street offers a low-traffic local street alternative that could be redesigned as a neighborhood greenway in the future, but does not offer as direct a connection to the Rose Quarter Transit Center and crosses a number of major streets that would need to be treated. Further, North Williams Avenue is designated as a “Major City Bikeway” in the Portland Bicycle Plan for 2030 adopted in 2010 and is the most continuous and direct north-south route for cyclists for considerable distance.

Issues and Concerns Map

Attendees were encouraged to identify existing areas of concern along the project corridor. The following is a summary of these comments by project segment.

Segment 1: Existing Issues

- The transition from Weidler Street to North Williams Avenue is challenging, even with the new sidewalk cut-through. This transition might be improved with the



Figure 2. Public comments were placed on the existing conditions map

addition of a separate 'bicycle-only' signal phase at this intersection.

- Motor vehicles disobey the “No Right Turn on Red” sign at the intersection of Broadway and North Williams Avenue.
- There are large potholes/puddles in the bike lane just north of Weidler Street and north of Broadway.
- Conflicts with buses blocking the bike lane at the transit stop immediately north of Broadway.
- A desire for a crosswalk to be added to the northern leg of the North Williams Avenue / Broadway intersection.

Segment 2: Existing Issues

- Make Rodney Street a designated neighborhood greenway.
- The crossing at Tillamook Street is dangerous (11 responses).
- Conflicts with buses blocking the bike lane at the transit stop near Russell Street.
- “Dooring” problems with parked cars near Russell Street.
- Accessibility concerns for mobility impaired residents and the need for a safe pedestrian crossing at Sacramento Street.

Segment 3: Existing Issues

- Leapfrogging with buses is common in this segment.
- Make Rodney Street a designated neighborhood greenway.
- The median island between Knott Street and Graham Street is problematic.
- Introduce a road diet in this segment.
- Add a traffic signal at Stanton Street to improve crossing to / from the hospital.
- A desire to maintain existing on-street parking levels near Morris Street.
- Conflicts with motor vehicles coming from I-405 and crossing North Williams Avenue at Fargo Street and Cook Street.

Segment 4: Existing Issues

- Generally uncomfortable riding experience: right-hook crash risks, high possibility of “dooring”, bus conflict, and high auto speeds.
- Having to ride in the door zone for the length of the commercial corridor from Beech Street to Failing Street (14 responses).
- Poor visibility at the intersection of Failing Street and North Williams Avenue.
- Inadequate bike lane capacity to safely accommodate the number of bicyclists.
- Desire for a buffered bike lane or cycle track.

- Remove parking lane and increase bike lane capacity.
- Maintain existing parking capacity.

Segment 5: Existing Issues

- Motor vehicles using Going Street as a cut-through route.
- Unpredictable bicyclist behavior at the left-turn box on Going Street.
- Unorthodox intersection at Killingsworth Street can be challenging for some bicyclists and motor vehicles.

Crosswalk Safety Strategies

The Crosswalk Safety Strategies board provided information on treatments that could be used to improve pedestrian crossing comfort such as curb extensions, reducing to a single motor vehicle travel lane, and high-visibility crosswalks. Specific comments included:

- Remove parking at intersections to improve sight lines.
- Reduce to one travel lane.
- Reduce posted speed.

Speed Reduction Strategies

Information about speed reduction strategies such as narrowing the street or adding signals to intersections was provided at the meeting. Comments on speed reduction strategies included:

- Introducing a road diet to North Williams Avenue.
- Calibrate signal timing to slower speeds.

Bus / Bike Conflict Strategies

Comments related bus/bike conflict reduction strategies included:

- If the cycle track concept is adopted - add an advance stop line and/or raised crosswalk to improve the cycle track crossing for pedestrians.
- The enhanced bike lane concept was considered to be inadequate in mitigating bus/bike conflicts.

Bikeway Capacity Strategies

The following points summarize some of the comments that were provided in response to strategies for improving bikeway capacity:

- Concerns about pedestrians crossing the street being hidden by a row of parked cars prior to crossing a cycle track.
- Concerns over the ability of a buffered bike lane to reduce “dooring” issues if no buffer is provided between cyclists and parked vehicles.
- Concerns regarding motor vehicles turning right across the cycle track.

North Williams Potential Bikeway Enhancements

The public open house generated a high level of discussion about the potential for North Williams Avenue to become a “platinum level” bikeway. This discussion was not limited to the alternatives presented, but included a number of ideas that will be further considered by the project team. These included:

1. Reducing the width of motor vehicle travel lanes between Weidler Street and Broadway and using the additional space to develop a dual-lane bikeway. This option provides an opportunity for faster cyclists to pass slower cyclists and when not in use the additional lane provides a buffer from motor vehicle traffic. This also allows three northbound vehicle lanes to be maintained.
2. Converting a motor vehicle travel lane in the commercial district (Segment 4) to provide an enhanced bikeway and applying peak hour parking restrictions on one side of the street to create two motor vehicle travel lanes during the busiest times.
3. Instead of an advisory bike lane in Segment 4, adding shared lane markings (SLM’s) in the adjacent travel lane as an option for bicycling outside the door zone. In addition, bicyclists and motorists are more familiar with the meaning of SLM’s compared to an advisory bike lane.
4. Consider a shared bus/bike lane to reduce conflicts between these two modes.
5. A number of other ideas including angle parking, a shared parking access and bicycle lane, and other concepts will also be considered further.

Appendix A

Display Materials

WELCOME

North Williams Traffic Operations Safety Project

The Portland Bureau of Transportation is exploring options that will make travelling on North Williams Avenue between Weidler Street and Killingsworth Street safer and more comfortable for all users.



With the advice of a Stakeholder Advisory Committee formed for this project, City staff have prepared alternative designs for your consideration. These designs include potential transportation changes to reduce conflicts and improve operation of the bike lane, auto lanes, bus stops, and crosswalks.

Here's how you can provide your input:

- Talk with staff
- Place comments on the map provided
- Answer questions at stations labelled "Input Required"
- Provide written comment
- Submit comments on project website:
www.portlandonline.com/transportation/williams

For more information, please visit the website or contact the Project Manager:

Ellen Vanderslice
503-823-4638
ellen.vanderslice@portlandoregon.gov

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Why Williams?

The City of Portland designated North Williams Avenue a "major city bikeway" in the Portland Bicycle Plan last year. This means North Williams Avenue will become one of the best and busiest bike routes in the bike network, the same way "major city traffic streets" (like NE MLK Blvd.) are designed to be the best and busiest car routes.

Why was North Williams Avenue designated a "major city bikeway"? And why are so many people already biking on North Williams Avenue?

① Crossings and Continuity:

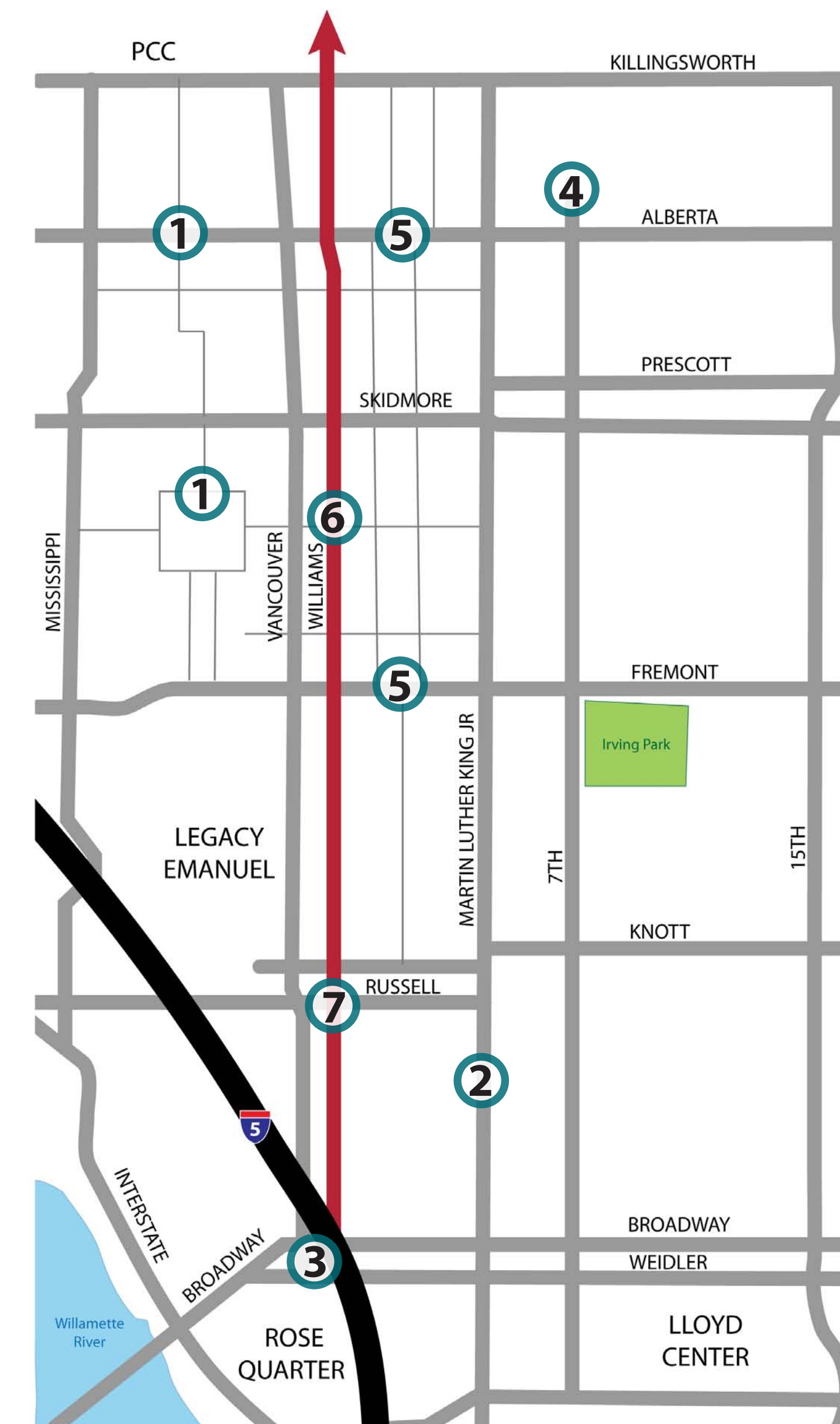
The side streets west of Williams don't go through, and the major east-west streets are hard to cross because they carry heavy auto traffic from I-5.

② NE MLK Boulevard:

MLK is designated a "major city traffic street" for cars and is not a designated bikeway. Some people therefore use North Williams Avenue to bike to destinations on or near MLK Boulevard.

③ Connections:

Of all the possible northbound bikeways for this area, North Williams Avenue is the only one with direct connections to the Broadway and Steel Bridge bike paths.



④ Comfort and Connections:

NE 7th Avenue carries a lot of car traffic, with no room for bike lanes. Plus, it ends just after NE Alberta Street.

⑤ Continuity:

Side streets east of North Williams Avenue don't go through.

⑥ Destinations:

North Williams Avenue is a busy place, and many of the people biking on the street live, work, eat, shop, or visit on North Williams.

⑦ The Numbers:

More than 3,000 people bike up North Williams Avenue each day in the warm months. In the evening, the street moves about 400 bikes and 800 motor vehicles per hour in the section north of Russell Street.

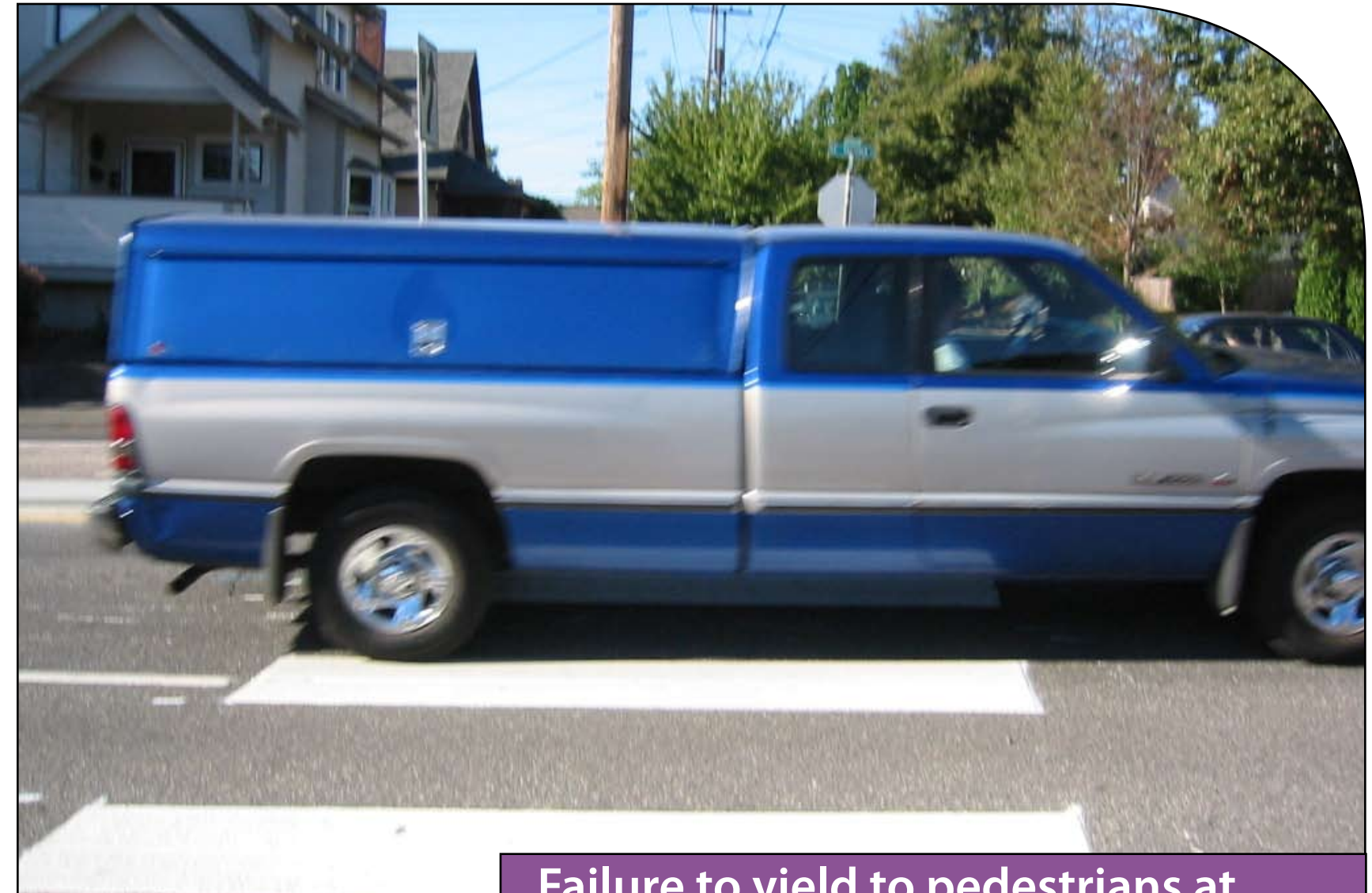
FOUR MAJOR PROBLEMS

North Williams Traffic Operations Safety Project

These are the concerns that we have heard most often from the residents, businesses and visitors of N Williams Avenue.

Crosswalk Safety

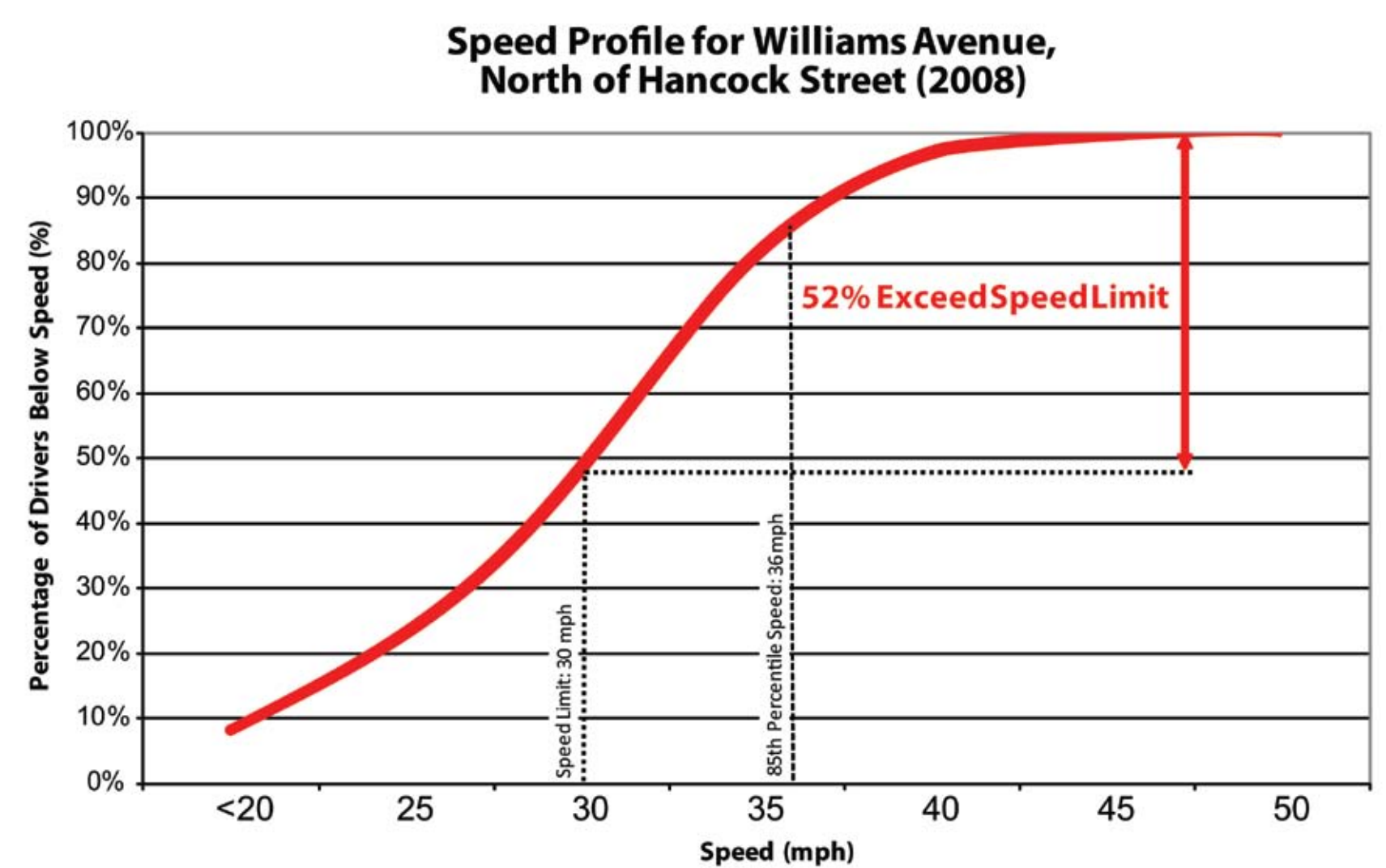
People are concerned about the ease and safety of walking across N Williams. With two auto lanes and one bike lane to cross, and fast-moving car traffic, using even a well-marked crosswalk can be unnerving. North Williams is a place where many children and people with disabilities walk and use transit, so crosswalks need to be safe and easy to use.



Failure to yield to pedestrians at crosswalks is a common complaint

Auto Speeds

We have heard concerns about speeding on every segment of N Williams. Between Broadway and Russell, 52% of cars exceed the 30 mph speed limit. Multiple lanes give motorists ample opportunity to pass, which makes it easier to exceed the speed limit.



Bus/Bike Conflicts

Ten years ago when there were just a few hundred people biking up N Williams each day, pulling a bus into the bike lane to drop off and pick up passengers worked fine. But now that there are more than 3,000 cyclists a day in warm months, it doesn't work well and feels stressful and dangerous to everyone involved.

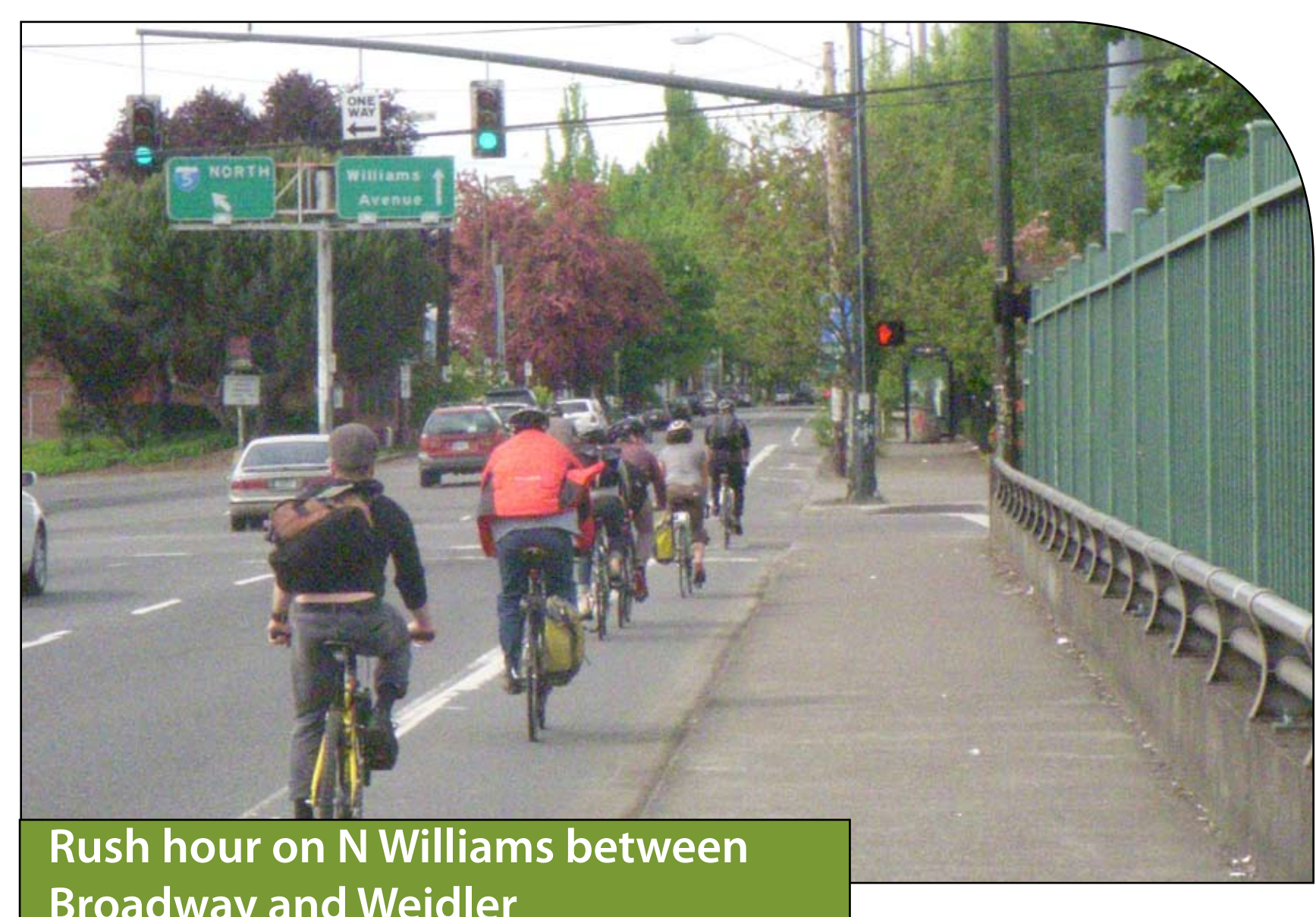


photo: Jonathan Maus

A TriMet bus stops in the bike lane to pick up/drop off passengers

Bikeway Capacity

The bike lane on N Williams moves nearly 400 people per hour at its busiest location (compare that to about 800 cars in the two auto lanes at the same location). But some of those people are actually riding in the auto lane at times to pass slower cyclists or the stopped bus. While this is legal, it is not comfortable for most cyclists or drivers, especially in places where auto speeds are high.



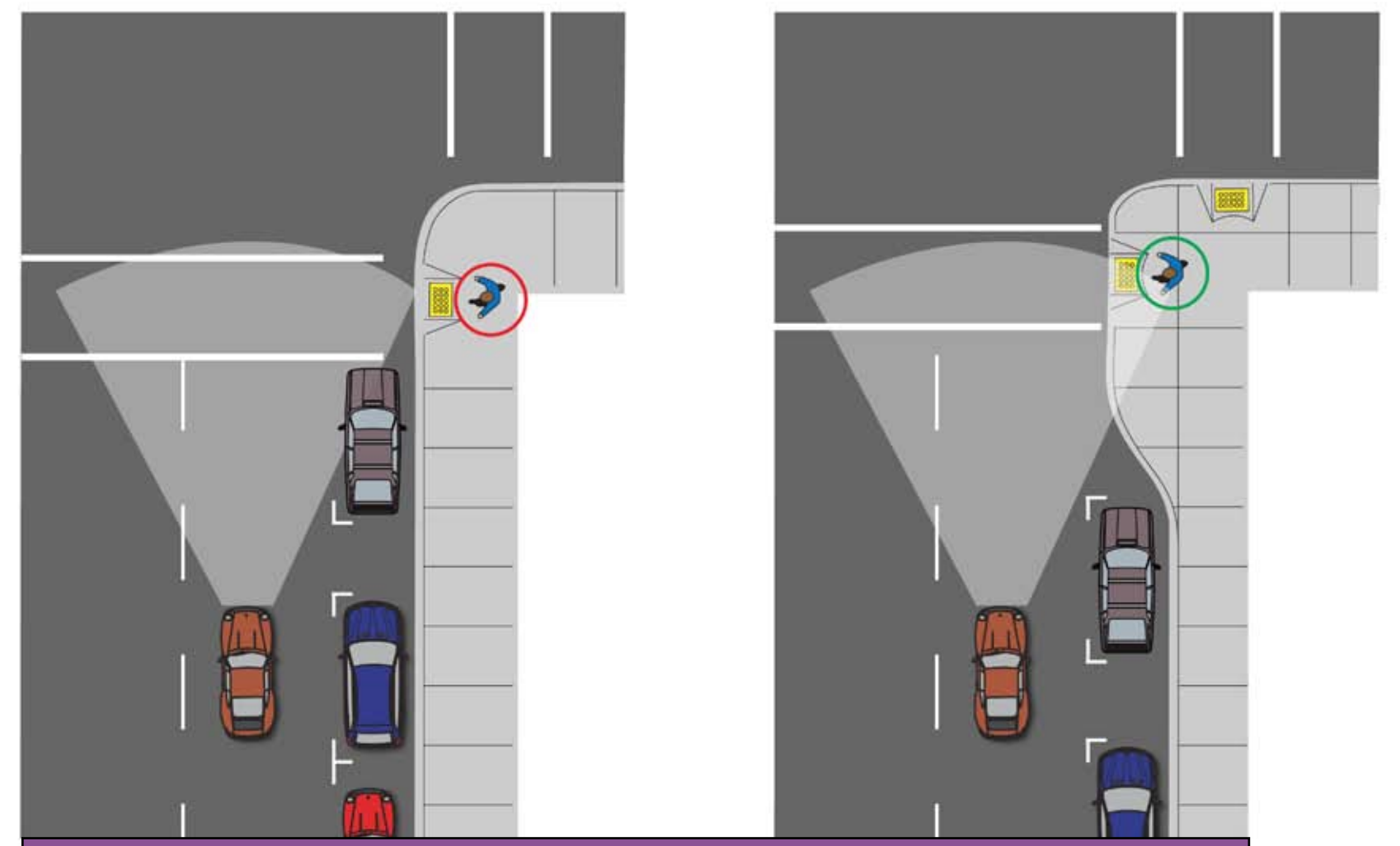
Rush hour on N Williams between Broadway and Weidler

CROSSWALK SAFETY STRATEGIES

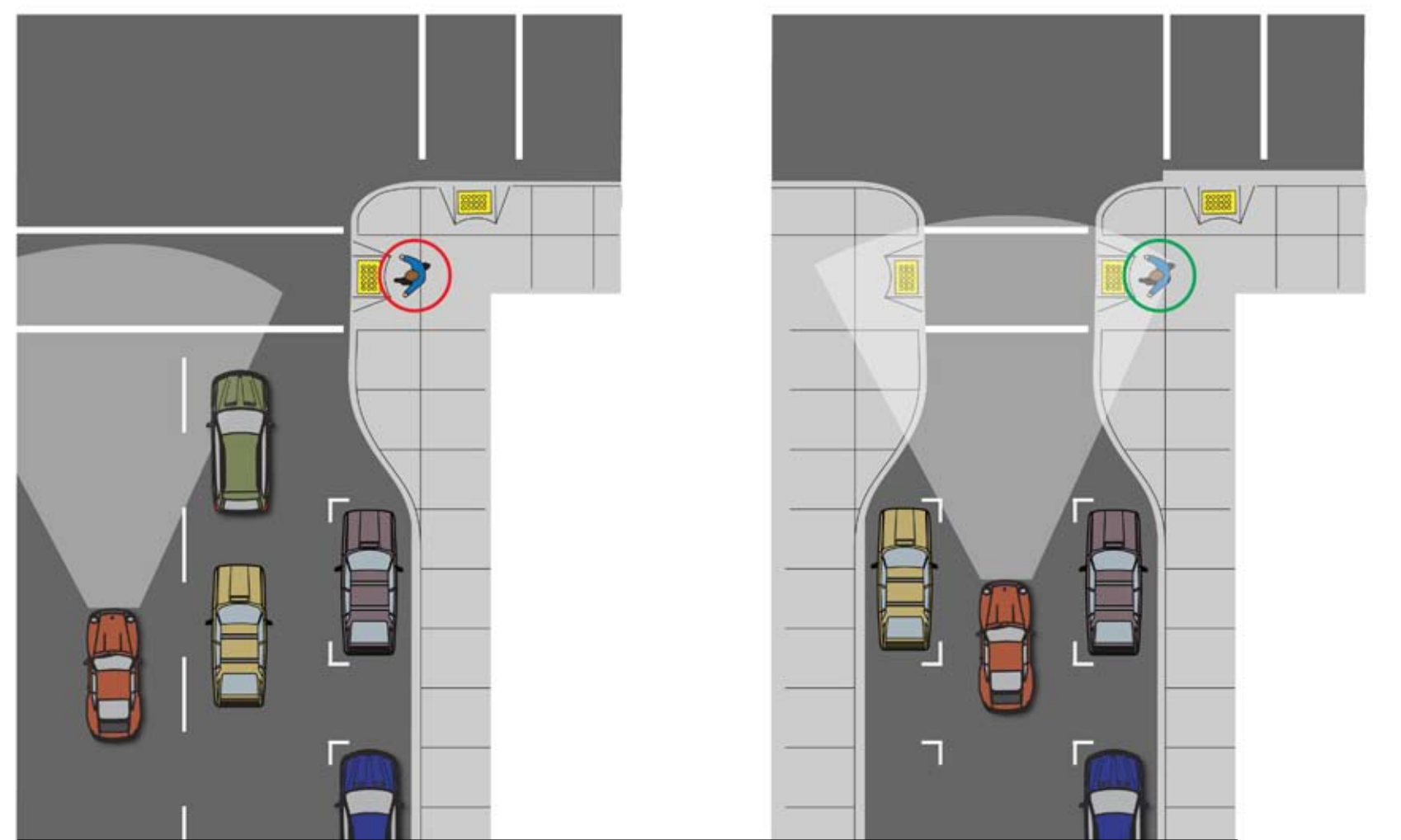
North Williams Traffic Operations Safety Project

Providing safe and comfortable travel for pedestrians using North Williams Avenue is one of the highest priorities for this project. The potential strategies for improving the pedestrian environment includes:

- Reducing the number of auto lanes in certain locations to slow traffic and allow drivers to better see pedestrians
- Provide high-visibility or signalized crosswalks at strategic locations
- Provide curb extensions to allow pedestrians and drivers to see one another
- Manage conflicts with bicyclists



Curb extensions decrease crossing distances and improves the visibility of pedestrians



Providing only one travel lane improves visibility of pedestrians to drivers



Providing only one travel lane allows pedestrians to identify safe gaps and eliminates "multiple threat"



High-visibility crossings at mid-block and intersection locations with high pedestrian activity provide priority to pedestrians



Reducing auto speed allows drivers to stop in a shorter distance and reduces injury risk



Signals at a number of key intersections will provide safe crossings

SPEED REDUCTION STRATEGIES

North Williams Traffic Operations Safety Project



REDUCE TO ONE TRAVEL LANE

Providing a single travel lane generally reduces vehicle speeds as vehicles travel behind other slower-moving vehicles, e.g. North Vancouver Avenue.

USE SIGNAL TIMING TO PROGRESS TRAFFIC AT SLOWER SPEEDS

Signals can be timed to move traffic at a certain speed. For example, signal timing along Broadway Avenue (Downtown) allows traffic to move at 12 mph.



VISUALLY NARROW THE STREET

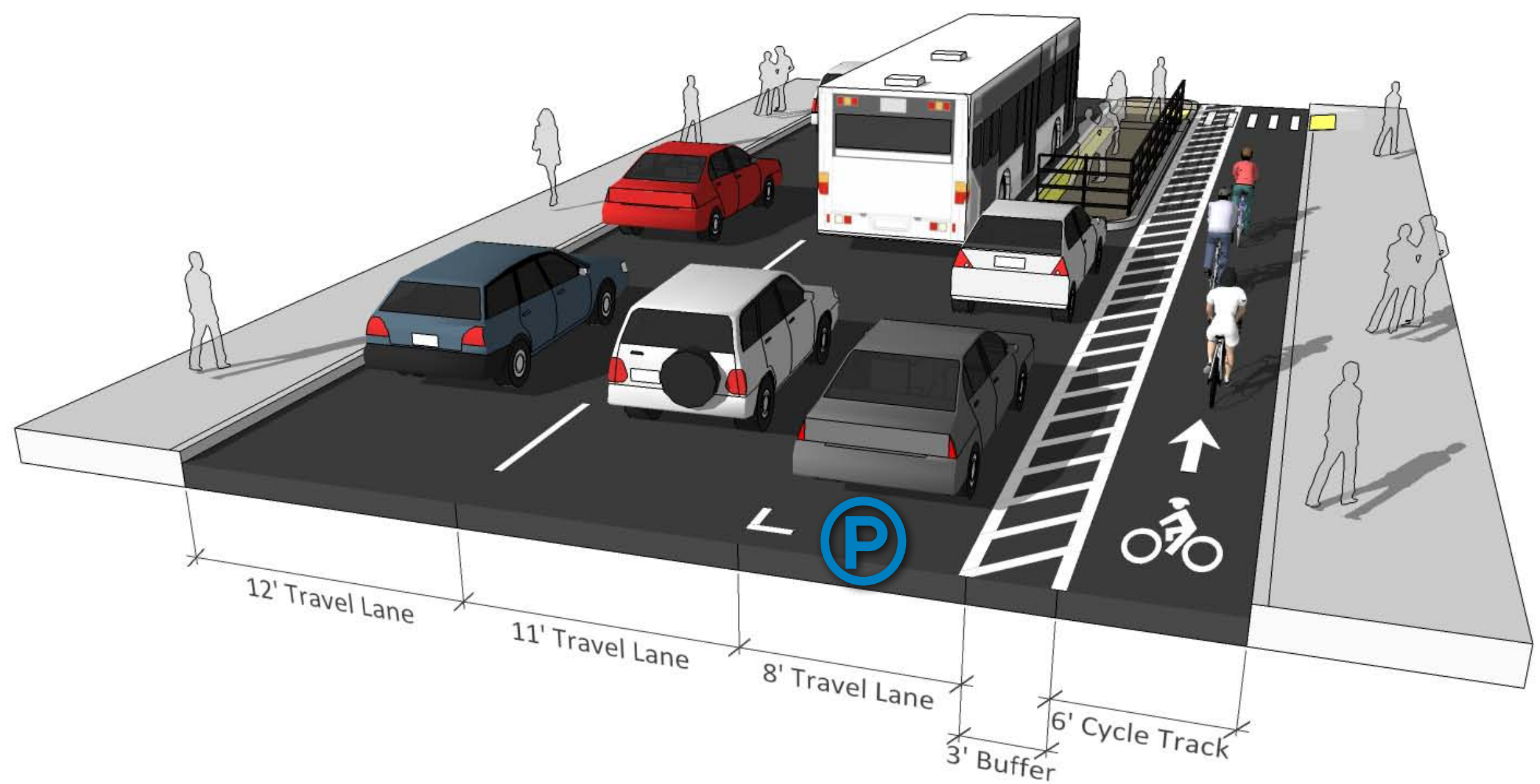
Curb extensions, pedestrian crossings, and other street treatments visually change the street for drivers - tending to slow travel speeds.

BUS/BIKE CONFLICT STRATEGIES

North Williams Traffic Operations Safety Project

CYCLE TRACK

Divert bicyclists behind bus stops so they do not have to interact with buses. This treatment requires managing conflicts between bus passengers and the cycle track.

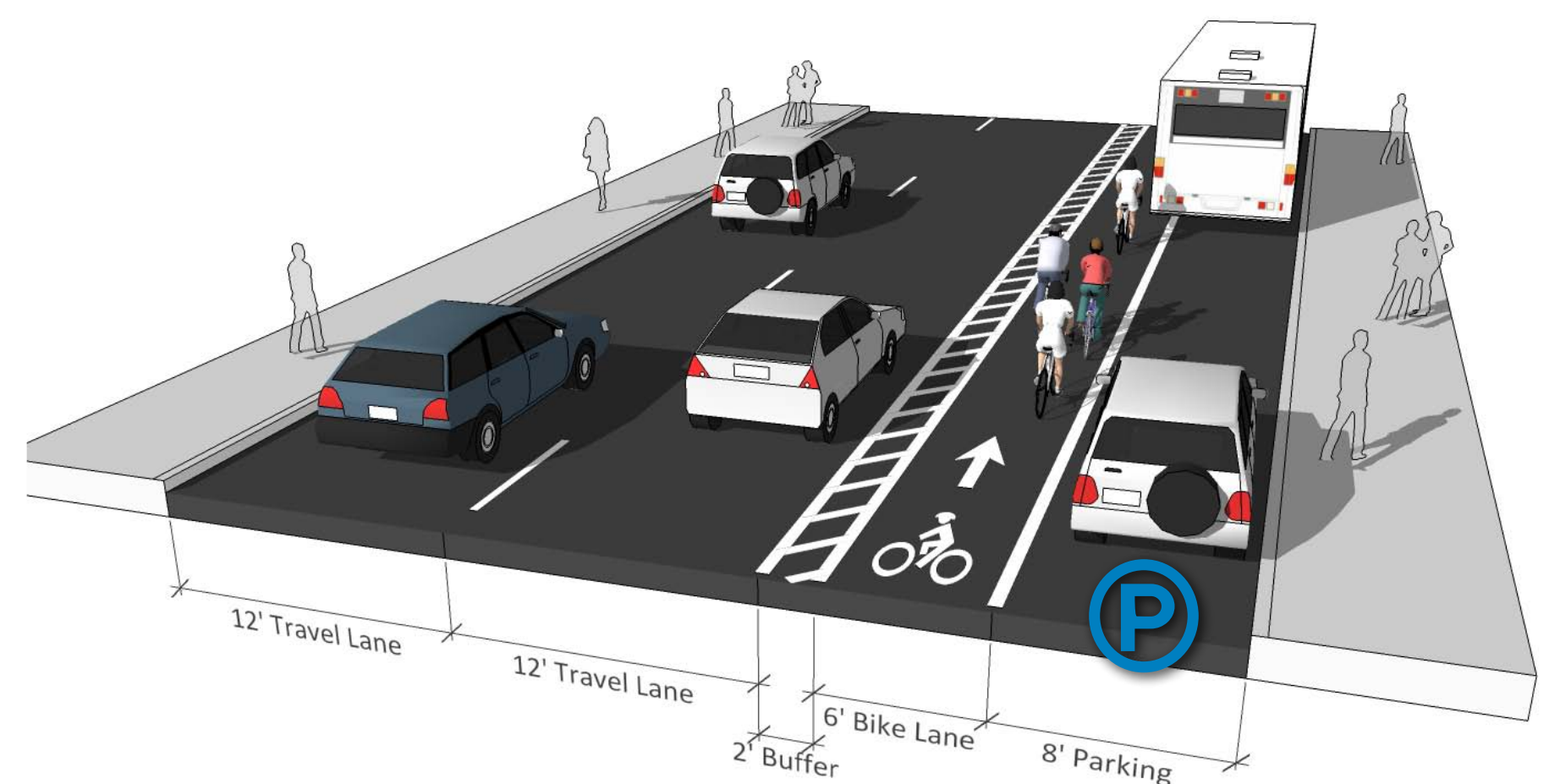


SEPARATE BUSES AND CYCLISTS IN TIME

Separate signal phases can be used to separate buses and bikes, e.g. buses could be allowed to travel forward prior to cyclists (and cars) at signals - or vice versa.

MANAGE CROSSING OF BIKE LANE

Although buses would still have to cross a buffered bike lane, the additional width allows easier passing while the bus is stopped.



LEFT-SIDE BIKEWAY

Moving cyclists to the left side of the street removes the bus/bike conflict. (Note: there are other difficulties associated with left-side bikeways.)

Advantages	Disadvantages
<ul style="list-style-type: none"> • Removes Bus/Bike Conflict • Drivers can see cyclists in side mirror (eliminates blind spot) • Removes conflicts with right-turning traffic • Easier for cyclists to turn left • Fewer door openings on passenger side 	<ul style="list-style-type: none"> • Difficult to transition from right-side bikeway • Drivers expect cyclists on their right - increased risk of crashes • Introduces conflicts with left-turning traffic • More difficult for cyclists to turn right • Cyclists placed next to "fast" traffic lane

BIKEWAY CAPACITY STRATEGIES

North Williams Traffic Operations Safety Project

The North Williams corridor is one of the most popular bikeways in Portland. This can lead to crowded conditions where faster cyclists try to pass slower cyclists. Providing more space, so bicyclists do not encroach into traffic lanes when passing, will create a more comfortable cycling environment and be able to carry even more cyclists in the future. Some potential bikeway enhancements are described below.

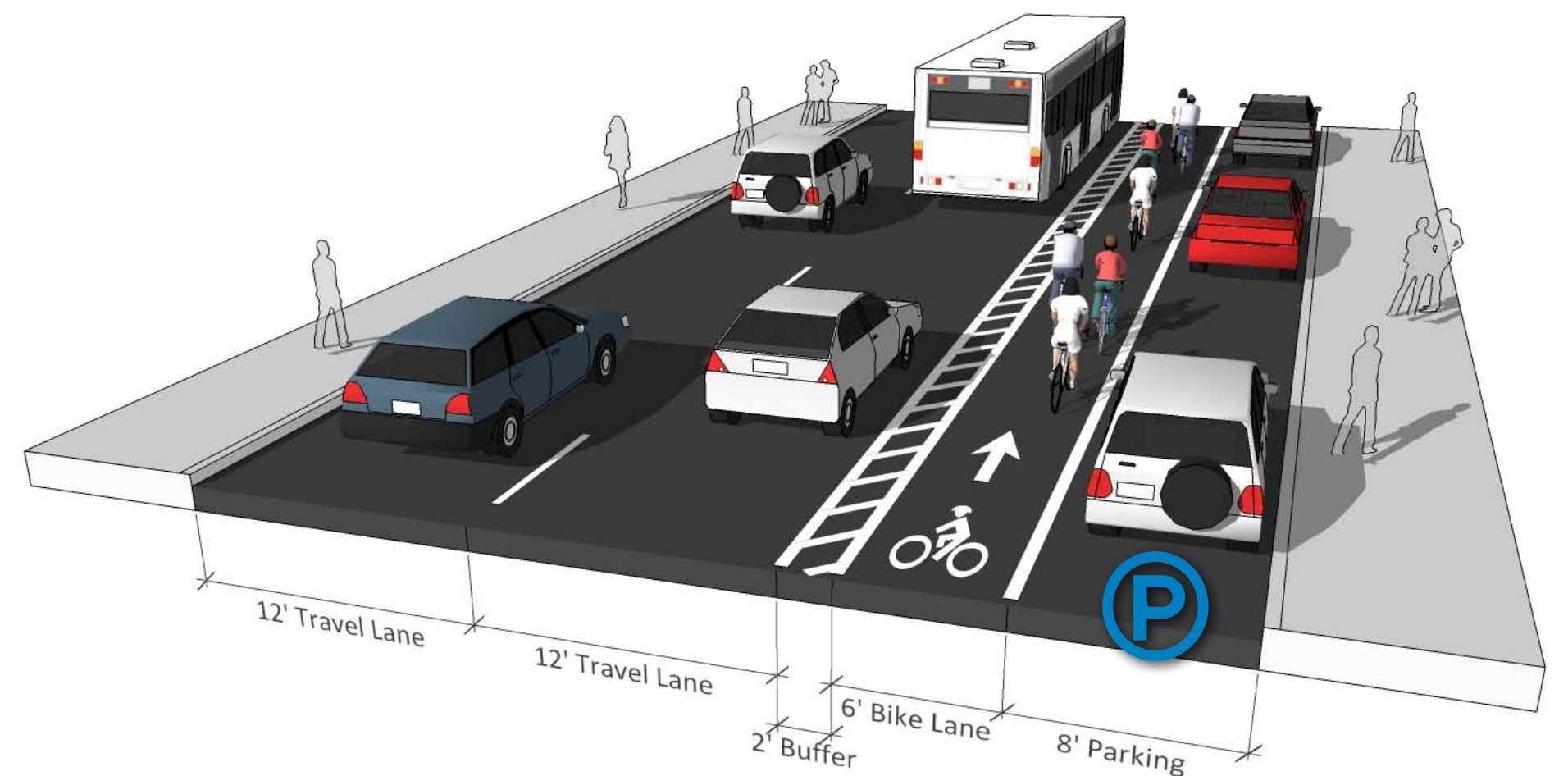
WIDE BIKE LANE



BENEFITS:

- Existing bike lanes are 5' to 6'. A wide bike lane increases width to 7'
- Increases distance between motorists and cyclists compared to a conventional bike lane
- Enables cyclists to pass one another without encroaching into the travel lane

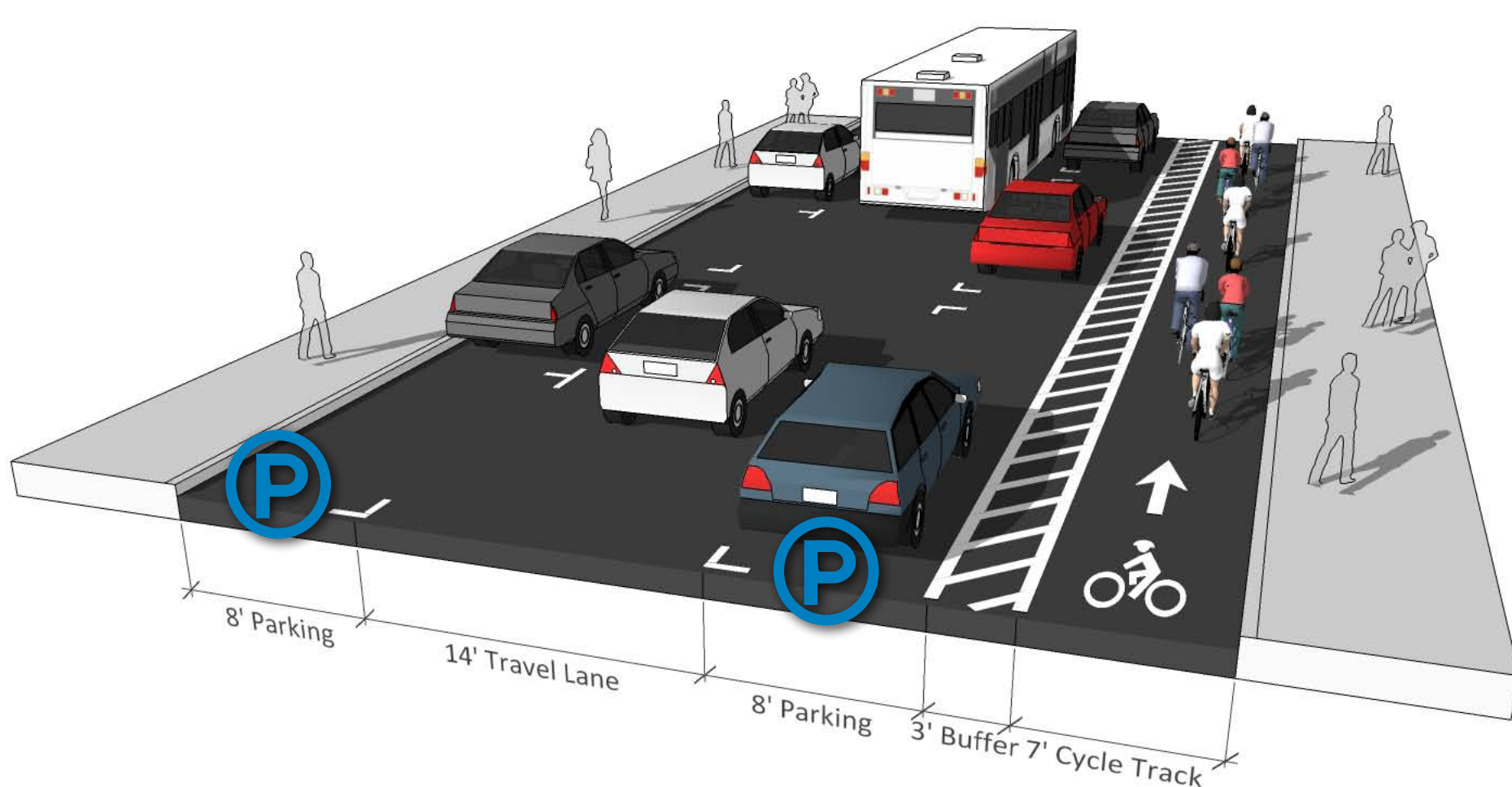
BUFFERED BIKE LANE



BENEFITS:

- Provides cushion between cyclists and motor vehicles, particularly on streets with fast moving traffic
- Allows bicyclists to pass one another or avoid obstacles without encroaching into the travel lane
- Reduces risk of being struck by a car door

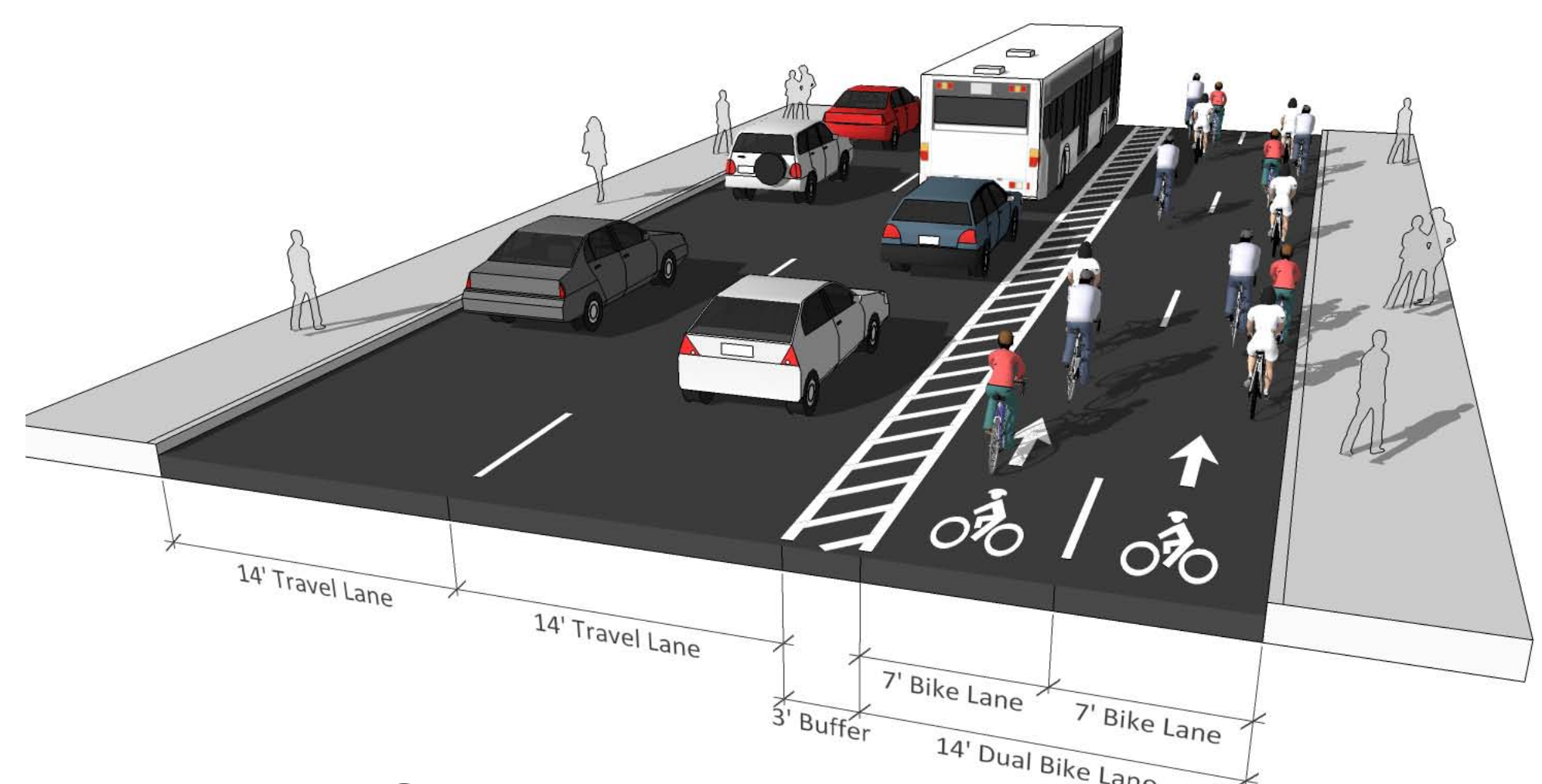
CYCLE TRACK



BENEFITS:

- Separates cyclists from parking and moving motor vehicle traffic
- Uses parked vehicles and a painted buffer to protect bicyclists - improving cyclist comfort
- Significantly reduces the threat of being struck by a car door

DUAL BIKE LANE

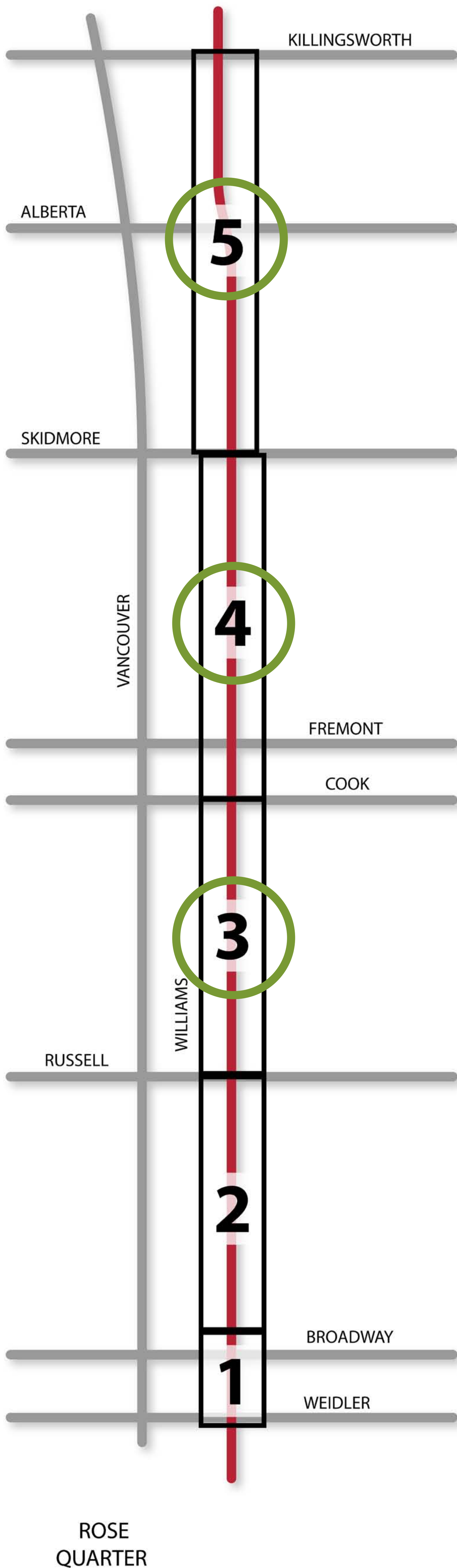


BENEFITS:

- Provides a dedicated passing lane for faster cyclists to pass slower cyclists
- Allows faster cyclists to move off quicker at signals

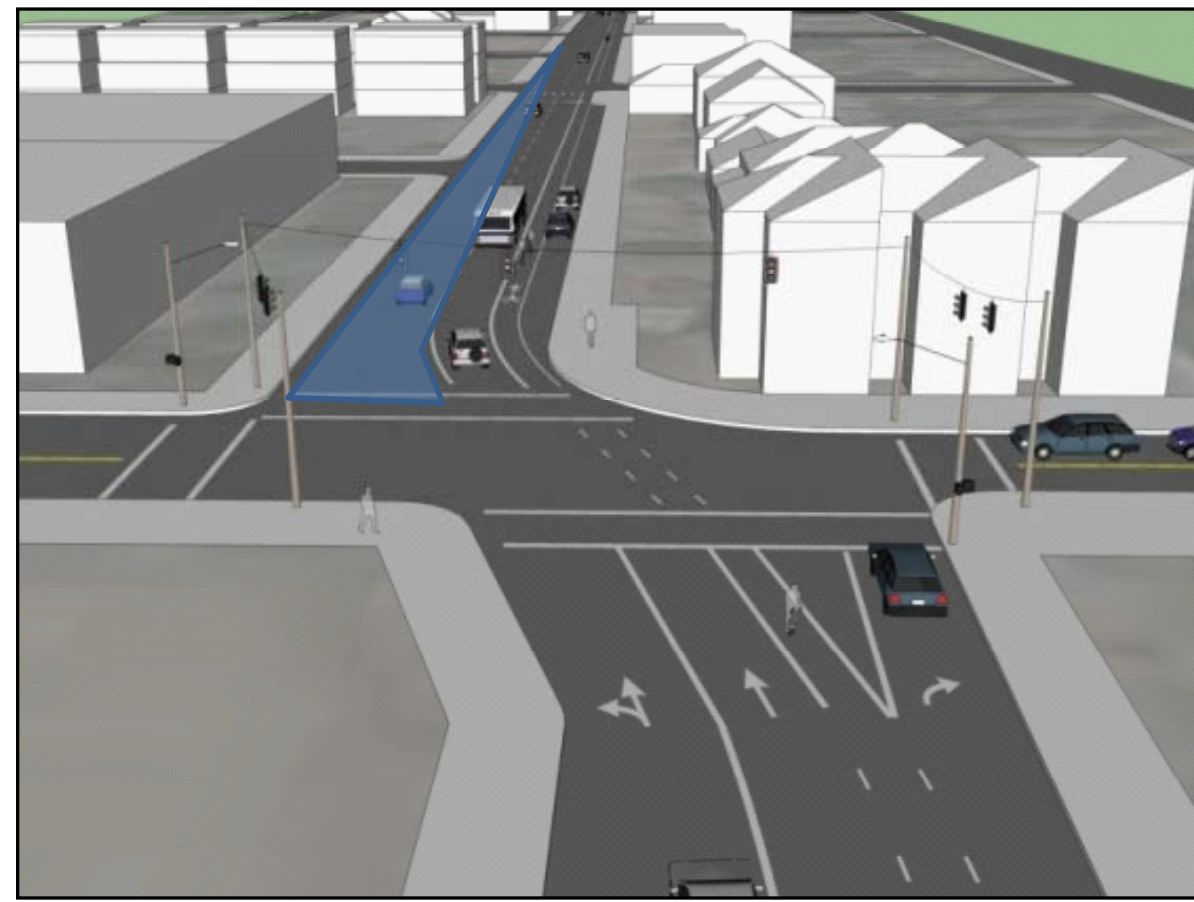
NORTH WILLIAMS SEGMENTS 5 - 3

North Williams Traffic Operations Safety Project



5 SKIDMORE TO KILLINGSWORTH

- Approximately 700 to 850 motor vehicles during peak hour
- No bicycle count data available
- Light bus stop activity; some conflicts (Alberta)
- Neighbors concerned about speeding (no speed data available)
- Crosswalks are used by vulnerable pedestrians
- Moderate parking demand



OPPORTUNITY: Remove a travel lane on the west side of the street and shift lanes to create space for an enhanced bikeway

4 COOK TO SKIDMORE

- 950 to 1,100 motor vehicles during peak hour
- 230 to 390 bicyclists during peak hour
- Light bus stop activity
- 31% of vehicles exceeding speed limit
- Busy crosswalks, especially at Failing
- Moderate to heavy parking demand
- OPPORTUNITY:** Add signals and use signal timing to slow traffic

3 RUSSELL TO COOK

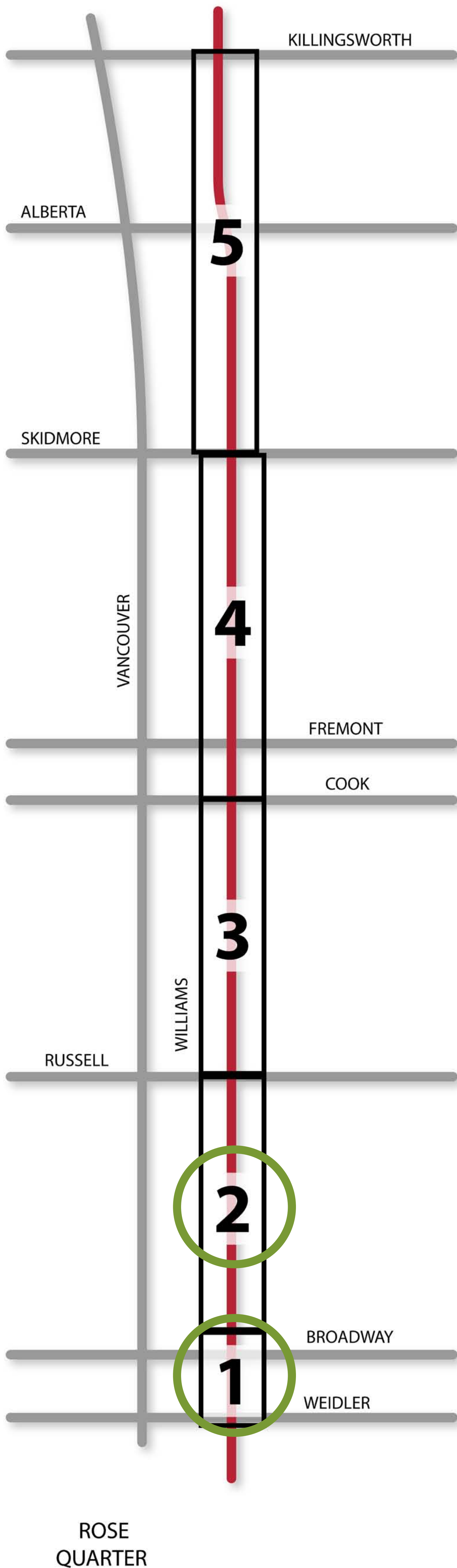
- 800 motor vehicles during peak hour
- Approximately 380 bicyclists during peak hour
- Heavy bus stop activity (some bus/bike leapfrogging)
- Light to moderate parking demand



OPPORTUNITY: Remove parking on the west side of the street and shift lanes to create space for an enhanced bikeway

NORTH WILLIAMS SEGMENTS 2 - 1

North Williams Traffic Operations Safety Project



2 I-5 ON-RAMP TO RUSSELL



Approximately 700 motor vehicles during peak hour



Approximately 300 bicyclists during peak hour



Moderate bus stop activity – bus/bike leapfrogging



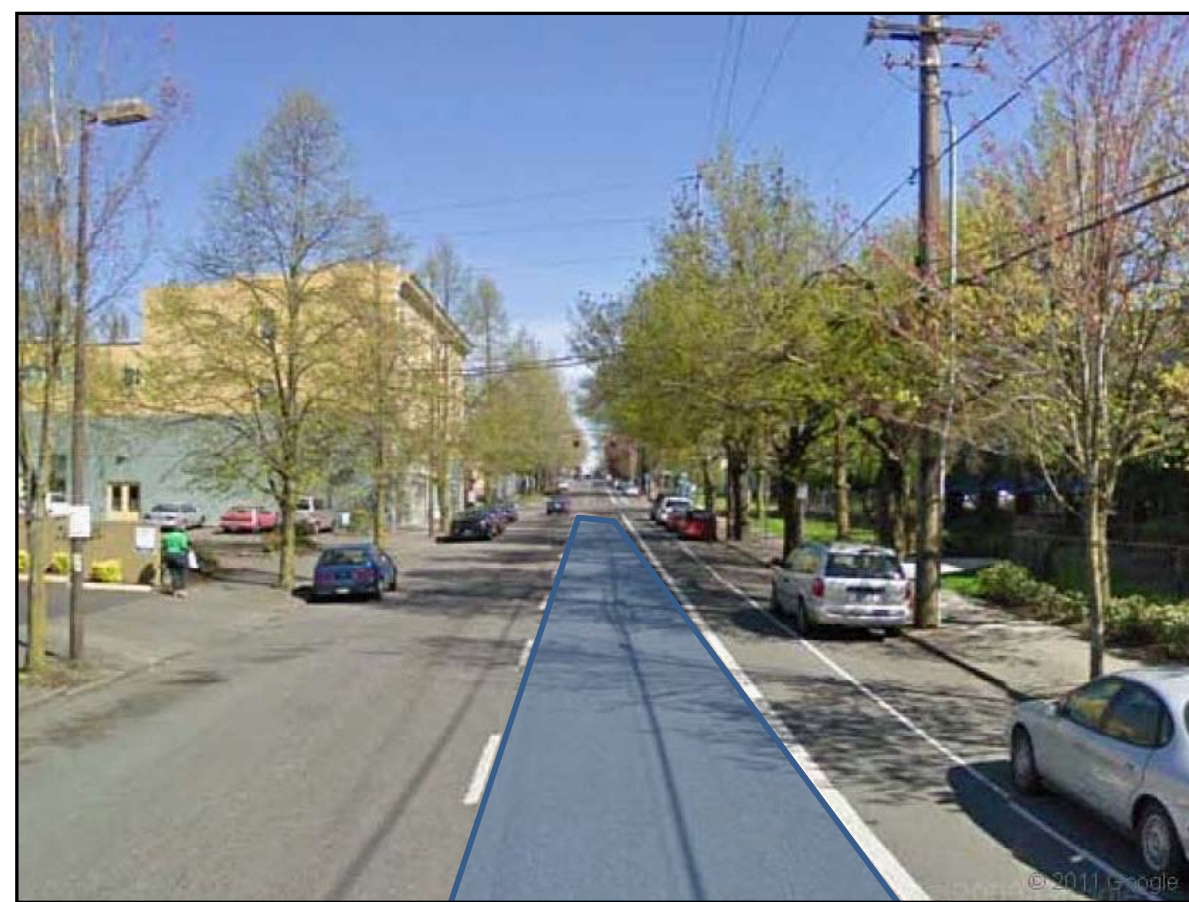
52% of vehicles exceed the speed limit, many neighbor complaints



Tillamook and Page used by vulnerable pedestrians



Light to moderate parking demand



OPPORTUNITY:

Convert an auto travel lane into an enhanced bikeway

1 WEIDLER TO I-5 ON-RAMP



Approximately 1,550 motor vehicles during peak



Approximately 240 bicyclists during peak hour



Key transit connection from Rose Quarter



No parking in this segment



OPPORTUNITY:

Convert one of three travel lanes into bus/bike space.

SIGNAL PROGRESSION

North Williams Traffic Operations Safety Project

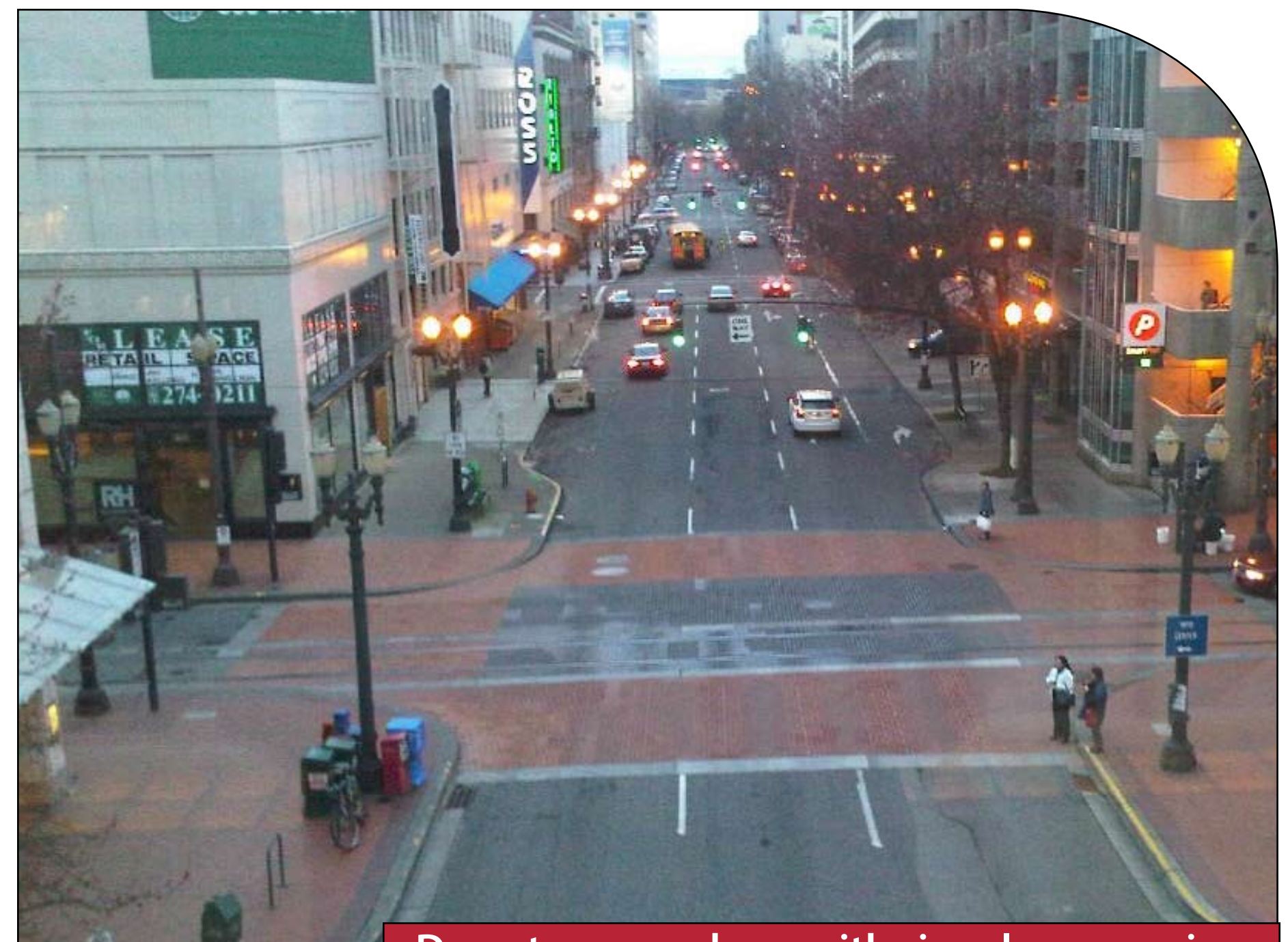
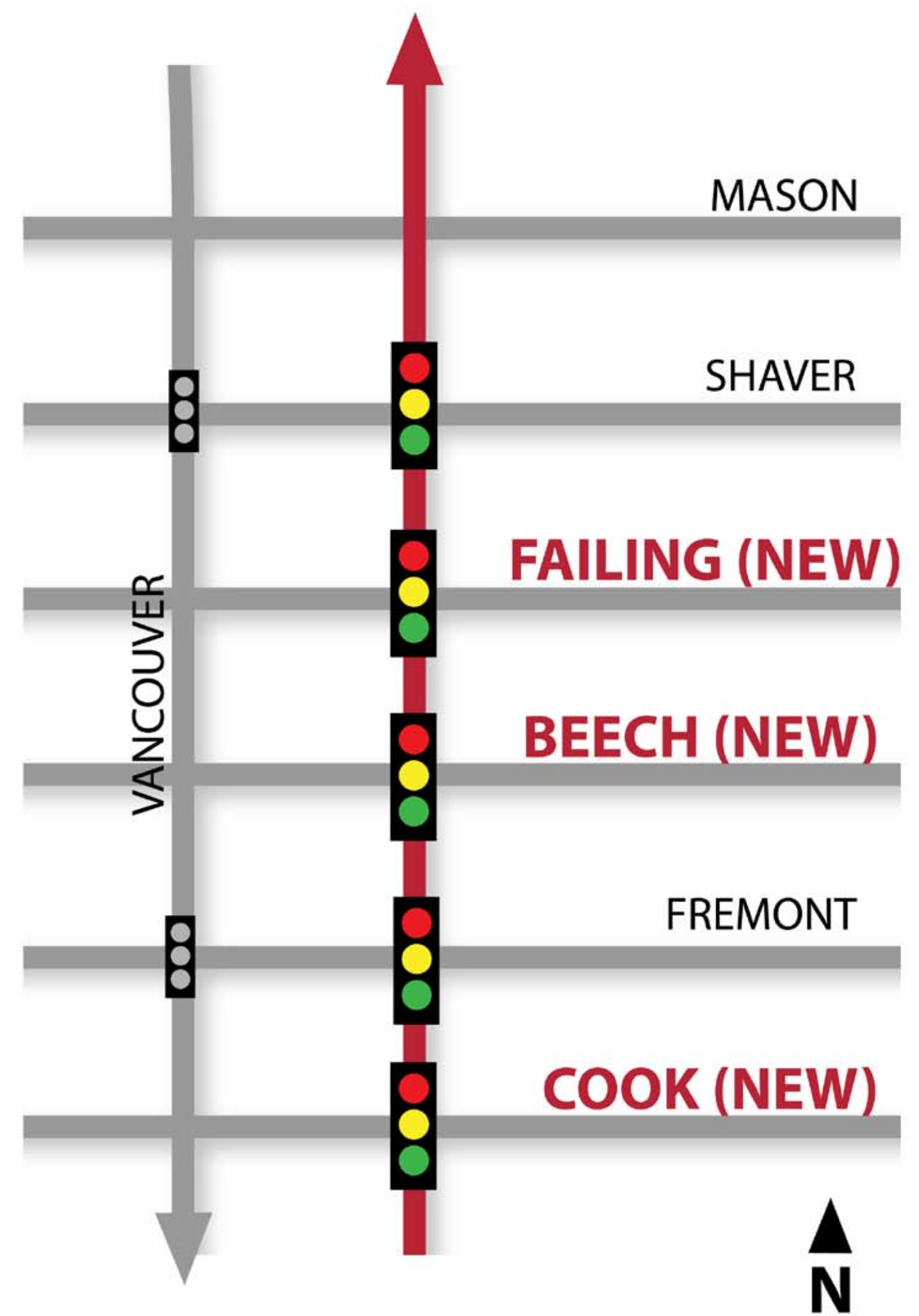
Ever notice that if you go the right speed along Grand Avenue (30 mph) or Broadway in Downtown (12 mph) you get all green lights? Traffic engineers adjust the timing of these signals so that the traffic progresses at these speeds. The same technique can be used on North Williams Avenue to better manage vehicle speeds.

However, providing a “green wave” requires a close and regular spacing of signals that does not currently exist on North Williams Avenue. It is proposed that speeds be better managed in the commercial district between Cook Street and Shaver Street by adding signals at:

- Failing Street
- Beech Street
- Cook Street

Other benefits from these signals include:

- Safer pedestrian crossings
- Safer passage for vehicles crossing or turning onto North Williams Avenue
- The possibility of timing the signals to allow bicyclists to travel through without stopping (“bicycle green wave”)



Downtown roadway with signal progression keeps the flow of traffic moving



Signalized crosswalks are more comfortable for vulnerable pedestrians



Roadway with no signal progression

LANE CONFIGURATION

North Williams Traffic Operations Safety Project

One Lane or Two?

A single motor vehicle lane on North Williams Avenue can carry approximately 850 vehicles per hour. Two lanes can carry approximately 1,700 vehicles per hour. Peak hour traffic does not exceed the one lane capacity in a number of segments and existing traffic may be accommodated with a single lane.

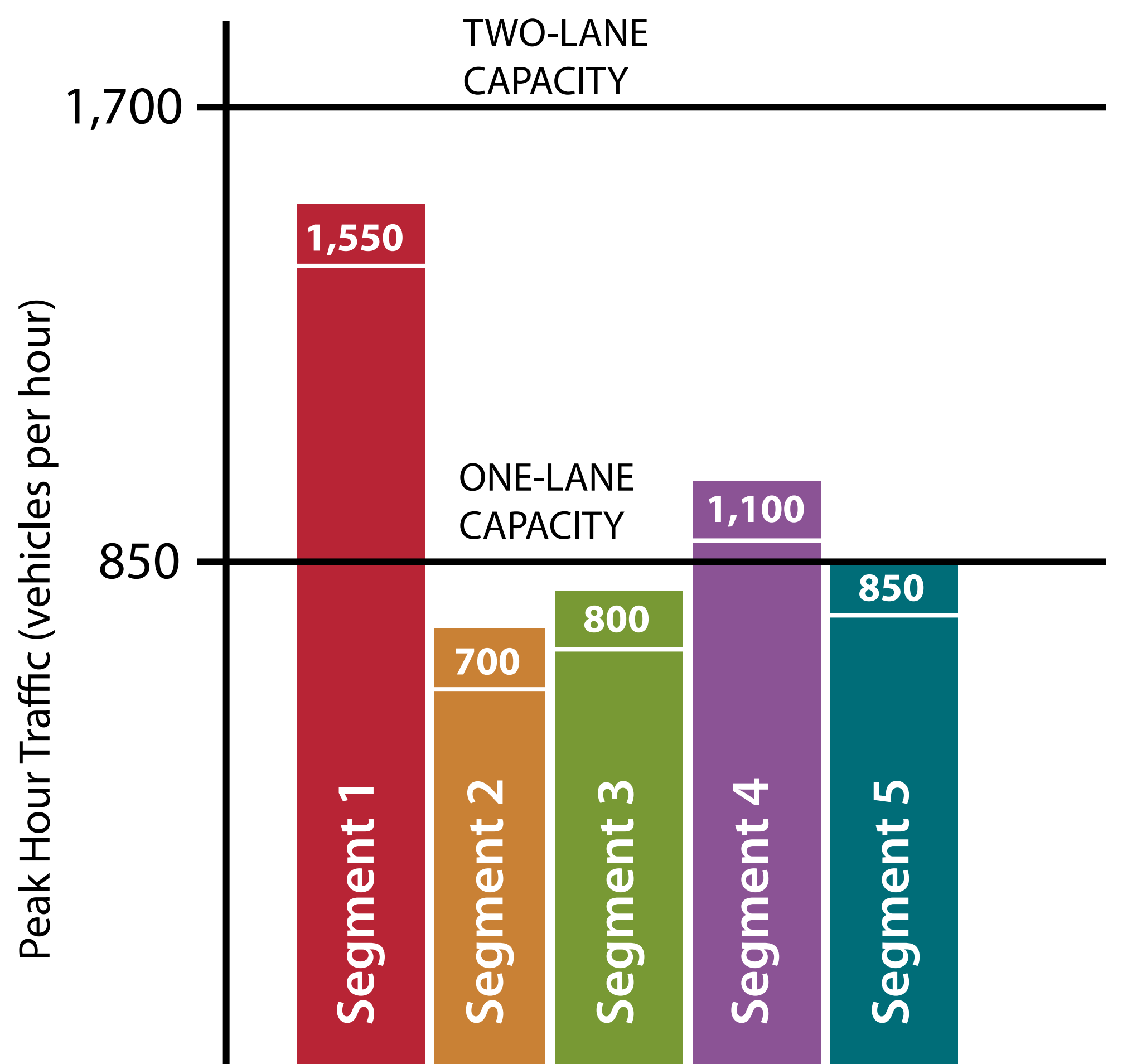
In segments 2 and 5, it is proposed that one of the motor vehicle travel lanes be converted to provide space for an enhanced bikeway and bus operating space. The benefits of a single travel lane arrangement include:

- Lower traffic speeds
- Easier for drivers to see pedestrians
- Shorter crossing distance for pedestrians
- Easier for pedestrians to identify safe crossing gaps in traffic stream

Issues that will need to be considered during design include:

- Additional delay to vehicles
- Emergency vehicle and bus operations

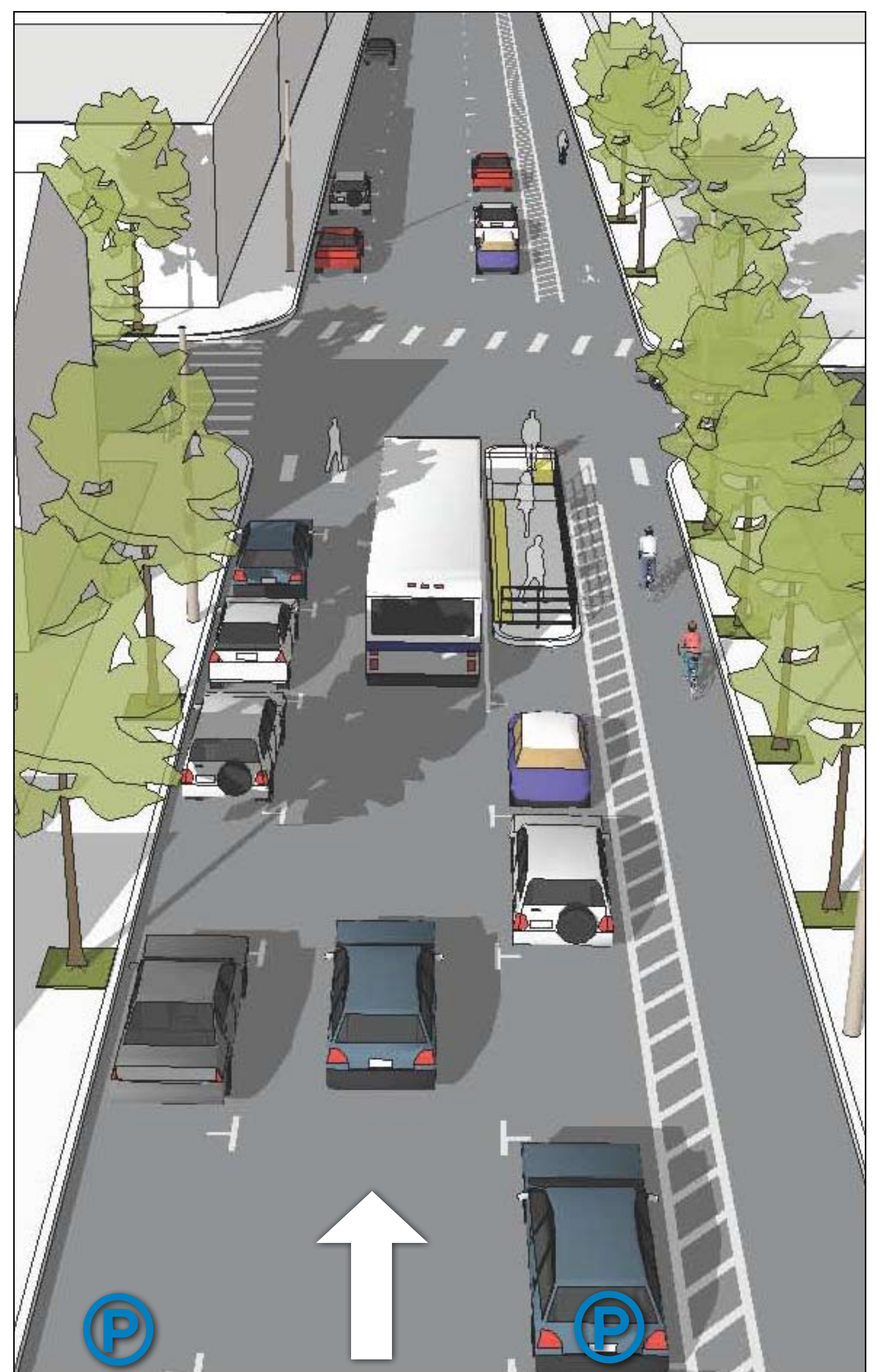
Weekday PM Peak Hour Motor Vehicle Traffic Volumes on North Williams Avenue



North Williams Street Segment



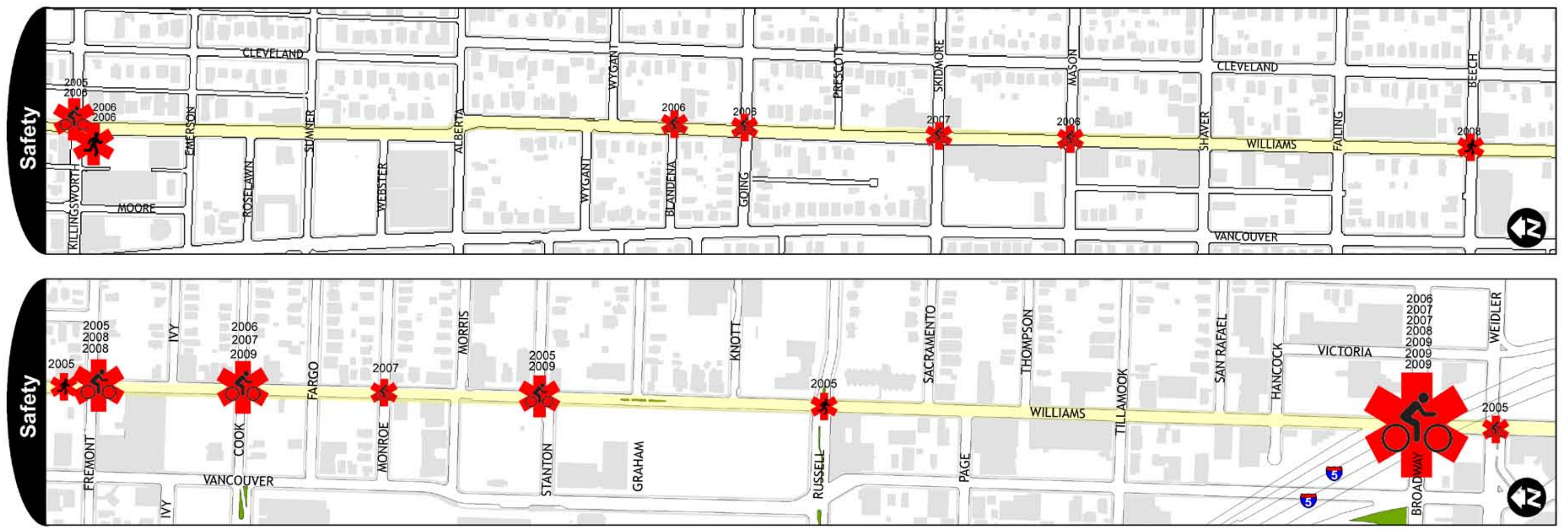
LEFT, existing roadway conditions at North Williams Avenue and Tillamook Street. RIGHT, enhanced bikeway treatment



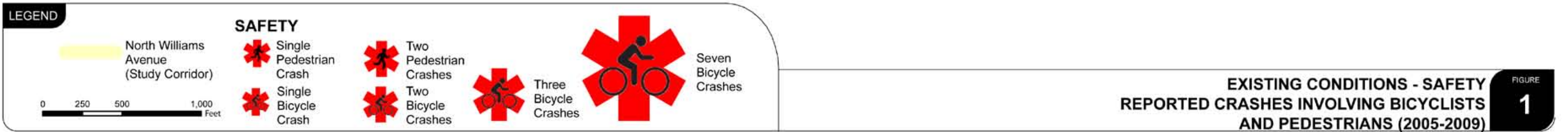
EXISTING CONDITIONS

North Williams Traffic Operations Safety Project

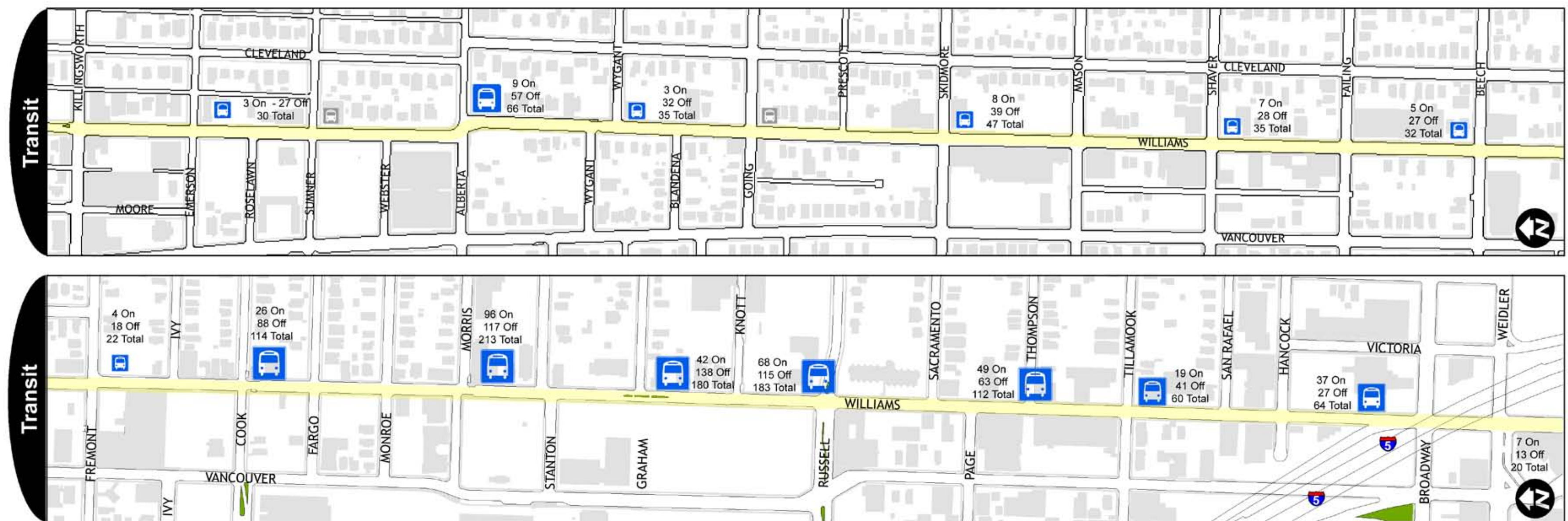
For more information see the North Williams Existing Conditions Report at www.portlandonline.com/transportation/williams



Data Source: Portland Department of Transportation, 2005-2009



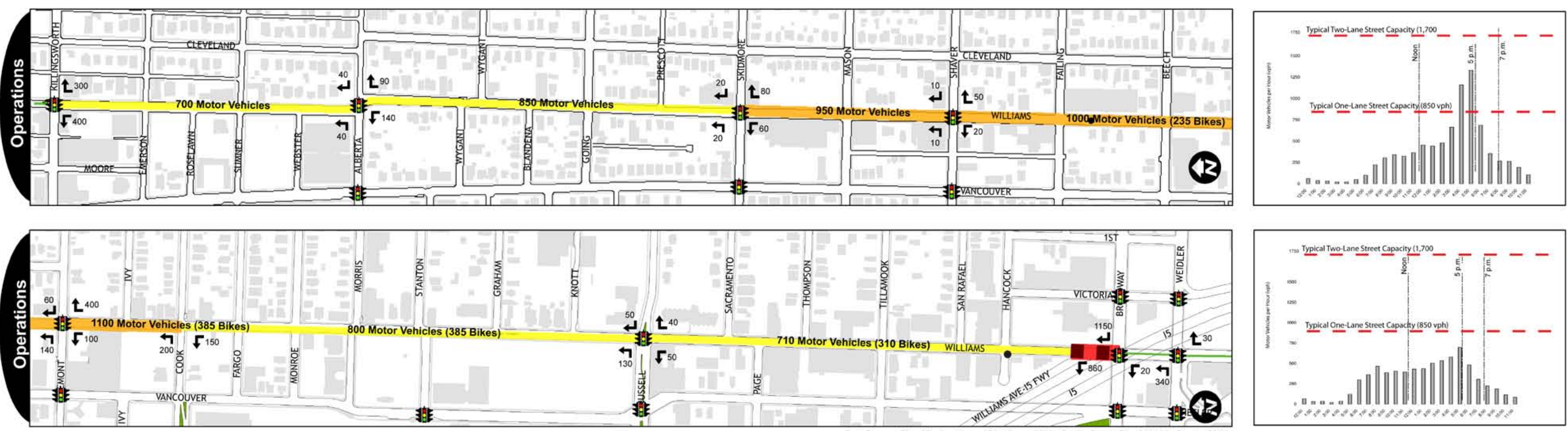
EXISTING CONDITIONS - SAFETY
REPORTED CRASHES INVOLVING BICYCLISTS AND PEDESTRIANS (2005-2009) **FIGURE 1**



Data Source: TriMet, Spring 2010



EXISTING CONDITIONS - TRANSIT
BUS STOP LOCATIONS & AVERAGE DAILY RIDERSHIP (2010) **FIGURE 2**



Data Source: City of Portland Annual Bike Count (2010), Quality Counts Bike & Vehicle Counts (2011)

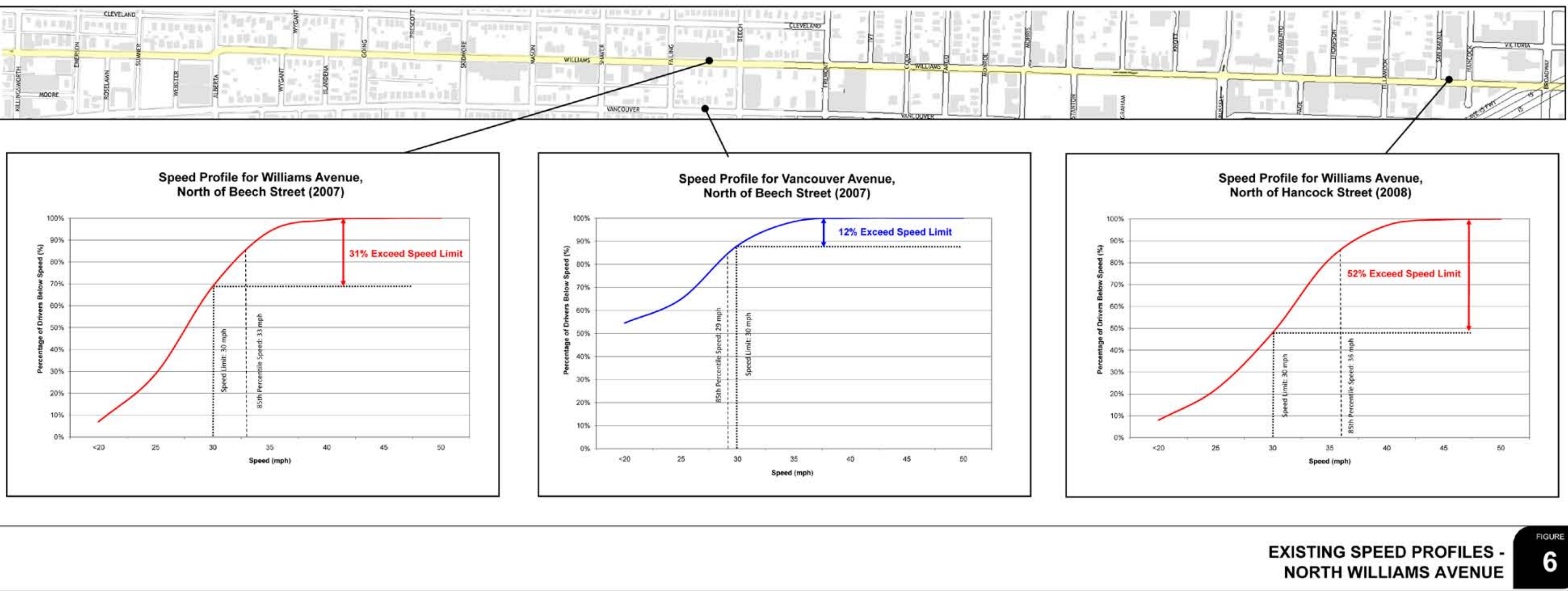
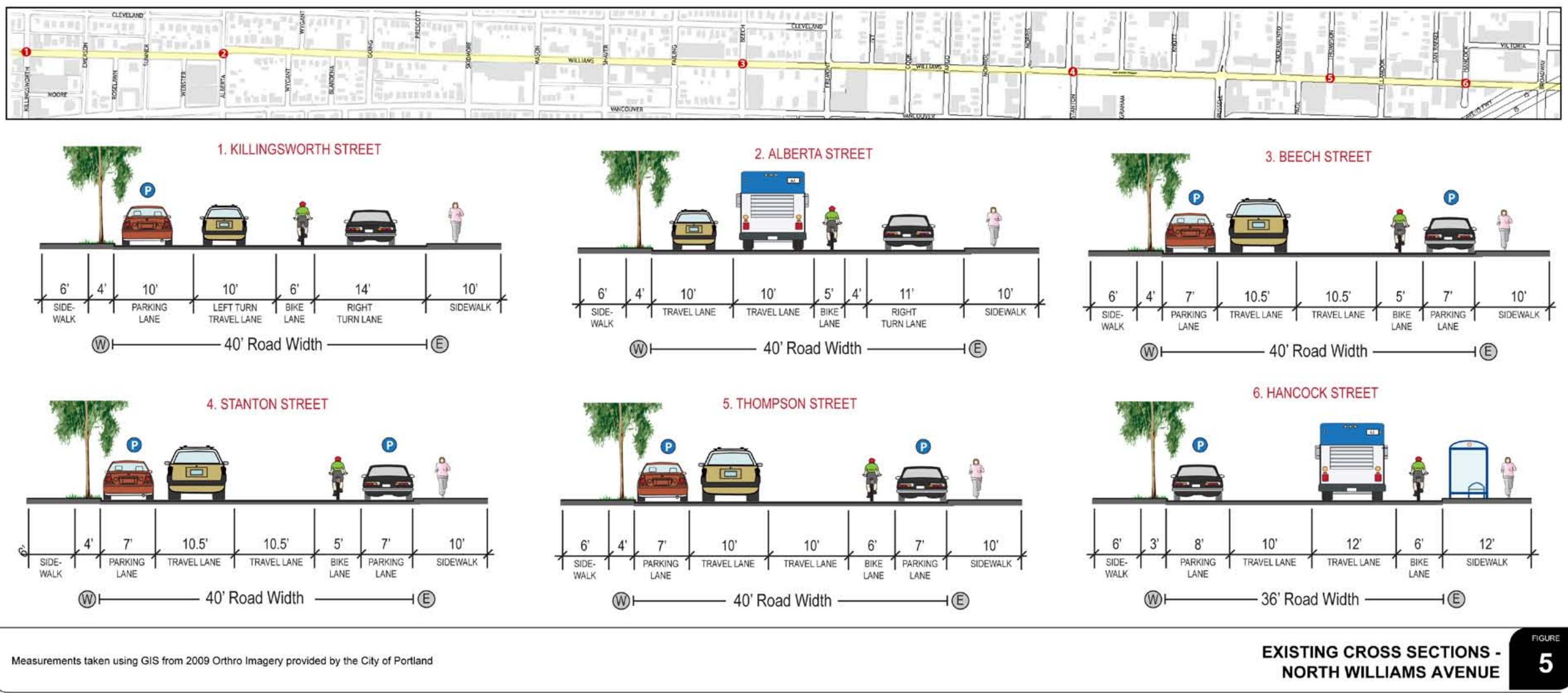
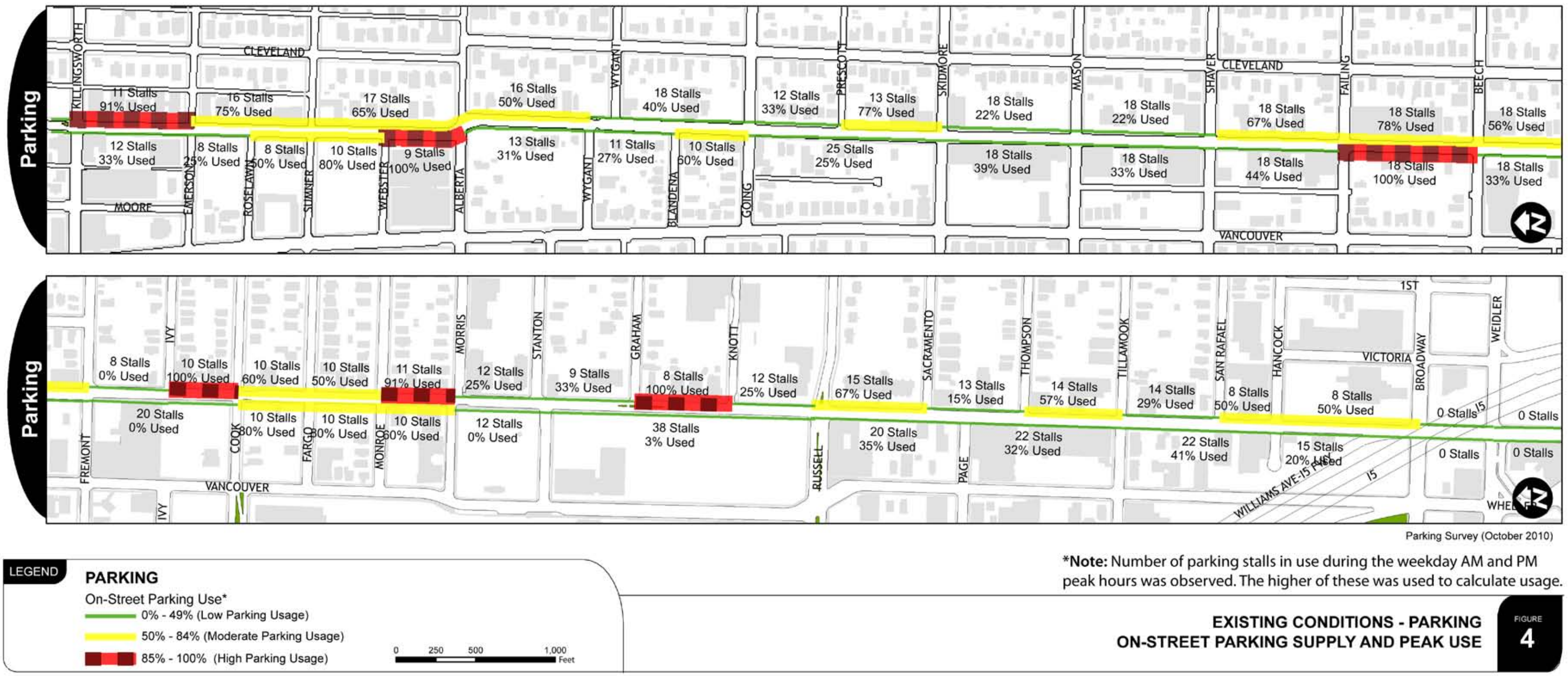


EXISTING CONDITIONS - OPERATIONS
PM PEAK HOUR TRAFFIC VOLUME **FIGURE 3**

EXISTING CONDITIONS

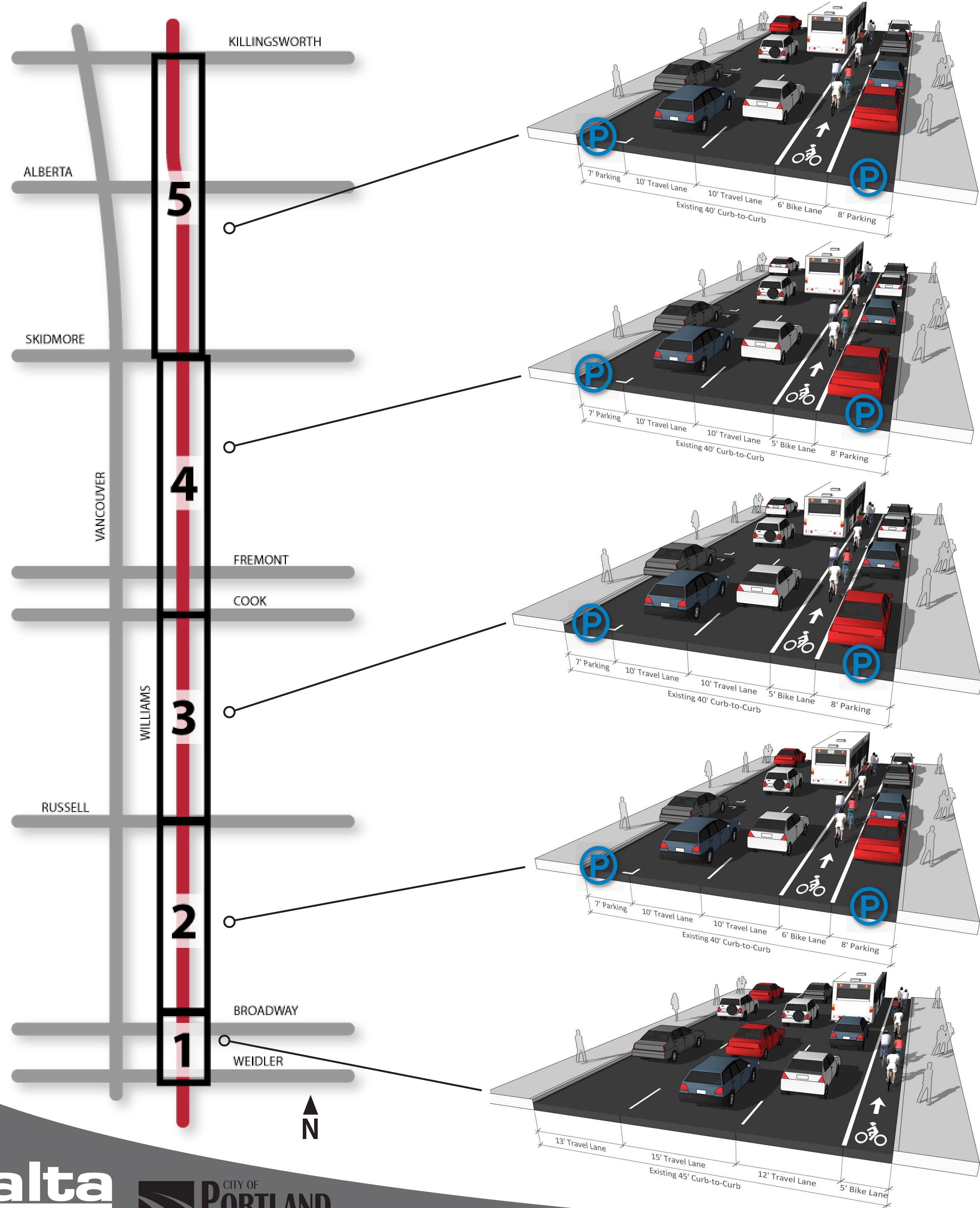
North Williams Traffic Operations Safety Project

For more information see the North Williams Existing Conditions Report at www.portlandonline.com/transportation/williams



NORTH WILLIAMS POTENTIAL BIKEWAY ENHANCEMENTS

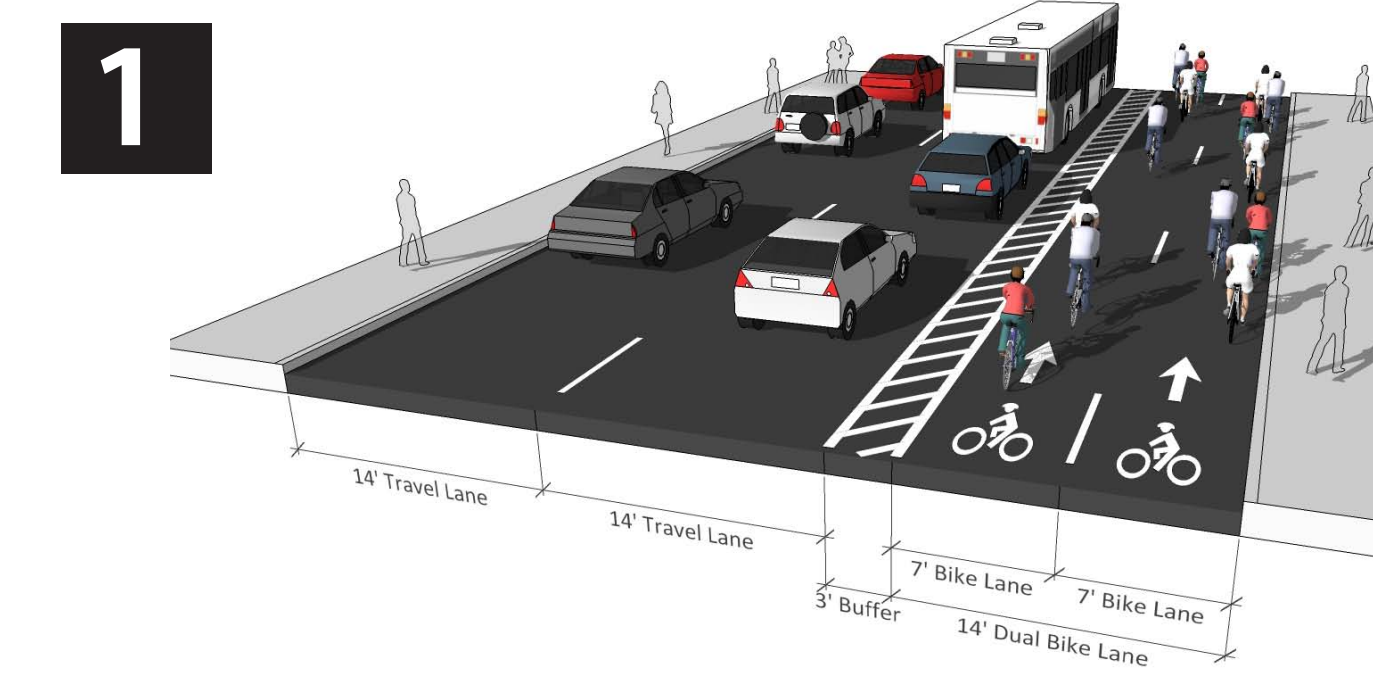
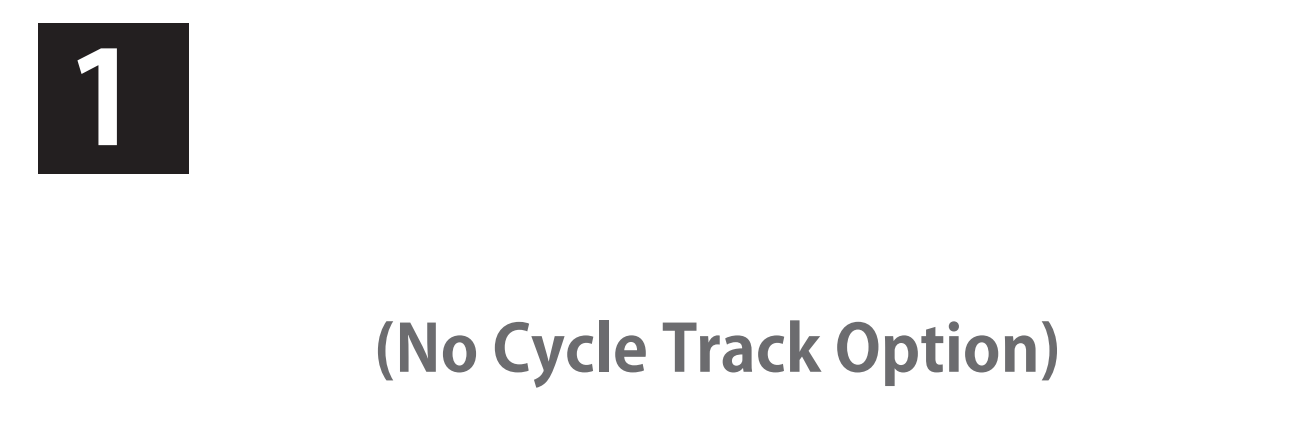
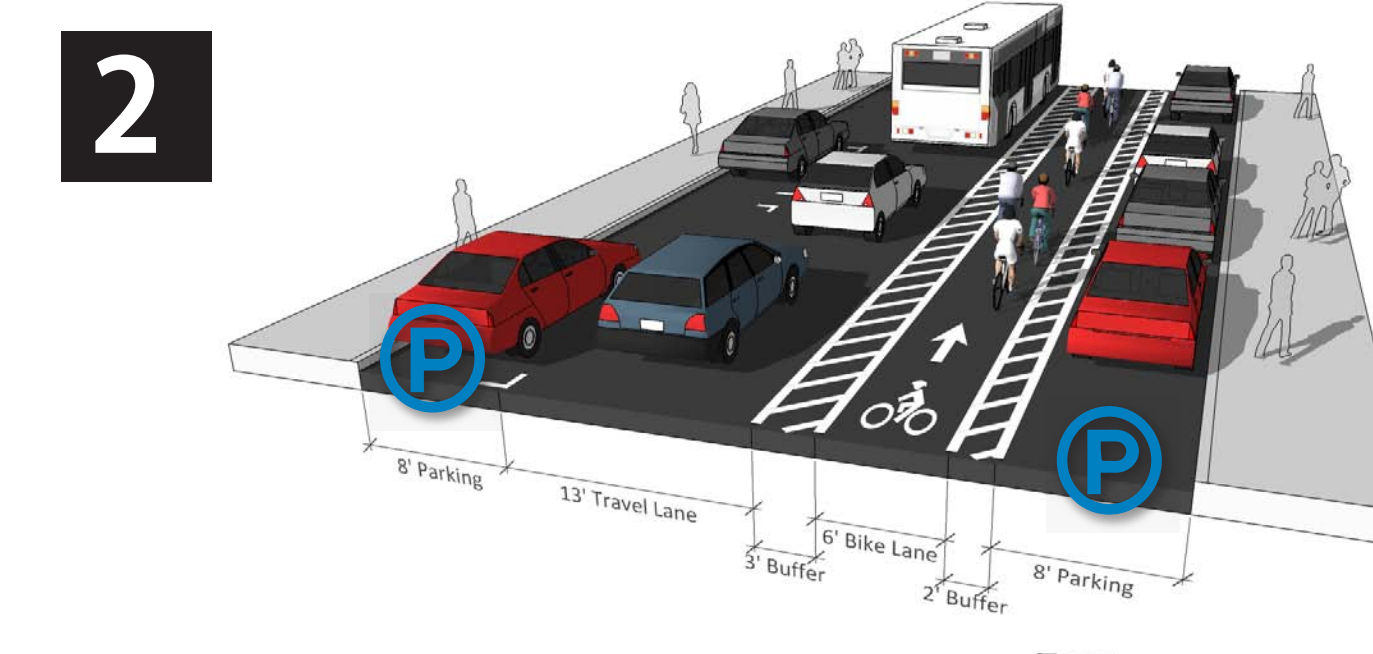
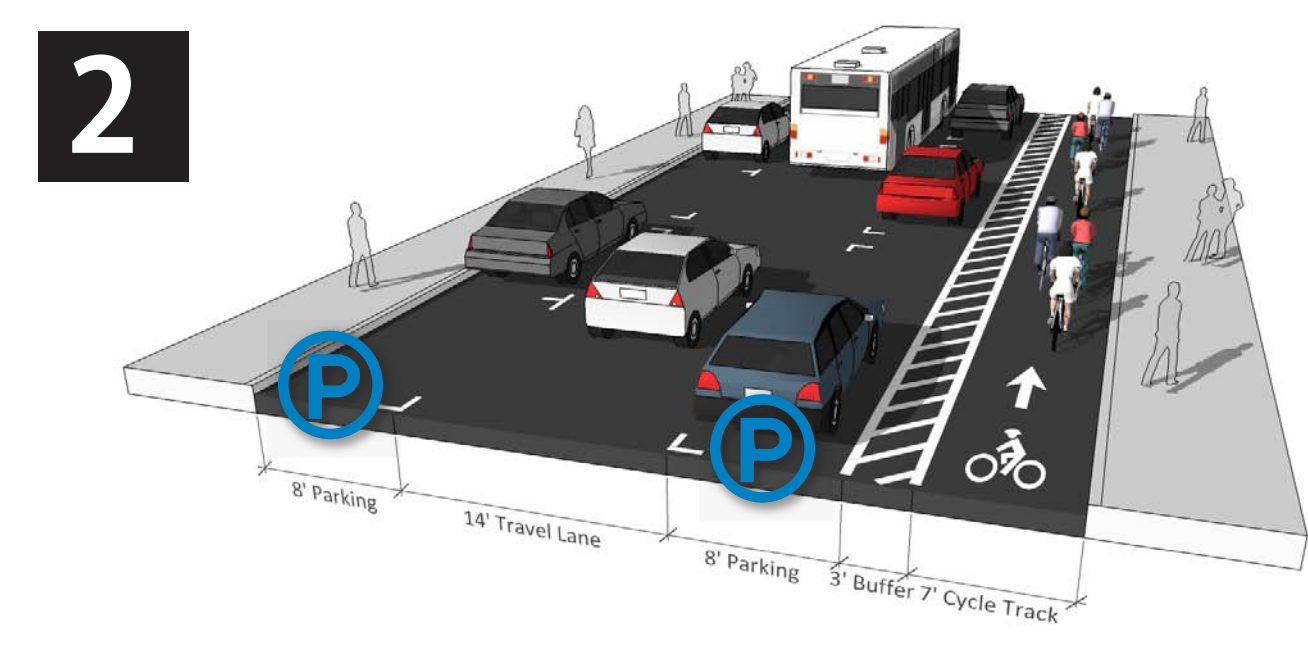
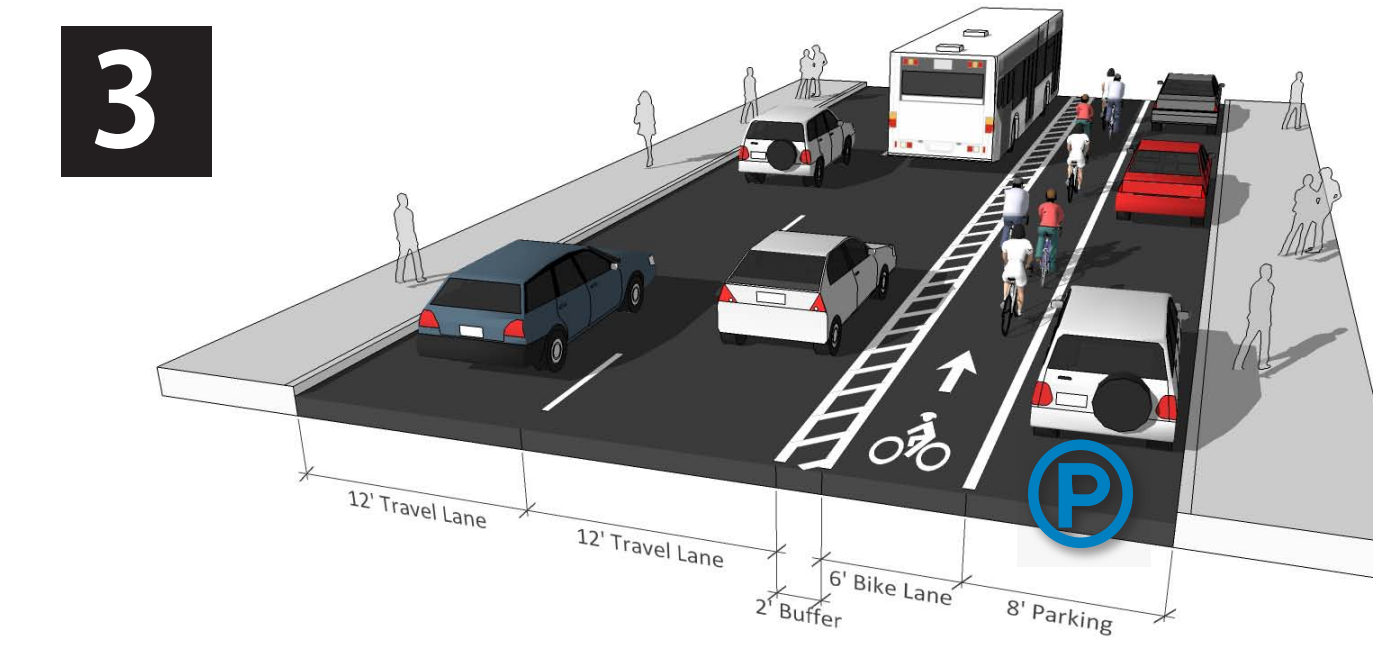
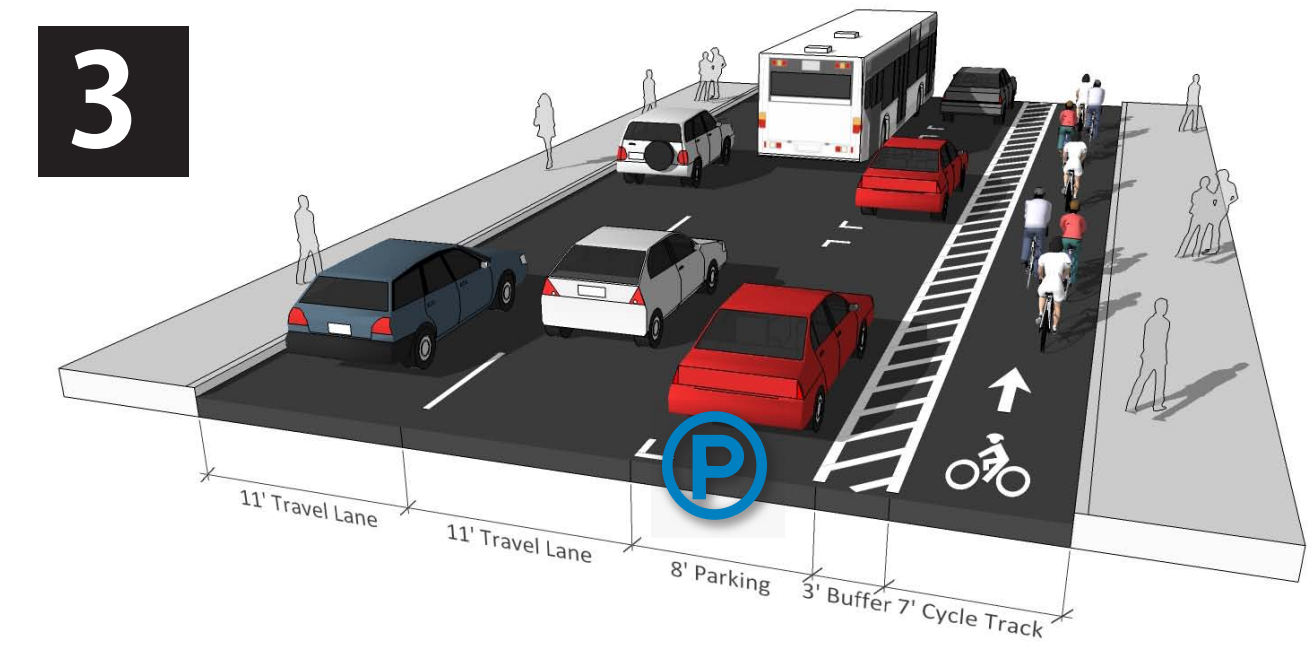
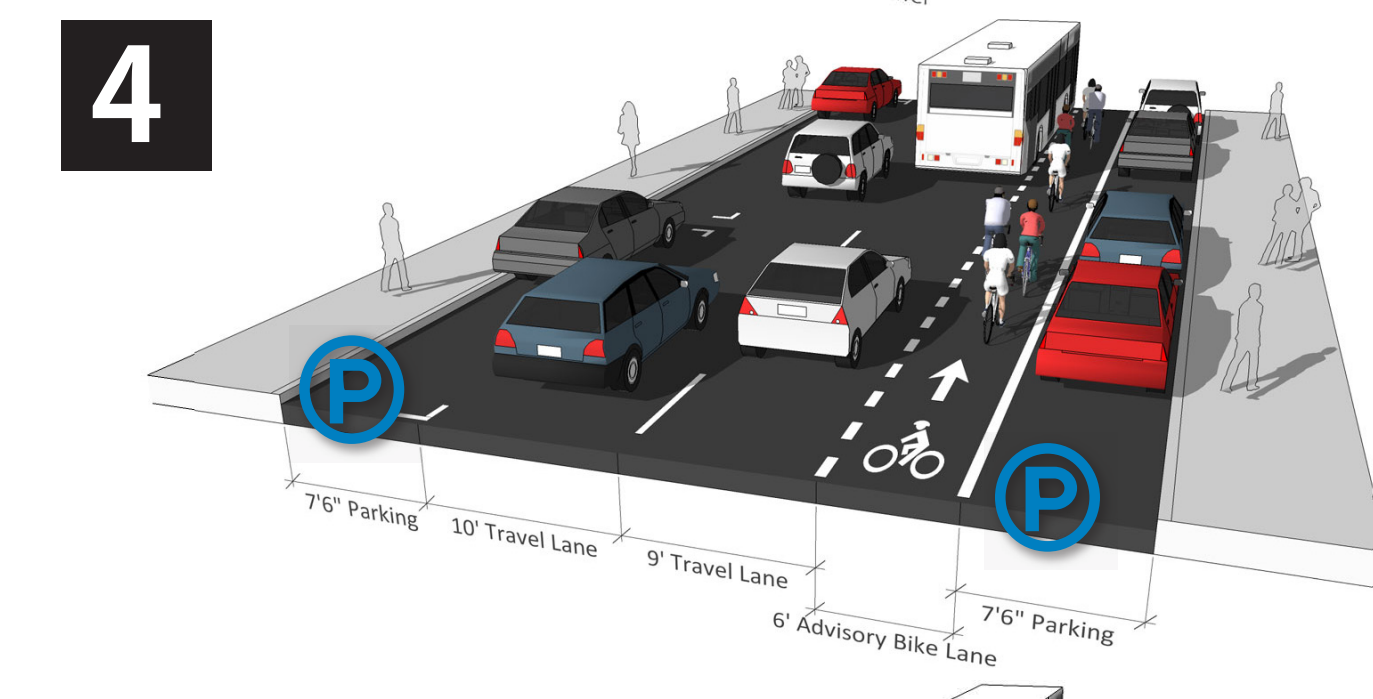
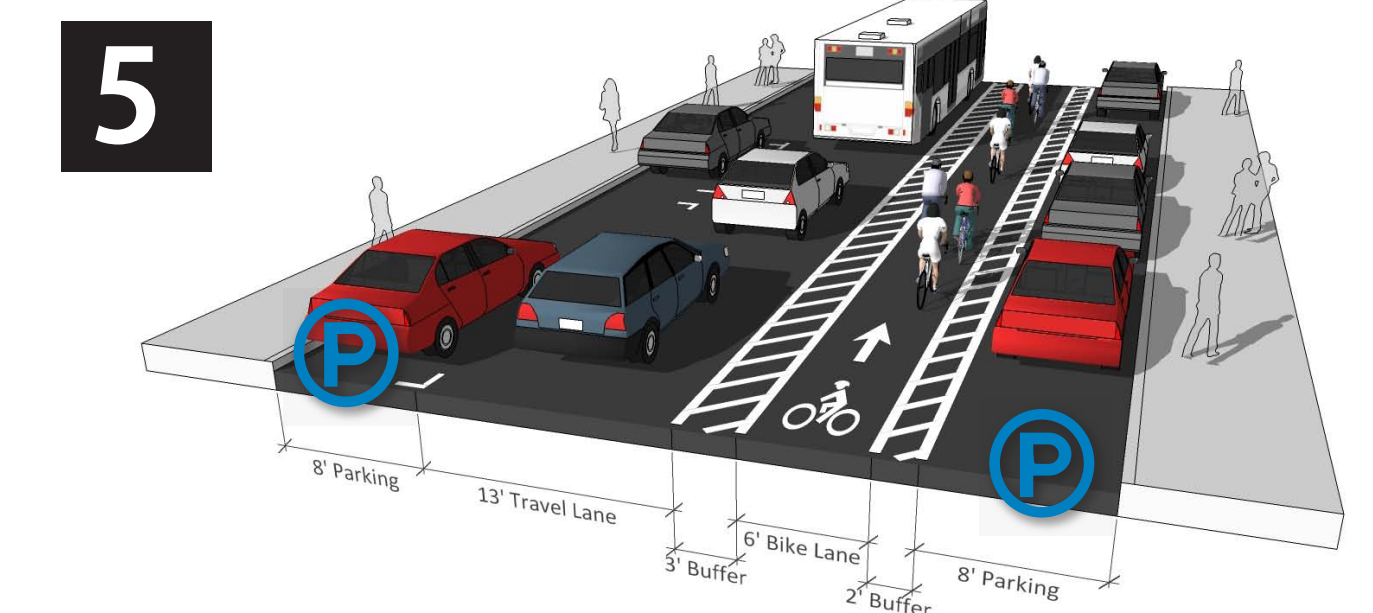
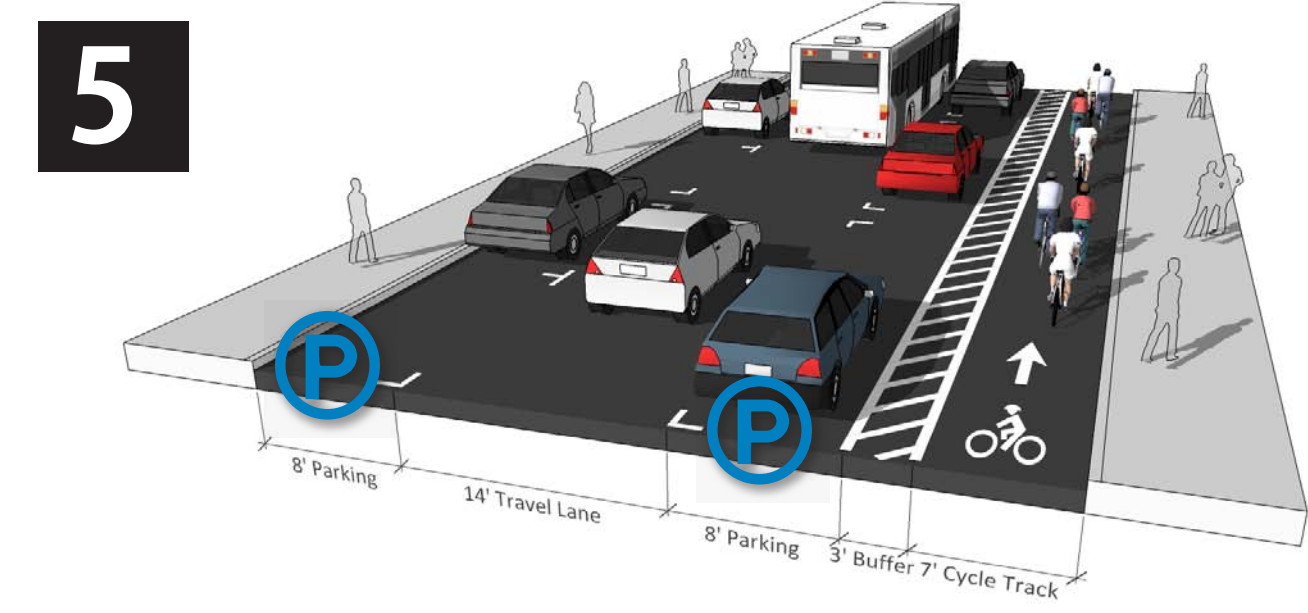
EXISTING CONDITIONS



PROPOSED ALIGNMENT OPTIONS

CYCLE TRACK

ENHANCED BIKE LANE



Appendix B

Detailed Responses to Questionnaire

Question 1: Travel Mode - Additional Comments

1	We live just off Going bikeway at NE 23rd. N. Williams is our main route from downtown.
2	daily commuter
3	I bike on Williams roughly 300 days a year.
4	Remove onstreet parking on at least one side in segment 4
5	Crosswalk enforcement and/or infrastructure improvements & bus/bike conflicts feel like biggest issues.
6	Would like to see segment 4 (Cook to Skidmore) reduced to one lane with parking on both sides for commercial use & a buffered bike lane to prevent dooring. Also need to step up enforcement of the speed limits existing. Saw Portland police car driving at least 5 mph over limit just today. hogan46@gmail.com
7	Cycle track! I'm comfortable with existing conditions, but my family is NOT. The more separation we can get from traffic, the better.
8	Whatever type of bike facility implemented needs to be wider with a buffer in the door zone
9	I commute Williams on weekdays and use it frequently for other trips, and I live at Alberta & Albina.
10	Williams could be more people and business friendly with one lane of car traffic. We own a home between Going St. and Wygant.
11	Bike facilities are insufficient for amount of traffic.
12	Need cycle track or wide lane on whole street, including segment 4 - Remove one travel lane in segment 4!
13	We should not be trying to accommodate freeway & regional trips. They should be on I-5 or MLK.
14	Buffered bike lane - 1 car lane
15	Bike mostly. Drive a block or two, but mostly I use MLK
16	N. Williams has the potential to be an active transportation thoroughfare. Let's do it! Single lane of auto traffic for entire street with cycletrack!
17	Please call/email to discuss more. Lisa Goorjian Duh 503.781.3809 or lgoorjian@gmail.com Please consider traffic calming @ intersection of NE Cook & Williams by installing a 1/2 street closure-allowing for westbound traffic onto Williams only - not allowing Eastbound traffic onto Cook from 405 16rby exit west of Williams.
18	Definitely support getting rid of one car lane! (And am a home owner on Williams btwn Going & Wygant)
19	Make two-way as it used to be; slow narrow lanes. Keep on-street prkg as ped-bike buffer. Bulb out at intersections. Cycle tracks. No one way couplets - too 1950s traffic sewer.
20	Driving is scary to-esp. in the rain, at night. I feel way to close to bicyclists & to other cars.
21	When I'm driving north, I know I have alternatives to Williams if it's too busy. But when I'm biking, there's no convenient alternate route.
22	Speed limits need to be enforced. Lane widths should reflect use: 33% cycling 66% auto. Or, discourage autos by reducing capacity for autos.
23	Bike 70%, Bus 20%, Drive 10%. Please address dooring danger near Lincoln!
24	Sharrows instead of advisory lane in segment 4
25	The major problem is not lack of space for bicycles or speeding cars but conflicts with buses, any improvement needs to address this conflict!
26	Need crosswalk on north leg of Broadway & Williams intersection. Go at same time as westbound bike signal
27	We do not need 2 vehicle lanes. Williams is not an arterial street.
28	I drive more than I use anyother mode, but I need more protection when I walk and bike. Please reduce auto lanes to improve active transportation.
29	Slower traffic please! No buses in Bike lane. Left side street parking only.
30	For being a main "bike-route" this (these two)(streets are far too car dominated. I don't feel safe riding here with my family.
31	I recommend further "traffic calming" features on Williams. Specifically built-out sidewalk corners at intersections and speed bumps for motor traffic but NOT bike lanes.
32	As longtime community member who was struck by a car as a kid and one of my friends killed by a car in this very area remember the children and pedestrian safety.
33	I work at Friends of the Children (mentoring kids @ Boise/Humboldt/King). I don't feel safe riding myself on Williams, let alone riding with the kids.
34	Cycling is my preferred mode of transportation & I think it should be a top priority in this project.
35	I want 1/10 of the street grid to be car-free (local access one way only). Cars & bikes don't mix well once they contact one another, discouraging bike riding at all.

Question 2: Pedestrian Treatments

Suggested Marked Crosswalk		Suggested Curb Extension Locations		Suggested Signalized Intersections	
Location	# Votes	Location	# Votes	Location	# Votes
Often or All	8	Often or All	7	Failing	5
Beech	5	Beech	5	Cook	4
Failing	3	Failing	4	Often or All	2
Shaver	2	Mason	4	Beech	2
Mason	2	Shaver	3	Knott	1
Monroe	1	Monroe	2	Stanton	1
Cook	1	Cook	2		
Knott	1	Knott	1		
Going	1	Going	1		
Fargo	1				

Question 3: Bus/Bike Conflict - Additional Comments

1	Make 2-way St & 2-way cycle track; narrow lanes; keep prkg on street as buffer; still too much of a traffic sewer!; No 14' Lane!
2	Question 3: how? Keep Williams one lane throughout, allows for bus/bikes to have their own, separate space
3	Cycle track on far right side of road to avoid having cars/buses cross bike lane
4	Transition to left could be difficult but not impossible
5	On your list of negatives you could say the same about turning left (with regards to left-side bikeway). Alternatively, you could move the bus stops to the left and have the busses drive backward :)
6	One lane for motor vehicles - and one very wide bike lane - bikes & buses (only 44 N of Fremont) must negotiate space!
7	Why are the cyclists in the picture riding side by side in the bike lane? This seems unsafe with respect to dooring risk (harder to take evasive action to avoid dooring) & it results in more lane changing by cars trying to stay away from the bikes (not very safe on a street filled with peds, bikes, side street entry/exit, parked cars, etc) Why do bikes do this during evening rush hour? Need wider bike lane & better separation.
8	Bike safety! Nice job on the open house, btw
9	Cycle tracks need to be wide enough to accommodate cyclists of different speeds and abilities, allowing for safe passing without getting into a door danger area. Do we need to continue to subsidize auto travel by providing free storage on the roadway?
10	Let's have confidence in the ability of bus, bike operators to start behaving better.
11	I like the dual bike lane with the two car travel lanes and no parking
12	The more separation between bikes and motor vehicles, the more we'll see an increase in ridership of "interested but concerned"
13	Need a wider bike lane, regardless of implementation
14	Left-side bikeway: best with 1 motor lane - not 2
15	Left-side bikeway: best with 1 motor lane - not 2; Dual bike lane would be good. There are a wide range of cyclists speeds. Same people pass on right or too close.
16	1st choice: dual bike lanes; 2nd choice: cycle track with bus passengers deboarding in buffer area
17	Left side bikeway: worth considering; last question: is this buffered bike lane? Then, yes! I think any of the proposed solutions are a step up, but the cycle track would be the most preferable.
18	Cycle tracks will take care of bikes passing bikes in road; turns onto Williams. All the way from Weidler to Killingsworth!
19	One lane is the best way to make this a world class bikeway! Safer, greater sense of place. And please paint the bike line its entire length, not just in bike boxes!
20	I think signal difference will be too confusing and won't eliminate bus/bike problems
21	Take out on street parking
22	A cycle track like the downtown Broadway one would be an excellent choice for making biking on Williams safer. It would help with dooring and with bike/bus conflicts
23	Cycle track would be better on Rodney 7th ave. or side street. Streets not previously planned for cycle track
24	Dual bike lane! Yes!
25	Please make any bike facility width of current bike lane south of Fremont
26	Left side bikeway: If only 1 auto lane; Remove an auto lane on the ride side parking
27	For two last questions: If most appropriate
28	I can manage the existing conditions - just get rid of onstreet parking
29	I suppose the sue of cyclet racks with "in-street" bus stop islands, if not located at a signalized intersection improved signing is needed to encourage cyclists to yield to peds in crosswalk
30	Like this for no cars, bus passing would be okay, need to keep clean during winter, especially not buses going 1st
31	Separate signals are too often ignored by drivers!
32	Question 2: undecided...I don't have experience riding in one. Additional width at bus stops is a good idea.

Question 4: Signals - Additional Comments

1	The 1,100 auto capacity is just slightly higher than one lane can handle. We know that if we reduce capacity cars will find other streets if the congestion gets bad enough. most of the cards should be on MLK or I-5 at PM peak anyways.
2	Am for two car lanes
3	I think that the "green wave" will not work here. The difference in speed between bikes/cars going uphill is big yet alone amongst cyclists themselves
4	More lights = more idling = more exhaust fumes in your face!
5	The 1,100 auto capacity is just slightly higher than one lane can handle. We know that if we reduce capacity cars will find other streets if the congestion gets bad enough. most of the cards should be on MLK or I-5 at PM peak anyways.
6	Signals are expensive, explore other options for controlling speeds
7	If lights are added, time them for bike speed. Prioritize pedestrian access w/ better crosswalks
8	I also support reducing it to 1 auto travel lane from Weidler to Killingsworth. Cars will go to MLK Jr. where they should be either way!
9	The signals MUST have a 2-3 signal green wave. Segments 2-5 should have 1 motor lane. Maybe it would cause a reverse induced demand and keep 1 lane capacity.
10	need to slow the traffic down - like drag strip now - make slow and 2 way! with good cycle facilities
11	Rather than spending \$ on signals, spend the \$500,000 on bike & ped improvements thru the corridor. There's lots of "high density" car-like "development" going on Wms between Cook and Shaver. to increase density, without adding car capacity, you need to simultaneously increase the quality of bike infrastructure. If you make a world-class route from Wms & Shaver to the Bwdy Bridge, many people will choose to bike. As it is today, many of these people will still choose to drive.
12	While I support slowing auto traffic signals are expensive. And traffic will shift to MLK eliminating the need for two auto travel lanes.
13	Also would like reduction to one lane - Cook to Skidmore with buffered bike lane to prevent dooring
14	In order to reduce speed. Would help.
15	Be brave! Go for bicycle green wave!
16	Signals are too expensive. The current signals are timed to encourage speeding & force cyclists to stop often. Just fix that.
17	Crosswalk unclear 4 senior & 1 parapalegic cmtr w/in close proximity
18	Could be used for all streets only during peak hours - not to take away main street designated redevelopment of vacant/empty lots. Please do NOT put in more stop lights. Its hard to stop when riding with kids or an xtracycle. Its expensive if speed is an issue. Go to one lane or have cops ticket.
19	The system that one lane doesn't work due to the fact it doesn't take into consideration other factors - turns-etc other feed of in traffic
20	Would like to see same \$ used for better lanes and other calming treatments that make neighborhood nicer
21	timed to 12 mph
22	bicycle greenway please! remove car parking. People will walk & bike & bus to neighborhood businesses
23	motorists have: mississippi/albina, MLK, 7th, 15th, 42nd, 57th...Cyclists have...Williams. Move the motorists elsewhere.

Question 5: Tradeoffs - Additional Comments

Segment 1: Weidler St to I-5 On-ramp	Segment 2: I-5 On-ramp to Russell St	Segment 3: Russell St to Cook St	Segment 4: Cook St to Skidmore St	Segment 5: Skidmore St to Killingsworth St
curb extensions to slow traffic	add lights and curb extensions-slow traffic	slow traffic w/ curb extensions	slow traffic down	Think there needs to be a traffic control for bikes in BL and cars turning right off of Williams
Haven't you learned anything from Alberta Street?	Are you aware that Williams is the alternate path NB from I-5 from 3 - 6:30 pm	This only reduces parking for residents and it is interesting that the churches are the only bldgs with off-street parking	I'm still concerned about cars coming off Fremont Bridge that "scope out" the street with the shortest line of cars and travel 3-4 block south to cut through the neighborhood	The traffic issues are as important from Weidler to Killingsworth
There seems to be adequate space for all here. Problem is road gravel	heavy traffic should be directed to I-5 and MLK	Public roads are primarily for transport, not parking	At Stanton and Williams, due to proximity to Emanuel Hospital unfortunately the wisdom of a traffic light on Vancouver was not carried over to Williams	Not necessary here. Slow the auto traffic
too congested	Prefer a cycle track	would rather see reduction to one travel lane	Too expensive when paint, sidewalk extensions and law enforcement can accomplish same goals	only during peak hours
yes, but through the entirety of N Williams	it's too congested, not enough time for a vehicle to get through lights, not timed to get more than 1-3 vehicles through	A cycle track would allow 2 lanes of mv traffic and 2 lanes of parking! Why not?!	You should remove a travel lane or parking lane - highest conflict for dooring in the entire length of Williams	even in segment 4
It will absolutely cut down on congestion and smog	800 cars=2 lanes versus 400 bikes=1 lane. Look at the rates. It's easy math	during peak	plus reduction to one lane and possible off-street parking	most workable solution is sharrows with traffic calming
	perhaps bus/bike lane - buses trying to merge in single line may cause more issues	remove 1 traffic lane	I would prefer enhancements that would slow mv traffic. Curb ext. at intersections and speed bumps	Any decrease in auto lanes will slow down commuters, also applies to segment 1 and 2
As long as Broadway transition is safe	the driveway entrance to the gas station needs to be improved to help avoid right hook crashes	If so, provide more off-street parking	during peak hours	Yes, this is a developing area and giving it a sense of place with slower traffic will really help
an enhanced bikeway can accommodate more users at peak than auto	I do, especially as car traffic isn't that bad here	Please consider removing travel lane in this segment for ped safety	remove vehicle traffic lane	an enhanced bikeway can accommodate more users at peak than auto
It's always so congested here with cars anyway. alternate route for bikes to bridge would be better	an enhanced bikeway can accommodate more users at peak than auto	Again, I feel that there should be even just one street in PDX that favors bikes over cars. Make cars go to MLK	also remove one travel lane and add cycle track	Based off of the current bike volumes, for sure!
make more pedestrian friendly - make less drag strip like. Slow it down and close/move on/off ramps	The extra lane just makes cars drive too fast anyway	how will you ensure neighbors can still park close to their homes	Also, reduce to one lane on entire corridor. This is a neighborhood collector, not an arterial - car commuters should use MLK	very much so, I own a home on this street
improves ped visibility	need also to slow motor vehicles	as long as it doesn't remove a travel lane	to 12 mph	Need to try to move more auto traffic onto other thruways. Which may mean expanding lanes on Interstate
It would create more problems	Yes, make two-way w/ narrow lanes	not worried about this section	also at Stanton	less confusion is better for bikes and cars
	i like this idea a lot	I fully support removing parking anywhere on the street	signals are expensive. Money could be used to improve traffic separation	Cycling should be a main priority - it aligns with our vision of a green people friendly Portland (our values)

	improves ped visibility	Williams should not be used as a regional collector and is under used for most of the day by cars. Cyclists deserve to have a bikeway that is safe for them to travel and that encourages otehrs to choose bicycle travel	I don't support the idea of a gap in an enhanced bikeway here. This is the worst, most dangerous part of Williams. The greatest effort should be made to support the safety of all users, not just cars	Maintain auto turn lanes at Killingsworth to prevent backups
		Parking is rarely used here	Perhaps around Cook b/c of Fremont Bridge traffic	make it consistent the entire length
		It won't be needed if one travel lane is removed	BUT this needs an enhanced bikeway more than anything because of the heavy car parking and narrow bike lanes. Remove west side parking and use space for enhanced bikeway	For residents/property owners it is not clear how these changes will benefit them
		keep on-street parking for a ped/bike buffer; remove travel lane for bike facility, not parking lane	Can't accept trade offs of 2 travel lanes on this segment. Safest solution for all modes is a one-lane retail district	It will do numerous things i.e. bikes can pass each other safely, cars have hard time speeding, turns onto Williams safer
		But would be better with 1 lane of mv traffic to make the transition better to/from the other side of the street	please, please bridge traffic is awful for those who live on Fargo St	Make 2-way also - narrow lanes too
			Reduce to one travel lane. Capacity is close enough. Improving bike facilities will reduce car traffic	I never experience much traffic when driving, but feel crowded on a bike
			Keep parking in this section. Important to businesses	It would create more problems
			won't help/work	
			I cross at Failing often - it's scary!	
			the light thing in tyhe video means I would be cycling more between parked cars and cars that have been stopped at the light	
			Not enough! You must come up with a way to widen and enhance bikeway. It is unacceptable to do not a thing other than signals	
			I also support reducing it one auto travel lane here	
			Support one auto travel lane from Cook to Skidmore	
			signals too expensive, explore other traffic calming measures, i.e. chicanes	
			Possibly eliminate one auto travel lane or parking lane to allow access with high volume and destination density	
			Slowing traffic is important. Still, I think this doesn't go far enough to increase safety for all users. More bike capacity is needed here!	
			at Failing	
			It won't be needed if one travel lane is removed	
			Make 2-way also - narrow lanes too	
			Enhanced facilities for bikes should go through here too. It will HELP business	
			But it doesn't alleviate dooring/encroachment problems for the bike lane in this section	
			If there is at least a practical bike green wave	
			improves ped visibility	
			Please do not remove CT option. There are way too many issues with dooring and dangerous ped crossings here. Why should an entire lane be dedicated to parking when so many more users would take advantage of a safe travel lane?	
			adding lights and signs to slow traffic down	

Question 6: Additional Comments

1	Crossing for peds at Going needs some kind activated signal-crosswalk is not safe enough. Turning for bikes and cars on Going and Vancouver causes many "almost accidents" because traffic calming is difficult to see
2	Reducing Williams to a single lane to slow traffic only helps bikers who commute, however it reduces access to the roadways for residents. Williams residents would have difficulty entering grid lock traffic . Planning near businesses should require off-street parking
3	Curb extensions need special attention to cyclists to prevent pinch points between motor vehicles and curb
4	Allowing 250 cars over the one lane capacity limit in Segment 4 to limit even having a conversation about the number of lanes is not productive. Let's have many solutions (including TDM solutions for those 250 motorists) on the table to increase the safety and livability of this section. Cook to Skidmore could be the anchor of another great 20-min neighborhood. We should foster that with the road/transp. system, not let 250 peak hour commuters dictate our actions or options
5	I like "part time parking" in some sections like Fremont to Shaver. "No parking 4-6 pm gives you an extra bike lane on this route
6	Take Williams down to one lane the whole way! Or, if you need additional capacity for the I-405 off-ramp, leave it 2 lanes from Cook to Fremont but buy a strip of land on the west side of the street from Hostess and widen the street for this 400' section
7	Eliminate parking on west side of street to provide 2 car lanes and new bike lane treatment (Fargo neighbor)
8	Don't switch back and forth between 1 lane and 2 lanes. Just reduce it to 1 lane. I say this as someone who DRIVES the route daily. If the traffic becomes too slow drivers (including me) will adapt or find different routes
9	Be consistent through entire length of Williams. A cycle track with green wave timing is my vote. Add a cycle track option to Segment 4. Marked crosswalks at all streets (visually safer). No ped walk push buttons. Every signaling cycle should have a walk cycle. Add signals at commercial areas/intersections. Regardless of cycle facilities, put Williams on a road diet (one travel lane) for entire length. I-5 on-ramp needs a single lane. This would simplify Broadway intersection as well. Ok to say "enough" to cars. Stop encouraging people to drive. EB cars on cross streets back up and cut thru neighborhood backup due to no left hand turn options. Reduce parking on cross streets near Williams to add left turn options.
10	Definitely do not like the shared/dashed bike lane approach for section 4. I would prefer existing. I think it would be lead to more bike/car conflicts
11	Make a double bike lane between Broadway and Weidler with three travel lanes and two 5' bike lanes. And do this anywhere else along the corridor that might make sense
12	there is a facility that employs disable persons at Tillamook. Lift buses clog up bike lane and street when they wait for their riders
13	Segment 4: If you "can't" improve the bikeway here then make Rodney St a bike blvd from Morris to Going
14	In general: make all parking lanes 7'. Make all driving lanes 10'. Use the rest for bike lanes
15	From Weidler to Hancock do a dual bike lane the whole length and remove all on-street parking. Add a block long dual bike lane on "the hill" from Weidler to Alberta, esp. on the steep sections. Use design guidleines on PBOT's master plan from 2030
16	I enjoyed the format of this open house as it easily allowed for direct feedback about the proposals. Thanks!
17	Segment 4 is the most dangerous part of Williams. The following are the hazards I encounter: business unloading/loading in the bike lane, high parking turnover/dooring issues, Bus in bike lane, parking traffic crossing into bike lane to park. Please consider an enhanced bikeway in this segment, I feel constantly in danger riding through this segment
18	Please comsider the impact of the Fremont Bridge traffic at Cook/Fargo. Both intersections are dangerous at peak hours as cars race across and cut through the neighborhood. Consider adding no parking zones along E side of Williams , turning to travel N is dangerous and blind at many intersection (Fargo, Monroe) Thanks!
19	I am excited to see meaningful and long over due improvement to Williams on the table. However, Segment 4 poses a serious dooring hazard to cyclists and I am disappointed to see improvements lacking in this area. It will not be an effective project without them
20	Great idea to have a transportation options table and ambassador at this open house. Please do this at other PBOT open houses
21	Williams is not an arterial street. It is at motor vehicle capacity only 2 hours per day on weekdays. Why are we creating options predicated on maximum accommodation of these vehicles when they have other options?
22	Segment 4: Please do not remove cycle track option. This is my main area of concern as I have frequent conflicts with parked cars here. It makes no sense to put the concerns of a few businesses above the safety of 1/3 of the road users on Williams

23	Full community input is important in this neighborhood. The gentrification in this neighborhood has huge impacts on a community and displacement of many African Americans. The remaining community members may see the rise in bike members as a further sign of gentrification. It's important to see what needs they see for this street that may compliment these bike improvements
24	I find segment 4 the most dangerous area to ride in on this corridor. I came to this event solely to discuss this segment and was bothered that it was not even brought into a topic for conversation
25	As a motorist, it is hard to see cyclists when there is a parking lane between my travel lane and the bike lane. Cannot see cyclists when I need to turn right. As a cyclist however, I like the protection of the parking lane to my left -- less likely that people will open car doors in my lane or use bike lane as parking. Also, if I were approaching an intersection where the cross street has a cycle track I feel it would necessary to have a signal at the intersection because it would difficult to see bicyclists traveling in the cycle track due to the parking buffer
26	Dual bike lanes are good, you could also use them up against parallel parking with no buffer
27	Left-side bike lane, if drive, needs to be wider than right-side lane, because people wobble more when checking over their right shoulder than left
28	Buffered bike lane that transitions to cycle track at bus stops
29	Yes to "reduce to one travel lane", "progress traffic at a slower speed". Partial yes to "visually narrow the street" - make asphalt extend all the way to the base of the curb, so there isn't a concrete gutter pan in the bike lane

Comments from Existing Conditions Map

Segment 1: Weidler St to I-5 On-ramp	Segment 2: I-5 On-ramp to Russell St	Segment 3: Russell St to Cook St	Segment 4: Cook St to Skidmore St	Segment 5: Skidmore St to Killingsworth St
Weidler: bike access from weidler to the bike lane on Williams is poor. Abrupt right turn onto sidewalk off Weidler doesn't work	Tillamook: Dangerous crossing at Tillamook (11)	Rodney: Turn Rodney into a neighborhood greenway (2)	Fremont: Dooring issues (2)	Going: Painted button-hook in lane neat, but creates unpredictable movement and bike/bike crash potential
Weidler: If this 'Copenhagen left' at Williams and weidler remains the same it needs its own bike signal	Hancock: Make a ped/Bike bridge over I-5 at Hancock	Knott: Median Island between Knott and Graham should be removed and travel lanes for cars reduced to one	Fremont: High speeds from light at Fremont north	Going: Love this greenway. Speed bumps annoying. Need to minimize car access
Broadway: MV's repeatedly violate the 'no right turn on red' signs at the interesection with Williams. Enforcement needed	Tillamook: Bike lane capacity N of Tillamook is a problem	Graham: One side for street parking between Graham and Stanton please	Fremont: Distracted pedestrians	Going: Merging onto Going from/to Williams/Vancouver
Broadway: Just after turning up Williams there is a big pothole and bus lane.	Russell: Bus Conflicts (2)	Graham: Make auto traffic one lane and make BL wider	Fremont: Need crosswalk and/or signal at Rodney and Fremont (2)	Going: Trees obstruct view WB turning S on Vancouver
Broadway: Leap frogging with buses worse on S end of Williams	Russell: Dooring issues	Graham: Bus leap frogging	Fremont: Don't feel safe on a bike between Shaver and Fremont due to parked cars, buses, speeding traffic	Wygant: Parking n both sides of the street between Going and Wygant rarely used
Broadway: Bus stop north of Broadway presents a conflict for bicyclists when buses block BL (2)	Sacramento: Unthank plaza residents are mobility impaired. Difficulties accessing grocery store across street. Would like a ped crossing at Sacramento	Stanton: Add traffic signal at Stanton and Williams there is a large vulnerable population in the area that needs adequate access to the hospital (3)	Beech: Car doors	Killingsworth: Crossing at Killingsworth and Williams can be tricky
Broadway: Need crosswalk on N side of Broadway at Williams. Critical route for peds		Stanton: Problems with dooring at the Quik Mart	In General: 2 lanes on Williams means bikes stay in door zone and maintaining a bus/bike conflict	Killingsworth: One way road is not labeled well. Cars go wrong way and cause accidents
		Stanton: BL too narrow for number of riders	Beech: Provide more bike parking; the neighborhood is full of car parking	Killingsworth: NB traffic needs left green arrow signal to turn onto Killingsworth (Bikes don't know it's safe when SB traffic is present)
		Stanton: Keep one side of parking	Failing: Increased visibility of ped crossing. Easier crossing for cars would help	
		Morris: Keep parking on street (2)	Failing: Dooring issues with parked cars between Beech and Failing (14)	
		Morris: Dangerous ped crossing, add curb extensions (2)	Failing: Difficult crossing for peds because parked cars reduce visibility (4)	
		Monroe: Difficult to see clearly to make turn onto Williams because the cars park too close to the interesection	In General: Bike lanes too narrow between Russell and Shaver to accommodate so many bikes	
		Fargo: Needs no parking S of interesection with Williams. Hard to turn auto as it is a blind spot	Failing: There is no loading zone in front of commercial businesses. Trucks double park and unload in BL	
		Fargo: Difficult to cross at peak hours with cars from I-5 aggressively trying to cross/turn at an unsignalized interesection (2)	Segment 4: Remove a travel lane in Segment 4 (6)	

		Cook: Add signal at Cook and Vancouver	Segment 4: Need buffered bike lane or CT	
		Cook: Close Cook to EB traffic and open to WB	Shaver: Cars turn across BL	
		Cook: Dooring problems between Page and Ivy	Failing: Cars turn across BL	
		Cook: Add signal at Cook and Williams (2)	Segment 4: Take away car parking and add bike lane capacity	
		Stanton: More crosswalks needed at interesections between Stanton and Mason	Failing: The businesses thrive on bike traffic	
			FailingL Leave as is - Main Street Business	
			Segment 4: Leave 2 vehicle lanes for cars and leave parking as is from Cook to Skidmore	
			Segment 4: is uncomfortable to ride on during rush hour	
			In General: Make Williams/Vancouver focused on transit and bikes	

Appendix C

Post-Meeting Detailed Responses

1. I enjoyed talking with you the other day at the open house for the northeast williams traffic safety project. you guys put on a very good presentation, and i think you provided a good opportunity for meaningful public feedback.

i actually like what you are proposing for segment 1, not that i myself have ever had any difficulty passing a bus on the left where appropriate and letting the bus overtake me safely where appropriate. but i acknowledge that certain formal treatments such as the cycletrack with the boarding islands to the left can actually facilitate a rational interaction between modes. and i said as much to adrian when i spoke with him.

much of what michelle and alta and PBoT have put forward is reasonably well thought through. but as i mentioned to you, and to michelle, and to adrian on saturday, i do have problems with your plans for segment 4.

if you cannot persuade the merchants to give up onstreet parking, and you choose to yield to them on the issue, then you should give up the second travel lane, simple as that. the existing configuration is unacceptable, because a narrow bike lane is squeezed between a narrow travel lane and a not very wide parking strip.

i simply will not use the existing bike lane, and an overtaking motorist can just move over to the left lane as far as i am concerned, regardless of 814.420 . what PBoT should do is reinforce this reality by removing the stripe and putting in sharrows. the proposed dashed "advisory" bike lane is unacceptable, because it continues to suggest to both cyclists and motorists that it is somehow safe for the cyclist to ride that far to the right.

on a somewhat different note, let me reiterate something i suggested to you on saturday, for which there really was not time for any lengthy discussion.

by saying they cannot do without the onstreet parking, the merchants are acknowledging that they are burdening the transportation infrastructure. this is just a tautology.

PBoT is trying to address a situation here that involves a heck of a lot of traffic -- motorists, cyclists, and pedestrians --, and that has potential effects throughout the neighborhoods, not just on williams, if any substantial diversion results from anything you are doing.

to me, this almost cries out for a transportation system development charge overlay. suddenly, we are talking serious money. you can actually signalize all these intersections and put in some curb extensions, boarding islands, and so on. and you can actually deal with some of the side issues on cook or fremont or wherever, maybe build out the rodney greenway. it is not too late to start thinking on a larger scale here. let's do it right.

2. I was unable to attend today's open house regarding the N Williams Bikeway project. I am writing to show support of any improvements that can be done to the corridor. I am a bike commuter who uses N Vancouver/Williams almost exclusively for my travels between home and work. I would like to see Williams changed to a one-lane vehicle travel, with a wider bike lane. I don't see a need to eliminate on-street car parking, as I think it could hurt businesses in the neighborhood.

I don't mind biking on Vancouver, but there are many days while biking on Williams that I feel uncomfortable and sometimes even unsafe. I love to ride my bike and enjoy the benefits cycling brings: healthy mind, healthy body, healthy environment. I know there are a lot of cyclists who ride one block over to the east, to avoid the congestion of N Williams. I prefer not to do this, as Williams is the best and fastest option. That being said, I don't want to see more traffic lights on N Williams - I think it'll slow down bike traffic too much. Thank you for taking the time to read this email. I look forward to seeing any improvements PBOT can bring to what can be one of the best cycling corridors in Portland.

3. I have heard that the City is considering changes to N Williams Ave. Based on materials I have looked at, it appears that the City is considering increasing bus and bike space. I strongly support this, and I am disappointed that I couldn't make it to the open house today.

At present, when biking in the area, I avoid Williams because of the dooring hazard, bike lane congestion, bus conflicts, and high motor vehicle speeds. I take Rodney instead, but it is a poor solution, with many stop signs and high-stress crossings of busy streets. Portland needs more space for bicycles on Williams. A cycle track is the best answer, because it will physically separate bikes from motor vehicles, improving safety and decreasing stress. It will also eliminate bus/bike conflicts and make pedestrian crossings much easier.

It seems from this document:

<http://www.portlandonline.com/transportation/index.cfm?&a=344478&c=53905> from Poyourow Consulting that there are barriers to increasing bus/bike space in Segment 4, the busiest commercial district. Please do all you can to overcome these barriers and improve conditions for bikes in Segment 4 as well. I think a cycle track is appropriate in Segment 4.

Some congestion for non-bus motor vehicles may be a price we have to pay for achieving the sustainability and livability goals that the City has laid out in document after document. However, I think it is more likely that people driving will choose other routes and times and a one-motor-vehicle-lane Segment 4 would not experience severe congestion. Thank you for your time, and best of luck on this complicated and important project!

4. I take Northbound Williams about 5 times a week. For the last month I've spent every ride looking at ways to fix that street on a limited budget. I've spent over 4 hours in the last month on site. I had a PSU class this morning so I could not attend the Church meeting today (Saturday). The most cost effective way to build safety: I'd highly suggest Williams go from 2 traffic lanes down to 1. Any other solution is spending a whole lot of money for very few results, possibly causing more injuries.

One traffic lane benefits: the cost is in paint and the labor to add or remove paint smoother flow of traffic, as seen in SF Valencia Street, previously 2 lanes in similar business district calming effect on moving car traffic would leave room for a cycle track or a very wide bike lane (side by side bike wide) leaves room for car turn lanes near key intersections more room for all the cabs and handicap vans with wheelchair lifts more parking for all the churches Currently there are many spots where there is no parking because of the 2 traffic lanes. cars are currently blocked by a buses that stop, rendering the right traffic lane a dodge in/out lane for cars below is a strange idea, so I only mention it for brainstorming. It may be a crazy

idea, but what about putting a cycle track on the LEFT side of Williams North of Russel and all the way North as far as money will last? From Broadway to Russel the bike lane would have to be on the right hand side of the road due to the Interstate on ramps. A left cycle track would have no bus or car leap frogging. I bet there would be less risk of a left hook car hitting a bike.

5. I was reading the following article about the various choices and trade-offs for North Williams Street. I noted that it said that a second traffic lane is needed at most during rush hour, and that "parking demand on Williams is high, especially on weekend evenings". If its true that the peak parking usage is not during peak traffic time, how about using one of the parking "lanes" for a second lane of traffic, but still allow parking there during other times, like occurs on Division Street? In addition, the parking could only be replaced by a second traffic lane where necessary. <http://www.activerightofway.org/p/a-better-williams-for-everyone-if-we-ask-for-it>

6.



7. Just wanted to say that the open house on Saturday was great. All of the staff I spoke with, from Alta and PBOT, were well informed and attentive, particularly Drew Meisel from Alta. The posters and comment formats were perfect.

I formally registered this comment in written and oral formats, but I just want to reiterate: The fact that we've allowed 250 peak PM commuters to dictate the conversation about the number of lanes on N Williams is unproductive. If were to have a community dialogue and decided that N Williams needed to retain that capacity, then I'd be less concerned, but we're not even allowing the community to really have the conversation formally. Instead, we've started the conversation by limiting our options in the section

that needs the most attention. We also have an entire division at PBOT that works to manage demand and we've shown success at reducing the number of automobiles in a corridor during the Keep Portland Moving/SmartTrips Downtown project (one of the original goals was to reduce PM peak traffic on 4th Ave by about 150 cars). I'm not convinced we can remove a lane on N Williams without negative impacts, but I'm also not convinced that we can't. Let's talk about it! Thanks for listening/reading!

8. I just wanted to pass on some other comments I've been hearing from neighbors. Just as at the meeting, I have been asked how this plan helps pedestrians. I think going to one lane and building a bus island are going to substantially help pedestrians in our segment of Williams, but in segments North there may need to be more crosswalks. Also some kind of signage that indicates that bicycles must also stop for pedestrians at crosswalks? Anyway people may need to be convinced. Painting a crosswalk in at Tillamook would certainly help. I am hearing a lot about future changes to I-5, including removal of the Flint street overpass. I hope there can be discussion of creating a better overall pedestrian environment on Broadway. So many places are forbidden for peds along the on and off ramps!

9. I will be unable to attend the open house tomorrow, however please move forward with reducing Williams to ONE LANE of automobile traffic. This will calm automobile traffic (through congestion) but also keep existing parking and allow an expanded bike line. I'd also like to point out that the city did something similar to Interstate ave in that it reduced a busy two lane (in each direction) road to one lane...but for the greater good (light rail). I am a North Portland resident that works downtown and I bike on Williams at least 7 times a week and find several sections dangerous. It would be wonderful to channel some of the automobile through traffic to MLK as that road is wonderfully designed for cars.

10. I am a 4-5 day a week bike commuter for 10 months out of the year, and I take the Williams/Vancouver route from Ainsworth to NE Monroe every week day. I would love to see a wider bike lane. I have three not-so-pleasant interactions with motorists who were either parked in the bike lane or pulling into a parking spot (all three happened in front of the Ristretto Roasters/Cha Cha Cha building) and would love to see a larger presence for the bike lanes. I unfortunately have to work tomorrow and won't be able to attend the open house.

11. I'm writing today to request that future development along North Williams include much needed transportation improvements for cyclists. For those of us who choose to ride rather than drive along this very important corridor there are very real safety concerns. Please consider the safety of bike riders as paramount in future plans. Unlike drivers we do not enjoy the same margins of safety, either here or generally, and have far fewer options when traveling from point A to B. Use the opportunity to send a message that the city cares about the transportation needs of cyclists and cares about their safety and is willing to provide the best transportation option available. Thank you and regards for your work on behalf of all those who choose to travel by bike.

12. I want to congratulate everyone who's helped create the North Williams Traffic Operation Safety

Project. It's a much-needed step forward for all users of North Williams. Thanks, also, for all your work on projects around the city that are making it easier and safer for all road users to get around.

However, after attending the N Williams open house last weekend, I was surprised and disappointed to see that the city is considering leaving the lane configuration substantially as-is in Section 4, the section between N Cook and N Skidmore. I've been a daily bike rider in Portland since 2001, but as a relatively experienced cyclist, Section 4 is nervewracking when I ride my bike on it.

The problems I encounter when I ride my bike in that stretch include: The bike lane is in the door zone

Cars pull across the bike lane to enter or leave parking Buses and bike riders play leapfrog Bikes have to leave the bike lane into fast-moving traffic to pass If these challenges make me nervous as an experienced cyclist, I can't imagine more vulnerable riders like kids and seniors ever feeling safe biking there. I'm sure there are several solutions that would alleviate these problems, but a cycletrack certainly seems to me like it would adequately address nearly all of them.

Williams is an especially critical route for people on bikes, because there are no good alternatives nearby. In contrast, if we reduce automobile capacity in this section, there are many alternatives for people in cars. Martin Luther King is moments away for drivers, as are Interstate Avenue, and I-5.

I understand that some members of the public feel that the lane capacity is needed for existing levels of car traffic. But it hardly seems fair that the mode currently responsible for 1/3rd of all traffic is shoehorned into a minimum-width bike lane among narrow traffic and parking lanes. If the city succeeds in its intention to increase bicycle mode share, this section is going to get more dangerous as bike traffic increases on this route.

We have the opportunity to fix this right now, which is a whole lot better than waiting for a tragedy to spur action. Accepting the status quo -- a street that's designed to accommodate peak-capacity rush hour car traffic at the expense of people who walk, use bikes, and take transit -- will inevitably limit the street's capacity and safety for bike traffic.

Creating a high-quality bikeway along the entire length of N Williams is critical to increasing mode share for bikes. Instead of being afraid to reduce car traffic or parking capacity on this section of Williams, I am asking that the City demonstrate the courage of its convictions and develop a plan that serves the large and growing number of people biking there. Thanks for your consideration.

13. I was unable to attend yesterday's meeting but wanted to share my support to some of the proposed changes. I used to ride Williams/Vancouver daily from inner NE via Going to OMSI, but switched my routes when the Broadway bridge shut down bike traffic last summer and the Esplanade/Steel bridge numbers swelled to annoying for the infrastructure though the Rose Quarter (which is usually just dandy).

I know it was temporary but it was the last straw...I didn't go back to my old route. This bikeway is too congested with bikes! This is good! I support it but the infrastructure does not so I chose a lower traffic route home through inner SE for my own stress and to help alleviate the issue for others. Vancouver is

fine, Williams needs some kind of change.

The auto traffic is more or less fine by me, but I am a confident cyclist. I will take the lane to pass others and avoid dooring. I just prefer not to leapfrog slower cyclists or buses and have faster cyclists leapfrog me. And If I feel that way, imagine what less confident cyclists must think or feel?

This will never be a world class bikeway, which is too bad since it is such a great destination street. Now that I have taken another route home, I no longer am passing by the businesses on Williams where I might stop off on my way home for a meal or some shopping. Also, I was also always alarmed at how hard it was to comply for peds crossing the street with other cyclists blowing by you if you stopped or almost slamming into you, and If you stop in the bike lane, autos do not follow your suit. Something needs to be done, curb extensions, maybe a HAWK signal(s) in the more southern blocks near the hospital? Remove parking at the curbs so people can see and be seen when trying to cross? This street is not a great place to walk.

I think installing a 2 lane cycle track is the way to go, remove a parking lane, put in bus stop islands...The bike traffic on this street will not diminish over time, but will increase. We have the opportunity to be a best in class city with how we implement and prioritize active transportation going into the future. We have a freeway mere blocks away that is for autos only, they should be encouraged to use it. We have some nice streets well designed for efficient auto flow, MLK and Interstate nearby for people driving to chose. This 2 lane road is not really a good arterial, why allow it to remain used for something it was not well designed?

As for businesses, we have several empty lots on Williams, build a parking garage and remove some on street parking. Time after time when cities have taken out on street parking and improved the area for peds and bikes, business have seen a rocketing increase in foot traffic and Williams will blossom to a real destination street. I know I would change my route back, since Going is such an excellent connection to my neighborhood and Vancouver/Williams should be an awesome connection to the SE, but it isn't..yet! Thanks for listening, and thanks for all you do!

14. According to Rob Burchfield via BikePortland, the SAC for the N. Williams Traffic Safety Project doesn't like a left side bike lane on N. Williams because it might set up left turn conflicts with vehicles, would make right turns difficult because cyclists would have to move clear across the street to turn right, motorists aren't used to seeing bikes on their left, there is a design challenge in allowing a right turn from a cycle track on the left side, and finally a left side solution would put cyclists close to fast moving motor vehicle traffic.

One at a time. Left turn conflicts. What is the difference between right hooks and left hooks? Not much. Right turns would be difficult from a left side bike lane. When I ride N. Williams I go west and north, so I often make a left turn starting from the right side of the street. Why is that any better or safer than the reverse? Do more riders really go east or is that speculation? Motorists aren't used to seeing us on the left. It seems to me that from a left side driving position I will be more, not less visible to motorists. There is a design challenge in allowing a right turn from a left side cycle track. How is that different from allowing a left turn from a right side cycle track? I have a lot of confidence that P-BOT can design an exit from the

cycle track and signage showing the way to a turn regardless of whether it is from the right or left. Proximity to fast moving vehicle traffic? We're next to the cars now. Maybe the city should put as much of N. Williams as possible on a Road Diet and slow the traffic by 5 mph. On the other hand a left side bike route would eliminate the bus/bike conflict. My guess is that Tri-Met and especially the drivers would like that a lot. I know I would. If you eliminate the left side option, I hope it will be for better reasons than given so far.

15. As someone who bikes the Vancouver/Williams bikeways 3-5 days per week, I just wanted to add my two cents on the ideas being floated in the redesign. I'm not a fan of the left side bike lane personally. I'd rather see the one lane for cars and either a bike/bus shared lane or a bus/car/bike design. We need to resolve the issue with the buses, I definitely don't feel safe doing the leap frogging that's required (and the bus drivers don't seem too keen on it either) to keep at a reasonable speed. I don't think that Williams needs 2 lanes going north for cars during peak travel times personally...and those who frequent those businesses on Williams aren't doing so solely because there are 2 car travel lanes.

16. I want to thank you again for leading a very successful open house last weekend on the 'North Williams Traffic Operations Safety Project.' It was a pleasure to get the opportunity to chat with you and I applaud many of the innovative options that were put forth.

I am writing to expand upon a discussion that we briefly had. After reiterating my strong support for a continuous and connected cycle-track, I had mentioned how my perception of safety while biking dramatically increases when cycling in a painted bike lane or bike box. Not only is the lane much more visible for both motorists and cyclists, the bright green paint reinforces to all road users that this lane is exclusively for cyclists. While you had mentioned that constant repainting of these lanes would be expensive--even an aged, faded green lane would do wonders for safety and perception over a nonpainted lane. The paint does not need to be kept in pristine shape for the paint to be a success. From an anecdotal standpoint, it seems that the painted pavement that wears away the quickest is actually the bike boxes that motor vehicles drive over. A protected, green bike lane would not have cars driving on it, and thus wear away much slower.

As mentioned on BikePortland.org this morning, my point seems further reinforced by the recent memo from the Federal Highway Administration's about painted lanes: "The Office of Transportation Operations [at the FHWA] has reviewed the available data and considers the experimental green colored pavement to be satisfactorily successful... Positive operational effects have been noted... such as bicyclists positioning themselves more accurately. The research has also shown that bicyclists and motorists both have a positive impression..." Even smaller details like painted lanes will make a big difference in increasing both the safety and ridership of North Williams. I hope you will give full and fair consideration to a continuous, connected cycle track with green, painted lanes throughout the project's entire scope. Please feel free to follow up with me on any questions you may have. Thanks!

17. I didn't have time to fill out any feedback forms at the Open House on Saturday, but I would like to provide some input regarding the stretch of N Williams between Cook & Skidmore (segment 4). Please note this is my personal opinion, and although I utilized the sketchup model to help communicate

the idea, I have not billed the time used in creating this particular alternative. Can you forward to the appropriate folks on the project team?

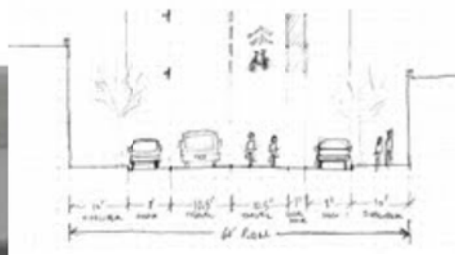
I'm accepting as a given that two vehicle travel lanes and parking on both sides in this section is important to accommodate the needs of existing businesses and future growth. However, keeping the existing bike lane configuration puts riders in a dangerous position, having to contend with doors opening, drivers pulling out of parking spots, and buses crossing the bike lane to pick up passengers.

Proposed Alternative for Segment 4: Shared Right Lane

I suggest eliminating the dedicated bicycle lane in this stretch and paint "sharrows" in the right lane instead. A 3 foot buffer zone between parked cars and the shared right lane would provide better visibility for drivers waiting to pull away from the curb and discourage cyclists from riding in the door zone.

A similar configuration is already in use in the following locations: ● NW 19th Ave (southbound) between Hoyt and Burnside - marked with sharrows. ● NE Couch St (westbound) between 14th and 6th - not marked with sharrows but often used that way.

Both of these streets have a downhill grade, making it easier for cyclists to ride at the speed of car traffic. Williams is slightly uphill, so additional measures to slow traffic may be needed. However, since slower vehicle traffic is a desired outcome, the shared right lane should be considered a viable option. Additional signage, curb extensions, pedestrian plazas and eventually, new signals can be used to reduce vehicle speeds to 15 miles per hour through this "main street" stretch.



18. I just read Jonathan's article on bikeportland.org about the Williams ave solution. I wanted to write in to voice my support of the left side lane. I live just 2 blocks off of Williams and ride on that street at least 4 times per week, year round. I spend large portions of nearly every trip on that street fantasizing about how great a bike lane on the left side of the street would be. I also fantasize about making Vancouver Ave. a bike-only street and Williams a car-only street, but my guess is that solution is far less likely than putting the bike lane on the left side of Williams. Still, a guy can dream, can't he? Sadly, I was unable to attend the recent open house. I really wanted to come to that event specifically so I could voice my support for a left side bike lane. I hope this opinion is helpful.

19. I really think installing more stoplights is a good place to start, removing parking or a lane of traffic would significantly affect the exposure to businesses on the street. One of the reasons we invested our money in N. Williams was because of the high traffic count. The whole area around Broadway/Wiedler gets so backed up as it is with all of the light changes and different directions people are traveling, once the street car is up and running thing will be even slower. If you reduce the lanes going on to N. Williams (as one diagram from the proposed plan shows) it will create a bottle neck slowing traffic flow even more, causing people to divert into the side streets and MLK. Shifting traffic to the residential side streets which are more densely populated would be dangerous and a nuisance to residence causing an bigger problem rather than solving a problem, and MLK is already over capacity. I understand bike safety is an issue as well, so why not shift the right side parking over three or four feet where the current bike lane is located, and move the bike lane along the curb creating a buffer between the cyclists and moving traffic. This way you retain the parking and traffic lanes while offering the cyclists a safer route to travel. Along with new stoplights to keep drivers at the speed limit and hopefully more attentive should also help reduce the incident rate.

20. I attended one of the meetings you held about two months ago at Emanuel Hospital. I didn't ask any questions or give any input, because I only have ONE concern about the corridor and traffic flow, and it is the Kerby st. off ramp from the Fremont Bridge which ends in front of the Red Cross where the cross street (4 lanes - two going west, two going east) wraps around and leads to the 'front' "official" entrance of the Hospital. (not the one off Vancouver ave.!)

Coming FROM the hospital "main" entrance (NOT the one on Vancouver ave. the "official" main entrance on the other side) and approaching Vancouver ave., (I believe you are heading east) you have the option to either go straight ahead to Vancouver/Williams Aves. (Red Cross employee "North" side entrance is on your right) - OR - (and this is the problem) turn left and get on the entrance to the Fremont Bridge heading into downtown. Traffic that is EXITING the bridge MUST stop (there is a stop sign as you exit the bridge at that intersection) and must wait for oncoming traffic approaching from the right that is ENTERING the bridge ON ramp. EXITING traffic MUST wait for the right handed oncoming traffic (yield to the right) to turn in front of you to get on the bridge, which causes a severe backup of the 'EXITING' offramp (most of which are turning left, headed to Vancouver/Williams to cross it).

I have been dealing with this problem since (and before) 1995 when I contacted the city who told me to contact the state who told me to contact the ... well you get the idea. At some point, there was MAJOR attention paid to widening the exit ramp from a two to one lane bottleneck into a two lane exit with one lane dedicated to curving to the right and heading to the main hospital entrance, which was a great improvement (I think the hospital was instrumental in this), but THAT wasn't the problem! The problem is... EXITING BRIDGE traffic having to wait for that single vehicle to traverse the road approaching you (which curves, so its hard to judge how far away it is, and whether you can proceed ahead of it) which causes massive backups onto the exiting ramp (still!).

The solution? A FOUR WAY stop sign (or light?) at that off ramp intersection so that exiting traffic can safely (and legally!) exit the bridge knowing that any oncoming (right hand) traffic MUST stop as well, allowing for a smoother flow of EXITING traffic resulting in less of a back up and better traffic flow all around. Simple, inexpensive, effective.

Several years ago, while attending one of these meetings I spoke to a city traffic person (I think his name was Doug) who A. Informed me he "knew of" the situation and yet had NEVER EVEN DRIVEN THE EXITING OFF RAMP and B. Suggested that it was "working properly", (!) because any and all "excess" traffic was being "held" on the off ramp to keep 'congestion' off the secondary arterials... I didn't think of it at the time, but I would have said to him that, had there been a 4 way stop sign in place, there wouldn't have BEEN any severe congestion/backup exiting the ramp...especially at high peak times (4:00-6:00 pm). A simple 4 way stop sign, and we wouldn't have even needed to widen the exiting ramp, not that that wasn't a HUGE improvement in and of itself, it just wasn't what was needed (at that time) to alleviate the congestion EXITING the Fremont Bridge. I can't imagine what it cost to widen that exit and all, but even though it was an improvement, it did NOT alleviate the major problem of exiting traffic having to wait for right hand oncoming traffic to approach unencumbered, while you sat there waiting for them to turn in front of you and enter the bridge while the cars piled up behind you while you were (and STILL are) trying to exit the bridge. this is, and has been my concern for almost 20 years! If you would like me to personally attend this meeting, I think I can, but this is my main and only concern with traffic/congestion and solutions for this area.

21. I am a resident of N Williams between Failing and Shaver, in the new Ecoflats building. As part of ongoing efforts of the City of Portland, active transportation advocates and local residents/businesses, I applaud all the work that has been done to make Williams one of the most-used bike corridors in the city. Additionally, intentions by the PBOT to expand these facilities and make the neighborhood safer for pedestrians and cyclists alike, as per the Portland Bike Plan and Green Hierarchy of Transportation, are extremely promising and make me proud to be a resident of Portland and a witness to the changing cityscape.

That being said, I was dismayed at receiving information that the particular segment (4) I live on may not see any improvement due to a 2-hour spike in weekday evening auto traffic. While I understand the need to accommodate drivers along Williams, especially during peak evening commute hours, this two-hour accommodation has come at the cost of both cyclists (many of whom ride down Rodney for fear of being "doored") and pedestrians, who must hastily cross two lanes of one-way traffic where 31% of cars travel over the speed limit. I can attest myself to feeling endangered on multiple occasions by the cars, many of which hurtle down Williams weaving in and out of the two lanes, even when trying to use designated crosswalks. This is a problem which I have seen hundreds of pedestrians have on weekdays as well as weekends.

Although Williams is a "neighborhood collector," from what I have seen a fair number of the evening cars have Washington plates and, judging by their speed, are clearly trying to bypass congestion on 5, which at that time of day is at a standstill just ten or so blocks directly west. Moreover, as I'm sure you know, Segment 4 has been the focus of intense redevelopment along bike- and pedestrian-friendly lines, of which my own building and the upcoming businesses on the ground floor are a part, and in order for these businesses to thrive and encourage similar development, support from PBOT is highly necessary.

Thus, I would like to extend my support of a reduction of Williams to a single lane of auto traffic with connected cycletrack and parking buffer (particularly within the area that has been referred to online as

"Segment 4B," meaning north of the 405 ramp between Fremont and Skidmore), giving the cyclists proportional and safe share of the road without sacrificing any on-street parking. This solution is more cost effective than installing signals in Segment 4 where none currently exist and should calm Williams, ensuring its proper use while also adhering to growing trends in transportation and Portland's own Bike Plan. I believe that making Williams one lane will encourage pedestrian usage and growth in ridership as well as accommodate all neighborhood traffic which the businesses have been concerned about, especially given how small the window of possible congestion would be.

And, as someone who lives in one of the few residential units along that segment of Williams, I know it would go a long way in making the neighborhood more "Main Street" and less "Expressway"! I greatly appreciate the opportunity to lend my voice to this project's planning as well as your time in reading my thoughts.

22. I didn't make it to the open house but I have looked over the materials online. I want to express support for removing a traffic lane on Williams Ave. and allocating space to enhanced bike facilities. Retaining the same amount of parking but eliminating one traffic lane shouldn't harm businesses. Slower traffic should, in fact, be good for business. The cars speeding through on Williams aren't the ones stopping at the shops. The ones stopping at the shops are driving slowly, looking for a place to park. I know business owners are sensitive about parking but for most of the length of the street there are businesses on only one side of the street or the other. Having parking on both sides should be more than sufficient.

I live near the intersection of Williams and Failing and don't notice a lot of overflow parking. There's no reason to believe this would change by removing a traffic lane. Additionally, the north/south side streets adjacent to Williams are extremely low traffic. I live on Mallory Ave. and I would be willing to absorb a few extra cars during rush hour to reduce speeds on Williams.

I hope PBOT will seriously consider a solution that allocates more space on Williams Ave. to bikes and pedestrians. Traffic is simply moving too fast and people on bikes have clearly outgrown existing facilities. I'm confident that business owners and community members would all be better off with this approach.

23. Portland Design Works (PDW) is a small bicycle accessory company based here in Portland, OR. We've recently moved into our new headquarters near the corner of N. Williams and NE Hancock. After a city wide search we chose this location in part to base our operations because of its proximity to the N. Williams bicycle corridor, and because we are excited to be in the middle of a renewal area that features so many bike based businesses. For us, the constant flow of bicycle traffic northward is an inspiring reminder of why we chose to move to start our business in Portland.

Currently however, we are less than impressed with the lane configuration on the stretch of Williams between N Cook and N Skidmore. That section of road has become an unsafe bottle neck if you are headed north on Williams by bicycle or in a car. A few years ago when that stretch was private residences, vacant lots and unopened store fronts the flow of northbound traffic probably worked fine.

As it is now, it is unsafe for cyclists due to the periodic cross traffic, on street parking and two lanes of traffic. As more businesses continue to move into this area, this problem will continue to get worse. It is our opinion that reconfiguring N Williams so it was one automobile lane along with a cycle-track, or some other type of enhanced bike lane would be good for the street and for the businesses that are located on the stretch in question. Thank you for your time and consideration. Please feel free to contact me with any feedback you may have.

24. Thanks for the opportunity to comment on N Williams options. I like the virtual open house format. I live directly on N Williams, near Prescott (in your planning segment 5). I'm generally a big fan of the Williams bikeway designation, so please take these comments in that light. I use Williams regularly in a variety of modes. I ride to work, mostly in the summer, a few days a week. The rest of the time I ride the bus 44. My wife and I are a 1-car household. When we do drive, most of our trips start and end on Williams. We also walk up and down the street quite a lot, to access local shops, get coffee, go to the library, see our doctor, and visit the park.

From those perspectives, here are a few thoughts: In segment 1, I strongly support converting one lane of car traffic to bikes, and adding a second bike passing lane. That segment is very congested in the summer, and the auto lanes are under-utilized. The street would benefit from narrowing, and I think it would help reduce mode conflicts. I would urge you to take the design one step farther, beyond paint, and spend some money to physically separate the bike lanes from the car traffic in this segment, with a median, grade separation, or curb of some kind. If you are trying to attract the "interested but concerned" riders, this is the segment that needs the most significant lift. Do a real cycletrack here, not just paint.

I would also encourage you to examine southbound Vancouver from Russell to the Rose Quarter. It doesn't make sense to improve North Williams if you are not also providing a safe inbound route. The segment between Broadway and the Rose Quarter is extremely unsafe in the southbound direction, but a lot of cyclists are using it. In fact, your whole project should be extended south to the Rose Quarter TC, in both directions.

In segments 2 and 3, I like the enhanced bike lane option better. There are a large number of disabled bus riders in this segment, accessing the hospital, and several other facilities. I think the cycle track would create too many conflicts for the disabled community, either for loading and unloading the bus, or loading/unloading private cars. If you do a cycletrack in this segment, I would focus on adding some physical protection (a median?) for the bike lane on the the block just south of Fremont, to reduce the length of the cross-traffic merging/turning conflicts.

In segment 4 I do not see a clear need for additional traffic lights. The speeding problem is not a big issue in that section, until you get north of Failing. The new shops and restaurants, in recent years, have added a lot more activity - with more parked cars, more pedestrian activity. It already naturally slows down traffic. I could see the benefits of a few more curb extensions to make the crosswalks safer.

For segment 5, I can give you comments both as a road user, and abutting homeowner. As a bike rider, I do not perceive a major issue in this segment. It's already fairly low stress, during rush hour, and there are few turning conflicts. There are not as many buses stopping in this segment, so that's not as big of a

conflict as it is farther south. There is a speeding problem here, though. Cars usually speed up north of Failing, and slow down again at Alberta, to navigate the curve. The segment between is a bit of a late-night racetrack. In the 12 years I've lived here, I've seen two major high-speed multi-car pileups between midnight and 1AM. One accident left 2 cars upside-down in the road, and wrecked at least 4 parked cars on my block. The drivers fled on foot. I think some more traffic calming measures, like curb extensions, swales, or street trees, could help a bit - perhaps at Skidmore and also at Going, next to the corner store.

As a homeowner, I have some concerns with the cycletrack idea for this segment. I have a multi-generational household, with a small child, and grandparents. Both the child and grandparents require an extra level of coordination to load and unload from the car. The current bike lane configuration works fairly well for us. We have taught the grandparents to look before we open our car door, and the bike lane allows a bit of a buffer between us and the speeding traffic. But most of our child-loading takes place on the curb-side. I would not be comfortable loading a grandparent or child if the car were sandwiched between the busy bike lane and the fast traffic. I use the cycletrack design in SW Broadway often, as a cyclist. I do not think it allows enough space for vehicle unloading. I also do not think the paint treatment is enough to create a clear sense of how the users are supposed to interact. In the early AM, or late evening I have often seen cars parked incorrectly in the track. On a wet dark winter night, it's hard to see that it even exists. All of the cycletracks I've seen in other countries involve physical improvements to separate the different modes - curbs, bollards, plantings, grade differences, different paving. And given the late night speeding and drunk driving I see on Williams, I would not be comfortable parking my car in front of a cycletrack here. It would feel too exposed, much like I was leaving my car in the middle of the road, waiting to be hit. If you do pursue the cycletrack design, please consider much more significant physical curb extensions and very aggressive traffic calming to protect the parking lane from being so exposed.

I also think you need to prioritize keeping on-street parking in this residential segment. Many of the houses along this segment have no off-street parking options. I noticed you did a survey on-street parking use during peak hours. I think that is not a very accurate time to get a sense of actual usage. Many people are still coming home at that time, and the restaurants/bars are not in full swing. Between 7 and 9 pm I think you would find that most on-street parking is occupied, from Skidmore to past Going. The 33% usage rate you cite for my block seems off-base. It ignores the fact that only one of the houses on the block has an off-street parking space, and so the whole block is usually "fully parked" on most nights, from 6:30 pm till 7 or 8AM. The bar at Skidmore also generates a lot of parking demand, for both cars and bikes. Again, thanks for the opportunity to comment.

25. Just wanted to weigh in on the street plan if not too late. I live on Shaver and Haight, west of Williams. I commute downtown by bike. I walk to patronize businesses on Williams. The Williams bike lane is so congested in the summer, I opt to ride home using interstate and climbing the hill on Mississippi. I have to make a left turn off Williams if I ride that way home, which is a bit risky. I support one lane of bike traffic and one lane for vehicles on both Williams and Vancouver. The Failing crosswalk needs some enhanced attention. Parking is allowed too close to it. Waiting peds and bikes in the crosswalk are not visible given the speed of traffic through there. Thank you for your efforts!

26. I only heard about this project recently and was at the recent meeting on May 3, for the first hour. As a property owner along N Williams, I would like to go on record as follows: 1. I would be generally supportive of improving the safety of the interaction of cars, trucks, buses and bicyclists along N Williams, including efficient flow management stop lights, particularly at congested intersections. 2. I am opposed to reducing the number of lanes on Williams in favor of more or wider bike lanes because: a) the volume of car, truck and bus traffic is relatively constant throughout the year and bike traffic is highly seasonal, b) N Williams is an established 2 lane road for which alternative routes impose too great of an inconvenience to substitute, c) roads are paid for in large primarily by usage fees in the way of gas taxes, registration fees, etc and bicyclists contribute nothing.

27. We bike that route every day. It is a mess. Not the standard "right hook" issue, but just the general craziness of bus pull outs, people parking in the bike lane, the bike lane not being nearly wide enough (huge issue!!!), drivers trying to park, etc etc. It's a great bike route - by far better than Interstate or - obviously - MLK, and it would be really nice to have a more sane balance between autos, buses, and bikes. Oddly, even though biking on Vancouver has major issues near the Fremont Bridge on-ramp access, it is really very different than Williams. I guess that is one of the downsides of the success of the new businesses that have moved in within the past several years (and I definitely want them to stay successful, and respect their need for parking.....but the public right of way is not meant solely for parking.)

28. I am writing about the Williams Avenue project. (Please note that I am writing you in a personal capacity, and the views reflected in this letter are not intended to represent those of my employer, Alta Planning + Design.) At the project open house, I was glad to see many thoughtful proposals that will improve safety and comfort for people who bike.

However, for Segment 4 (Cook to Skidmore), I was very concerned to see that the proposed solution for bikes is nothing more than adjusting the signal timing. I do understand the value of signaling auto speeds, and I support this proposal, but this is clearly insufficient for improving bicycling conditions along the very stretch of Williams that is most deficient for bicycles, and thus the proposal fails to achieve one of the major project goals. I believe that PBOT should proceed with a design for Segment 4 that reallocates the space of one through vehicular travel lane to an outstanding bicycling facility. The arguments for this are many, including:

1. Now is the time. The Williams Avenue bike lane is already dangerously over capacity. Any day of the week you can see the results of that - dangerous passing maneuvers, inexperienced bicyclists terrified by the chaos around them, and bicyclists spilling into the vehicle travel lane for lack of space. If we do nothing today for Segment 4, I dread to think of how dangerous, uncomfortable, and insufficient tomorrow's conditions will be. We must act now to address these known safety issues, and we have the team and the funding in place to solve this problem today. Public process is hard and expensive. Do you really want to have to redo this again in two or three years because we failed to take action now?

2. Cars have other options. People on bikes do not. Vehicles traveling longer north-south distances have many options available to them, including I-5 and MLK. Bicyclists have no other north-south options in this corridor. Williams Avenue is the only north-south facility for bicycling in this corridor, yet today it badly fails to serve that function.

3. A Williams Avenue bikeway is only as strong as its weakest link. The City's goal is to create infrastructure that serves "interested but concerned" bicycle riders. We know that these residents do not feel comfortable bicycling on facilities that expose them to speeding vehicles, narrow bikeways, and conflicts with buses and parking cars – the precise conditions on Williams you propose to leave unmitigated. If we create a world-class bikeway on Segments 1, 2, 3, and 5, yet abandon users once they reach Segment 4, we will fail to make "interested but concerned" bicyclists feel safe enough that they will be willing to ride in large numbers.

4. The City's adopted plans and policies support this project. The City's own adopted plans, including the 2009 Portland Climate Action Plan and the Portland Bicycle Plan for 2030, support this project's purpose and the roadway reallocation necessary to implement it. Without taking action on Segment 4, we will fail in our goals to shift 25% of all trips to bicycling in order to reduce VMT levels by 30%.

5. A few hundred peak-hour trips should not determine the fate of this corridor. At all times of day except for PM peak, vehicle volumes on Williams are compatible with a one-lane cross-section. From 4 to 6 pm, numerous drivers choose to bypass I-5 and MLK by using Williams to connect to I-5 and I-405. However, the functional classification of Williams is a neighborhood collector, and thus by city policy its purpose is not to serve those regional, freeway-based trips. Land use and transportation system mistakes of the past have led to inappropriate use of Williams by drivers during PM rush hour. To decide that those bypass trips – which never should have been on Williams in the first place – are more important than meeting the bicycle safety needs which called this project into being in the first place is totally inappropriate. (I also believe that some number of those drivers will choose to move back to I-5 and MLK, and that thus the congestion will not be as dire as your traffic engineers predict. I also recommend that this project be implemented with a targeted SmartTrips outreach campaign that will serve to reduce drive-alone trips in the corridor, a proven strategy that can reduce PM peak vehicle volumes.)

Now is the time, and this is the project. In order to realize our goal of becoming a world-class bicycling city, difficult tradeoffs will be necessary. This project, however, is uniquely poised to succeed: the need is crystal clear, cars have other alternatives, the users are there, and we know that demand will grow in the future (and will grow even faster if we create facilities that serve all ages and abilities). Most importantly, the City's own adopted policies make the right decision clear. A no-build, status quo approach between Cook and Skidmore fails all of us. Please, do the right thing and create a world-class bicycling facility on all of Williams, including Segment 4.

29. Since returning to the Northwest eight years ago, I have regularly cycled the Vancouver-Williams combo of streets from downtown Vancouver to downtown Portland. I also bicycle frequently on SW Broadway through Portland State University. My experience at PSU is that the protected bike lane increases the likelihood of impacting pedestrians, especially those who are hidden from view by the line of parked cars on my left. I have to watch two directions at once--the sidewalk on my right and the obscured line on my left. One result is that I have to reduce my forward speed as much as 50%, which seriously diminishes the attractiveness of the street as a bicycle boulevard for cyclists who actually are using the street for transportation purposes. The OHSU study of accident risk indicates that the incidence of accidents increases on streets with special bicycle facilities. Could it be that the proposed changes on N. Williams will serve only the slowest, most cautious cyclists and deprive commuting cyclists of the only really good north-south corridor?

30. I am so sorry I wasn't able to make the April meeting about the proposed changes to Williams, and unfortunately I found out about the May 3 meeting too late. Can you please put me on a email list to get updates about when any more meetings might be held. I live at NE Fargo St. and so travel Williams and Vancouver daily in a car, or on a bike in the summer.

I do have some questions I didn't see addressed in the online proposal: 1..Rush our traffic to and from the Fremont Bridge on ramp off of Cook. Cars tired of waiting at the stop sign on Cook often cut over and down Fargo. This creates lots of traffic cutting across Williams at rush hour and is dangerous to bikes and cars alike, additionally they are often speeding through the neighborhood. Is there any discussion of putting timed lights at Vancouver and Cook as well as Williams and Cook to ease the traffic congestion and increase the ease of crossing the street at rush hour?

2, Cars park right up to the street corners. This means when I am trying to cross Williams in my car to get to Vancouver it is very difficult to see whether or not any bikes, or cars, are coming without pulling out into the street or bikelane. Is there any talk of making set backs from the corners to improve sightlines?

31. I read about the project on the BTA blog. I commute on Williams/Vancouver daily. I would like to see changes that result in buses not crossing the bike lane in order to make stops. I bike at about the same speed as a bus goes and so if I wind up in sync with one it will ruin my entire commute as we weave back and forth for many blocks. This does not feel safe to me, as a cyclist.

32. As a bike commuter, I'm in favor of the cycle track, alternatives three and five. It's extremely important to keep buses and cars from having to cross into or out of the bike lane.

33. I am writing to provide my perspective on the N Williams Traffic Operations and Safety project, with regard to the proposed bikeway improvements. I was not able to attend the open house on Saturday, but I have been a regular user of N Williams regularly since moving to Portland in July 2009, using it as a connection from the Broadway Bridge and the Esplanade (via the Rose Quarter) to visit friends living in NE Portland and attend events and visit restaurants in the Williams/Alberta corridor. It is by far the easiest and safest-feeling route up to NE in inner Portland. For that I express appreciation.

I am very glad that the city is considering bikeway enhancements on Williams. I would definitely enjoy the street more and feel safer if the bikeway was wider, there were fewer conflicts with buses, and motor vehicle traffic proceeded more slowly.

After reviewing the documents from the open house, I want to express strong support for a continuous cycletrack from the I-5 on-ramp to Killingsworth (Segments 2-5). This would allow for reducing the conflicts with buses, as well as supporting cyclist passing while simultaneously reducing the door zone risk. Providing would allow for good management of walk/bike conflicts. The other possible options, the dual bike lane and the buffered bike lane, do not offer as many options for bus/bike conflict reduction and door zone safety.

I see in the project documents that a cycletrack option in Segment 4, Cook to Skidmore, is not considered acceptable because of marginally high motor vehicle traffic volumes and neighborhood concerns about parking and vehicle access. Although these concerns are understandable, I hope they will not prevent PBOT from stepping up to the plate and standing up for good access for all users. Williams is intended to be a major bikeway in Portland, which means it should work for all citizens. Having two cycletrack sections that aren't connected will not create the kind of continuity and safety that will

protect existing users and encourage prospective new users of the route. A continuous cycletrack demonstrates commitment to equal access for people biking, as continuous sidewalks do for people walking. Removing a standard travel lane in this segment will also promote legal speeds and help to keep pedestrians safe at crossings, which is expressed as one of the highest project priorities.

The motor vehicle traffic volumes are not a fait accompli. If the street space is allocated in a way that encourages cycling, there will likely be more cycling and less driving, accommodating the same number of users -- or more -- in less road space. As a Transportation Options Ambassador, supporting the mission of effective use of the transportation network, I understand that this is a viewpoint that PBOT embraces, and hope that engineering as well as encouragement will be used to support it.

I would also like to express my support for a comfortable bike lane in Segment 1, preferably a buffered or very wide lane. A shared-use bus and bike lane (as mentioned in the project documents) would be a very interesting experiment, however, and I would not necessarily oppose it if it were well-implemented with good education for bus drivers. Thank you for considering my comments, and thank you and everyone involved in the project for the conscientious work that makes it possible for citizens to give their input in a meaningful way.

34. Williams Avenue. I am writing to you both as a home owner who lives on North Williams Avenue and as a bicycle commuter of 20 years. Live/Work My wife and I own a live/work condo at 5232 North Williams Avenue. My wife is a media educator who works downtown for a nonprofit media arts school, and I am self-employed. We purchased this live/work unit for the following reasons: (1) short commutes, my wife has a 3 mile commute, while I walk downstairs, (2) proximity to amenities, most errands we need to run are within six blocks of where we live, (3) our home design was compact and energy efficient. There are of course other reasons, but the aforementioned three were the primary reasons for our choice to buy here.

The work side of our condo is utilized for media related projects, film and video. If North Williams Avenue had motor vehicle traffic reduced to one lane, and provide a safe bicycle route on the right side of the road, this would reduce the flow of traffic, lowering the noise level of traffic that passes 20-25 feet from our home. In addition, this traffic reduction would have a positive effect on home values on North Williams Avenue. A convenient yet quite neighborhood is a desirable one, and for home owners like us, we could see the market and home values stabilize and begin to slowly move in a positive direction if North Williams Avenue was reduced to one lane.

Bicycle Commuting Even with 20 years of experience bicycle commuting and five years racing bicycles, I feel unsafe riding north on Williams. With the speed of traffic, the constant threat of being doored from a parked vehicle, and with the annoyance, noise and danger of leap frogging buses, I've taken to riding up the streets just east of Williams. This is unfortunate, given the stop lights and more direct route to where I live on Williams, however I prefer to ride with a feeling of safety.

Reducing the vehicle travel lanes to a single lane with parking on each side and a bicycle lane on the right would provide one of (if not the best) safe bicycle route on a commercial strip in Portland. In the area, Mississippi, Alberta and Killingsworth do not make room on the road for bicycles. If Williams was to make room it could be a positive step forward in changing the nature of our streets and better accommodating active transportation in Inner North Portland. It could also prove to be a catalyst project showing that lowering the volume and speed of motorized traffic does not negatively impact businesses.

Thank you for taking the time to review my issues and concerns. I hope the City of Portland makes the right decision about North Williams Avenue. Reducing motor vehicle lanes to one lane will help keep

bicyclists safe, provide greater access for active transportation on a commercial corridor and help home and business owners see the value of their properties stabilize and slowly increase.

Please do not allow business owners on North Williams Ave to block this progress out of fear. It would seem to me that slowing people down would have drivers and their passengers looking around, and seeing potential businesses to patronize. For those who want to move quickly through the corridor, it would seem these individuals are not the patrons businesses on North Williams Avenue are going to attract.

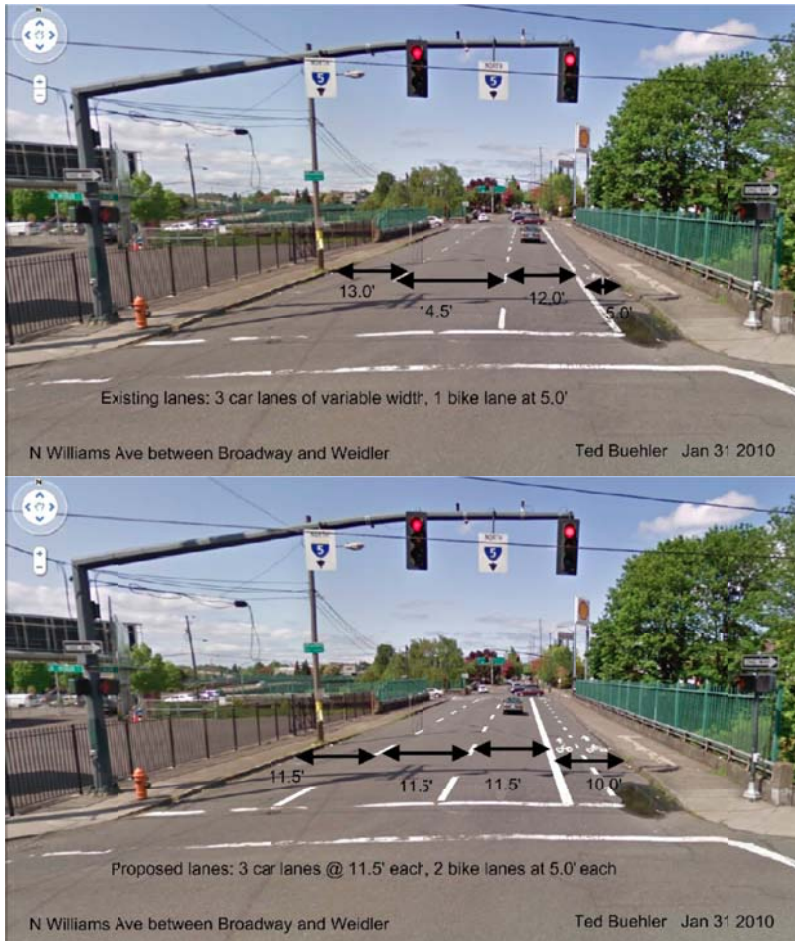
35. I've lived 1 block off N Williams since Aug 2009. I've commuted on Williams for the last six months by bike and sometimes by car. I think the Williams Ave corridor should be a model for "heavy bike traffic" infrastructure. There is very little research or experimentation done for "dual bike lanes" and other high-volume bike routes. Williams should be designed for at least twice as many bicyclists as currently use it.

The "traffic volume problem" between Cook and Skidmore is caused by I-5 bypass traffic, not Cook traffic. There are three components to the car traffic on Williams north of Cook: a) N Williams neighborhood traffic -- traffic from Broadway to N/NE Portland, drivers that wouldn't use I-5 even if it was flowing freely. b) I-405 exit traffic -- traffic from downtown, NW, SW and Washington County going to NE Portland. This is the only reasonable route for much of this traffic. From c) I-5 bypass traffic -- when the ramp signals on the Broadway ramp to NB I-5 start to back cars up to Williams, then drivers opt to stay on Williams and use local streets instead of the freeway. This can be easily observed if you stand on the corner and watch around 5pm as the ramp begins to back up. a) and b) are legitimate users of Williams Ave. It's local traffic, and traffic between a freeway exit and local destinations. c) are not legitimate traffic -- it's highway traffic using Williams as a regional route to a distant destination. This is the traffic that should be dissuaded from using Williams. Methods to dissuade I-5 bypass traffic from using Williams: 1) Add a traffic signal at Tillamook and Williams. Instead of adding traffic signals at Beech and Failing, add a signal at Tillamook. Tillamook and Williams is a genuine hazardous intersection, with heavy bike a car traffic crossing at a nearly blind intersection. And a signal at Tillamook will change the "highway" feel of Williams between Broadway and Russell. 2) Add speed humps between Russell and Cook. This will divert I-5 traffic over to MLK or Interstate. 3) Add bicycle art and a "bicycle gateway" to Williams somewhere between Hancock and Russell. 4) Diet Williams down to 1 motorized lane from Broadway to Cook.

Add "Dual Bike Lanes" on several sections of the corridor The Portland Bicycle Master Plan for 2030 outlines the standard design for "bike passing lanes" -- two 5' lanes, up against a curb, with a skip line between them. (Appendix D, Page "2 of 41")

It indicates that they are to be used on uphill grades, with heavy bike traffic, with a wide range of travel speeds. Dual bike lanes are a better choice than a buffered bike lane in many places. Here's why: a) Cars recognize dual bike lanes -- a 5' strip of pavement with a bike symbol. Getting them to recognize a 10' dual bike lane is a 1-step process -- they see two bike lanes, and they don't drive in them. Buffered bike lanes, on the other hand, are the same width as a driving lane, and drivers need to cognate a bit before they can figure out if its appropriate to drive in them. b) Bikes know how to use dual bike lanes -- pass on the left. If you "channel" traffic into two lanes, then it's comfortable and safe to have bicyclists moving at different speeds on the roadway. Bicyclists will intuitively keep in their lane, and keep to the right if they're going slow. This will allow folks that have long commutes or prefer to ride fast to have a relatively unobstructed roadway. Buffered bike lanes don't indicate lane positioning, and it's more of a free-for-all. Unlike cars, bikes operate at a wide range of preferred operating speeds. It's important to have multiple passing opportunities over a long distance (like a block or more) to allow folks to sort themselves out. I ride Williams both as a slow bicyclist and a fast bicyclist, and it's awkward and occasionally dangerous

as either type of rider. For Williams Ave, I'd suggest trying a couple different types: * dual bike lanes, 5' wide, no buffers, up against parked cars. * dual bike lanes, 7' wide, no buffers, up against parked cars. * dual bike lanes, 5' wide, buffers, up against parked cars. * dual bike lanes, against curb. If the "tighter" configurations don't work out, they can be restriped as buffered single bike lanes. Below is an example of what two 5' bike lanes would look like between Weidler and Broadway. There's plenty of space.



Improve Rodney as an alternate route from Morris to Going Rodney is on the long-term plans to be a bike blvd. If a short section of it is developed with the Williams project, then some of the slower and family riders can use Rodney through "Section 4." Many riders already use Rodney. I do, and I see a lot of people on it that live nowhere near the neighborhood. It's quieter than Williams, less spray from cars, less exhaust from cars, less likelihood of being hit by cars. It would need a few minor improvements -- a few flipped stop signs, and an improved crossing at Fremont. You could install "Box Junction" markings in Fremont -- now approved in the 2009 MUTCD for this purpose (under the "do not block intersection" section). I understand that a couple years ago PBOT wanted to build the Rodney Bike Blvd., but the neighborhood association didn't support it, partly because they would lose four parking spaces at each intersection. The Morris - Going section of Rodney doesn't have any parking problems, so it should be straightforward to gain approval now. Even with a cycletrack or dual bike lanes on Williams, there is so much bike and car traffic that a significant fraction of riders would opt for a developed Rodney Bike Blvd.