

Appendix C:
Chestnut Corridor Plan



Table of Contents

Context	2
Why Plan for the Chestnut Corridor?	2
Goals & Policies.....	3
Recommendations	5
Intersections	6
Chestnut Corridor Alternatives	12
Shared Use Path Alternative	16
Separated Bikeway Alternative.....	19
Separated Bikeway with Street Parking Alternative	21
No Build Alternative.....	24
Funding for Chestnut Corridor Projects	24
Summary of costs.....	25
Alternative Renderings	27

Table of Contents

Acknowledgments

I. Introduction.....	2
II. History.....	3
Neighborhood.....	3
Dutch Jake.....	3
III. Neighborhood Context.....	4-6
Demographics.....	4
Figure 3.1.....	4
Figure 3.2.....	4
Crime Statistics.....	6
Figure 3.3.....	5
Table 3.1.....	6
Figure 3.4.....	6
IV. Vision, Goals and Policies.....	7-8
V. Current Conditions.....	9
VI. Public Participation.....	10-11
Community Meeting.....	10
Parks Committee Meeting.....	10
Community Workshop.....	11
VII. Recommendations.....	12-41
Alternative #1: Minimal Change.....	12-14
Alternative #2: Moderate Change.....	15-17
Alternative #3: Significant Change- Option A.....	18-20
Alternative #3: Significant Change- Option B.....	21-23
Park Features.....	24-35
Related Features.....	36-38
Preferred Alternative.....	39-41
VIII. Implementation.....	42-44
Features.....	42-43
Programming.....	44-45
Appendix A: Outreach	
Appendix B: Trees	
Appendix C: Chestnut Corridor Plan	
Context.....	2
Why Plan for the Chestnut Corridor?.....	2
Goals & Policies.....	3
Recommendations.....	5
Intersections.....	6
Chestnut Corridor Alternatives.....	12
Shared Use Path Alternative.....	16
Separated Bikeway Alternative.....	19
Separated Bikeway with Street Parking Alternative.....	21



No Build Alternative.....	24
Funding for Chestnut Corridor Projects.....	24
Summary of costs.....	25
Alternatvie Renderings.....	27

Appendix D: Walking Tour

Context

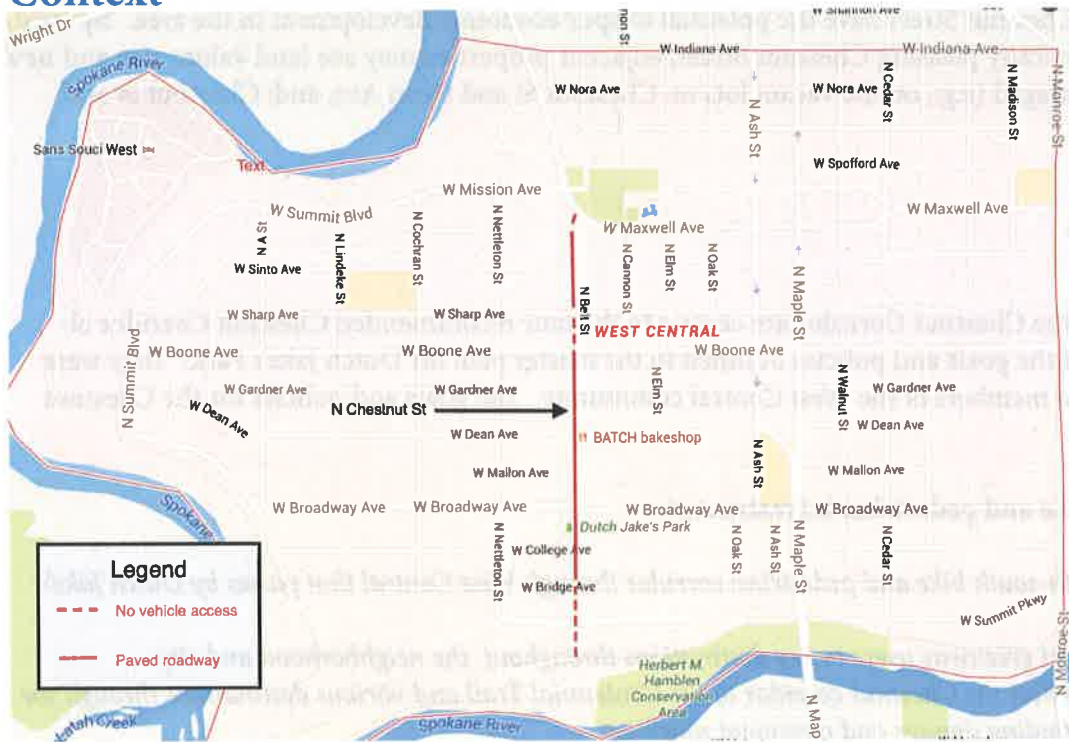


Figure D1 - Map of the location of the N Chestnut St corridor.

Chestnut Street is a narrow north-south local road that runs along the eastern side of Dutch Jake's Park (see Figure D1). In its entirety, it runs between W Maxwells Ave near AM Cannon Park and W Bridge Ave near Kendall Yards. From W Bridge Ave to the Centennial Trail, Chestnut St was vacated and is now a pedestrian corridor that contains community gardens for the residents of Kendall Yards. In the context of the immediate park focus area, Chestnut Street is intersected by W Broadway Ave, an east-west collector arterial that runs along the north end of the park, and W College Ave, an east-west local road that runs along the south end of the park. It is also intersected by an alley midblock, which terminates at Chestnut (creating a 3-way intersection).

Why Plan for the Chestnut Corridor?

Chestnut Street has enormous potential to become an important north-south pedestrian and bike corridor through West Central, connecting to Centennial Trail and linking destinations such as Dutch Jake's Park, AM Cannon Park, Kendall Yards' Olmstead Park, and businesses in Kendall Yards and Downtown Spokane. Connections to the park are an important aspect of the overall park plan, as pleasant connections linking the park to desirable destinations will encourage more foot traffic in and around the park. This will improve safety by creating more eyes on the park and help build a sense of community by allowing people to interact with one another. In addition, safe streets can encourage more active transportation (i.e., biking and walking) as an alternative to private automobile use. Active transportation is not only environmentally friendly, it is good for the health and wellbeing of the community. It also creates a more equitable transportation network that makes it easier for those without a car to get around.

Chestnut Street, through smart and innovative design, also has the potential to be an extension of the park itself. Features from the park (e.g., benches, artwork, lighting, etc.) can be blended into Chestnut Street adjacent to the park. Additionally, the corridor can be envisioned as part of a larger park network since it links three parks within its vicinity (AM Cannon Park, Dutch Jake's Park, and Olmstead Park). By creating pockets of landscaping, pedes-

trian scale lighting, and places to sit along the street, Chestnut Street can potentially be made to feel like a park itself.

Finally, improvements to Chestnut Street have the potential to spur economic development in the area. By creating a more safe and aesthetically pleasing Chestnut Street, adjacent properties may see land values rise and new development will be encouraged (e.g., on the vacant lots on Chestnut St and Dean Ave, and; Chestnut St and College Ave).

Goals & Policies

The goals and policies for the Chestnut Corridor are central to the four recommended Chestnut Corridor alternatives and compliment the goals and policies outlined in the master plan for Dutch Jake's Park. They were shaped through input from members of the West Central community. The goals and policies for the Chestnut Corridor are listed below:

G1: Expand Spokane's bike and pedestrian infrastructure.

- P1.1: Create a north-south bike and pedestrian corridor through West Central that passes by Dutch Jake's Park*
- P1.2: Link and direct greenway users to key destinations throughout the neighborhood and city.*
 - P1.2.1: Connect the Chestnut corridor to the Centennial Trail and various destinations through the use of wayfinding signage and pavement markings.*

G2: Make biking and walking safer and more appealing on N Chestnut St.

- P2.1: Use sharrows or protected bike lanes and signage to alert drivers of the presence of cyclists.*
- P2.2: Use speed humps to make driving along Chestnut less appealing for through traffic.*
- P2.3: Use center island median traffic diverters at major intersections to reduce traffic volume.*
- P2.4: Use speed humps to slow traffic.*
- P2.5: Use flashing signage, pavement markings, center island medians, curb extensions, and if desired, traffic tables at intersections with arterials to make crossing on bikes and on foot safer and more comfortable.*
- P2.6: Place pedestrian amenities along the corridor where possible (e.g., trees and landscaping, pedestrian scale lighting, benches, artwork, etc.) to create a more comfortable and interesting journey.*
- P2.7: Use markings on the pavement and signage to let users know where the greenway goes and what is nearby (e.g., parks, the community center, etc.).*

G3: Activate and make Dutch Jake's Park a safe space for all.

- P3.1: Encourage bicycling and walking along N Chestnut Street to generate more eyes on the park, which will improve park safety (both real and perceived).*
- P3.2: Place lighting along N Chestnut St, which may improve park safety at night (both real and perceived).*

Current Conditions

N Chestnut St between W Boone Ave and W Bridge Ave has a right-of-way of approximately 30', which includes 21' of roadway and 4½' of sidewalks on both sides (see Figure D2). Between W Sharp Ave and W Maxwell Ave, N Chestnut St is an approx. 20' unpaved alley. Due to the narrow nature of the street, parking is not allowed along

its entirety, with the exception being on the east side of the street between W Bridge Ave and W College Ave. Additionally, there is no room in the current street layout for any pedestrian amenities, such as benches or street trees. There is also a lack of lighting along N Chestnut St, as luminaires are only located at intersections. Pedestrian crossings across W Broadway Ave on Chestnut are limited to the west side of the intersection, likely due to limited visibility created by the S-bend on Broadway (see Figure D3). The average daily traffic (ADT) at Chestnut and Broadway is approximately 3,700 veh/day as of 2015.

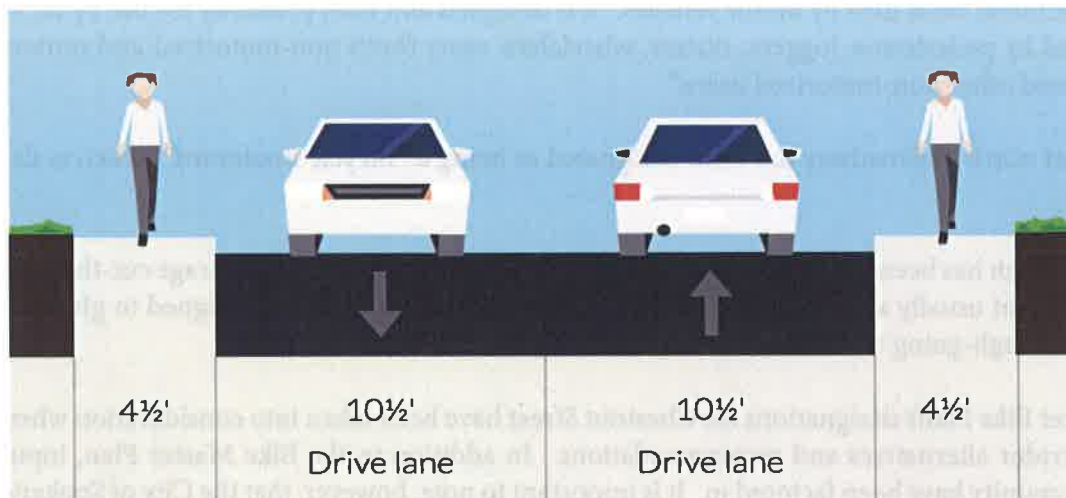


Figure D2 – Cross section of N Chestnut St at Dutch Jake's Park, which is representative of the street dimensions between W Bridge Ave and W Boone Ave. ROW = 30'.

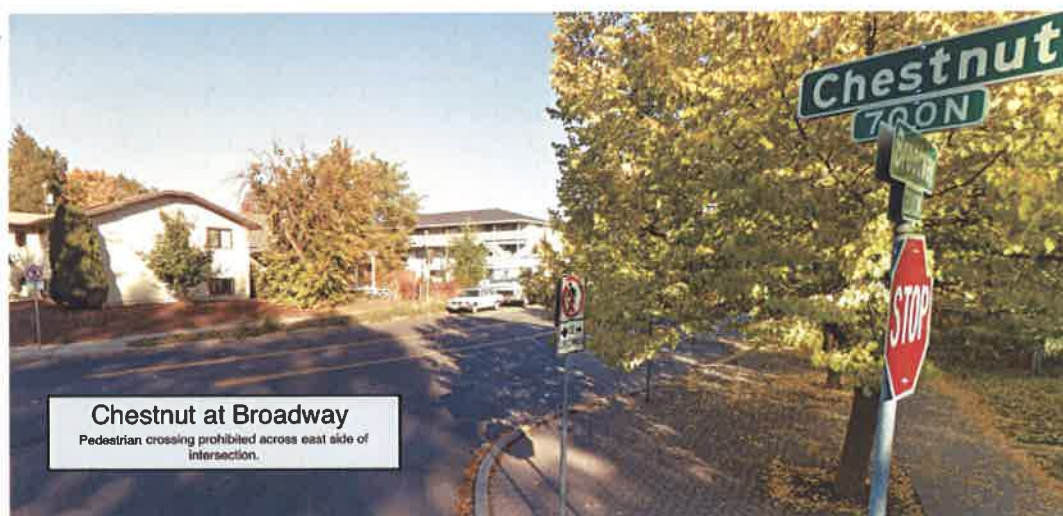


Figure D3 – Intersection at N Chestnut St at W Broadway Ave, where signs prohibit pedestrians from crossing on the eastern side of the intersection.

Additionally, pedestrians are prohibited from crossing across W Boone Ave west of N Chestnut St (pedestrians must cross between N Chestnut St and N Belt St). ADT on W Boone Ave just east of N Belt St is approximately 5,300 veh/day as of 2015, while ADT on Belt just north of Boone is relatively low—approximately 1,100 veh/day as of 2015. Unfortunately, N Chestnut St does not exist between W Boone Ave and W Sharp Ave, leaving a gap in the corridor. Lastly, there are some obstructions, such as plant overgrowth from adjacent properties, a lack of ADA ramps, and uneven sidewalk surfaces that can make traversing Chestnut difficult especially for those with physical disabilities.

Recommendations

According to Spokane's Master Bike Plan (amended June 8, 2009), Chestnut Street south of Broadway has been designated to be a "Shared Use or Multiuse Path", which is defined as:

"A facility physically separated from motorized vehicular traffic within a right of way or on an exclusive right of way with minimal cross flow by motor vehicles. It is designed and built primarily for use by bicycles, but is also used by pedestrians, joggers, skaters, wheelchair users (both non-motorized and motorized), equestrians, and other non-motorized users."

In addition, Chestnut Street north of Broadway has been designated as being a "Bicycle Boulevard", which is defined as:

"A shared roadway which has been optimized for bicycle traffic. Bicycle boulevards discourage cut-through motor vehicle traffic, but usually allow access to local motor vehicle traffic. They are designed to give priority to cyclists as through-going traffic."

As such, the Spokane Master Bike Plan's designations for Chestnut Street have been taken into consideration when drafting the Chestnut Corridor alternatives and recommendations. In addition to the Bike Master Plan, input from the West Central community have been factored in. It is important to note, however, that the City of Spokane periodically updates their Bike Master Plan. As such, designations for Chestnut Street may change and therefore the neighborhood should work closely with the City to ensure that any changes are in the neighborhood's best interests.

Intersections



Figure D4 – An example of a possible wayfinding sign at the intersection of Chestnut and Bridge.

In this section, recommendations for the design of intersections along the corridor, particularly problematic arterial intersections, are addressed first. This is due to the fact that the recommendations for the intersections are constant and do not change between the four alternatives.

Chestnut at Bridge

Due to the development of Kendall Yards, N Chestnut St terminates at W Bridge Ave. Kendall Yards implemented a pedestrian walkway that continues Chestnut from Bridge down to the Centennial Trail, however, this passageway is unhospitable to bikes. This is primarily due to the sharp 90 degree turns the sidewalks make around Kendall Yards' community gardens, as well as the lack of curb ramps on Bridge leading into Kendall Yards. In a meeting with Greenstone Homes, it became clear that while pedestrians can still pass through the walkway, bikes can simply either divert onto Elm or Nettleton via Bridge to reach the Centennial Trail, depending on whether they wish to travel east or west. Signage located at the junction would direct users to destinations (see Figure D4), as well as sharrows painted on Bridge, Elm, and Nettleton, effectively extending the Chestnut greenway network.

Chestnut at College

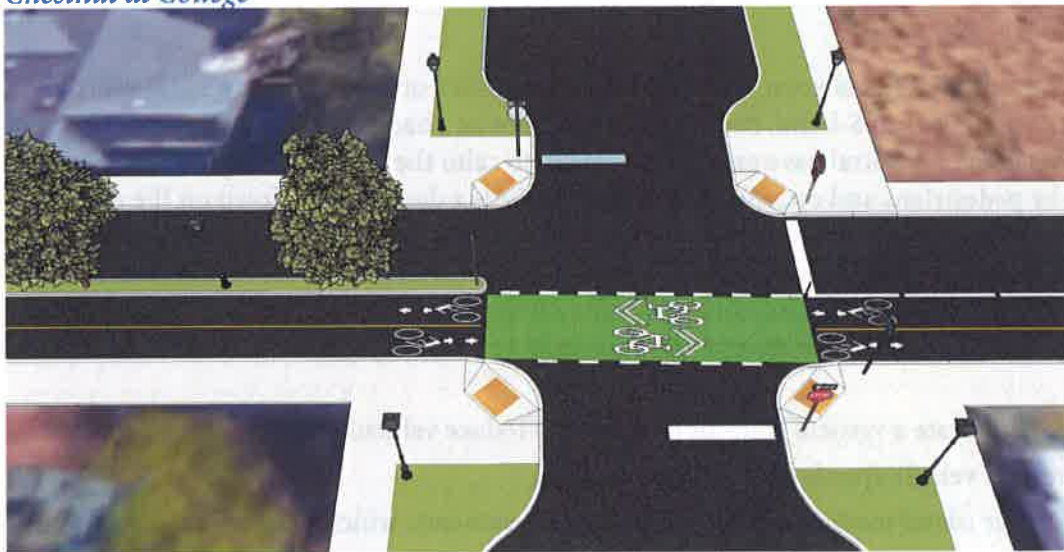


Figure D5 – A basic example of

what Chestnut at W College Ave could be under the Separated Bikeway Alternative.

Chestnut at W College Ave is a minor intersection, due to College being a local street. However, its proximity to the Dutch Jake's Park means there is the opportunity to improve it. Depending on the direction that is chosen for the Chestnut Corridor, this intersection could vary slightly. However, the addition of curb ramps would be independent of what is done with Chestnut and should be added at a minimum (see Figure D5). They should also be paired with curb extensions, which would contain pedestrian scaled lighting at a minimum. The curb extensions could also contain art and/or landscaping that blends in with park. Finally, motorists travelling across Chestnut at College would have to stop as cyclists and pedestrians have the right of way.

Chestnut at Broadway



Figure D6 – A rendering of what the intersection at Chestnut and Broadway could look like if traffic calming measures were implemented. The bikeway connection to the right is representative of Chestnut under the Separated Bikeway Alternative and the Separated Bikeway with Parking Alternative. Looking east on Broadway.

Due to the fact that W Broadway Ave is a collector arterial road with an ADT of approximately 3,700 veh/day, and that Chestnut crosses Broadway at an S-bend, Broadway can be seen as a barrier to the northern entrance of Dutch Jake's Park. Residents in West Central have expressed a desire to calm the traffic on Broadway at Chestnut to allow for safer crossing by pedestrians and cyclists. In addition, there is a desire to cut down on the amount of cut-through traffic on Chestnut, especially by those who bike. The Broadway intersection at Chestnut should use several traffic calming features that would work together to increase driver awareness of the intersection, slow vehicles down, and cut down on the amount of cut-through traffic on Broadway (see Figure D6). Each feature could be implemented in phases if needed. The general recommendations are listed below:

- Raise the intersection to create a vertical deflection (bump) to reduce vehicular speeds along Broadway. It should be engineered for vehicle speeds of 15-20MPH;
- Add a landscaped center island median to prevent turning movements, which will reduce the amount of traffic on Chestnut. The median needs to feature cutaways for through traffic by cyclists and pedestrians along Chestnut;
- Move the Nettleton statue into the median to create a visual gateway into the area while ensuring that it does not obstruct the driver's view of pedestrians;
- Add curb extensions in conjunction with the median to narrow the roadway, which will help reduce vehicular speeds and shorten the crossing distance for pedestrians and cyclists;
- Strategically place flashing beacons, high visibility signage, and pavement markings to alert drivers of the pedestrian and bike crossing, but avoid "over-engineering" the roadway, which could detract from the aesthetics of the area;
- Use brick or textured concrete to change the look and feel of the road, which will slow drivers down by letting them know they are driving in a pedestrian and bike zone;
- Replace the luminaire mounted on the wooden utility pole with pedestrian scale lighting, which would make the area feel more like a pedestrian zone, and;
- Place aesthetically pleasing metal bollards where appropriate to protect pedestrians and cyclists from vehicles.

Chestnut & Belt at Boone

The intersection of these three roads poses a challenge as it forces people travelling north on Chestnut or south on Belt to do an S-maneuvre to continue travelling north-south due to a misalignment in the roads and due to the fact that Chestnut does not have a stretch of roadway between Boone and Sharp. The S-maneuver creates three potential conflict points for a cyclist, excluding the initial stop: (1) the right turn in front of traffic (risk of being hit from the side); (2) waiting in the travel lane to turn left (risk of not being seen by a distracted driver and being hit from behind), and; the left turn in front of traffic (head on/side collision; see Figure D7). A straight crossing across a road, on the other hand, only creates two potential conflict points. Considering the relatively high ADT at this segment of road, it would be ideal to bridge the gap in Chestnut St between Boone and Sharp (see Figure D8).



Figure D7 – A diagram showing the three potential vehicle-cyclist conflict points at N Chestnut St, W Boone Ave, and N Belt St.

If this is not possible due to private ownership of the land, the intersections can be re-engineered to provide for safer crossing by:

- Reducing or eliminating the risk of cyclists being rear ended while waiting to turn left, thus bringing the potential conflict points down to two;
 - o Add a left-turn refuge median on Boone for cyclists travelling north-south (see Figure D9).
 - o Use sturdy metal bollards and reflective signs to protect the refuge median.
 - o Reorient the lanes and parking on Boone to allow for the implementation of slight horizontal deflections, which would force vehicles to slow prior to reaching the bike and pedestrian crossings.
- Adding pedestrian scale lighting in the medians or sidewalks, and;
- Adding wayfinding signs and pavement markings such as sharrows to help users navigate the intersection safely.

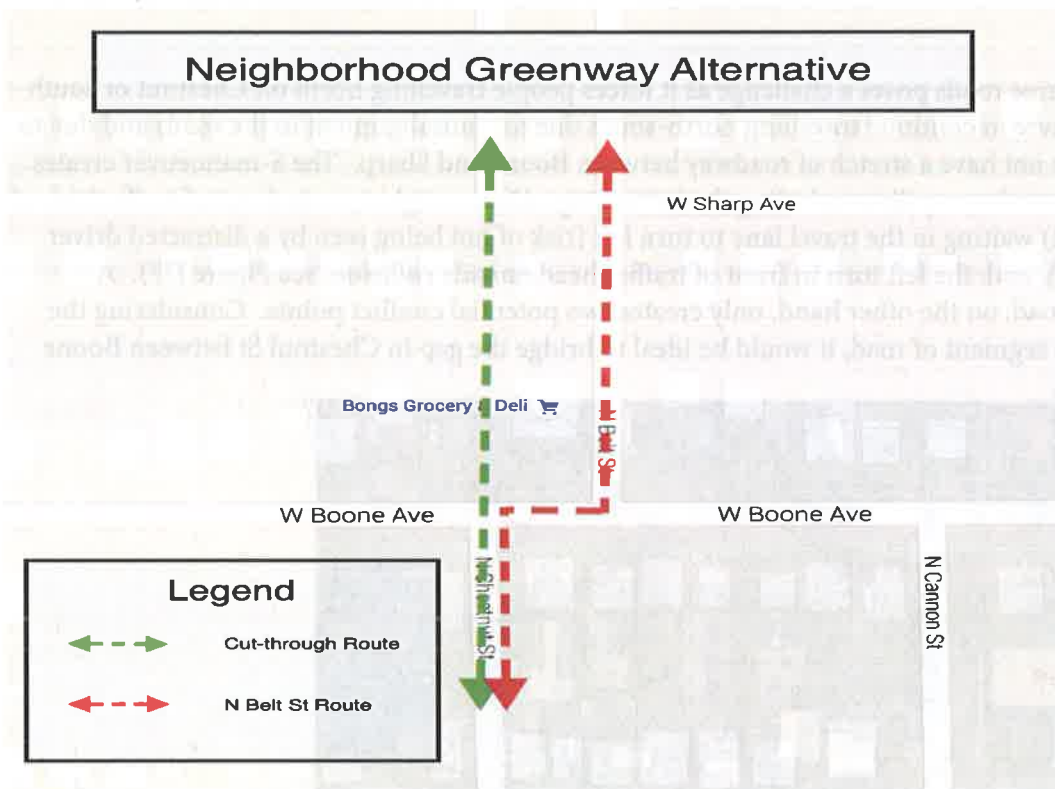


Figure D8 – Possible greenway routes north of W Boone Ave.

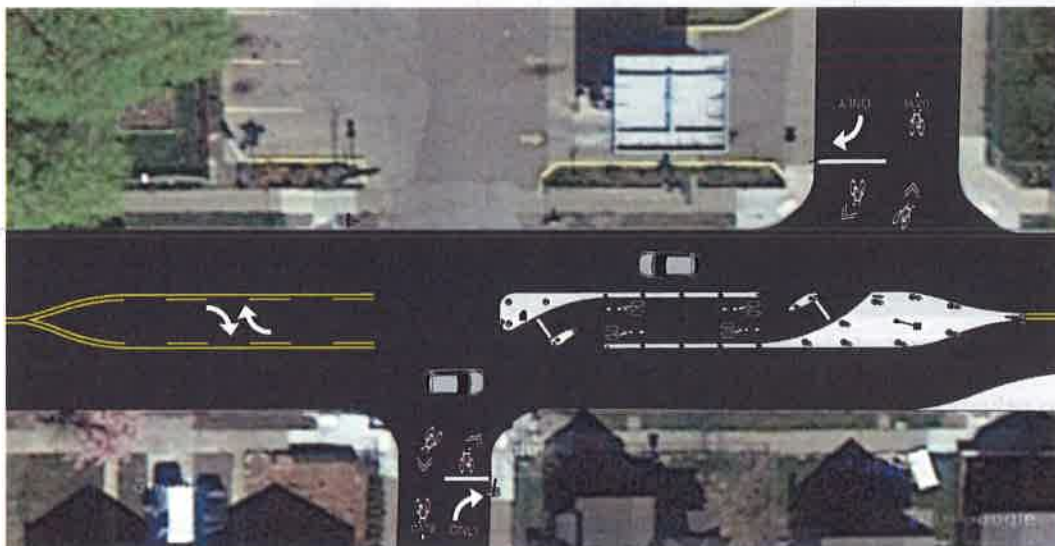


Figure D9 – Top view of a potential re-engineered intersection at N Chestnut St, W Boone Ave, and N Belt St. Sharrows direct bikes to follow the route through the protected center median left turn lanes, which are for exclusive use by cyclists.

Belt at Pettet & Maxwell



Figure D10 – A potential future design for the N Belt St, N Pettet Dr, and W Maxwell Ave intersection, which borrows themes from protected intersections to create a safer, seamless transition between the Chestnut Corridor Greenway and the Pettet/Maxwell bike lanes.

The most northern major intersection of the corridor would be located at N Belt St and at the junction of N Pettet Dr and W Maxwell Ave. Due to this intersection being on an arterial road curve, it can be daunting to cross, despite the fact that drivers on the N Pettet Dr and W Maxwell Ave arterials have a clear line of sight of the intersection from the beginning of the curves. Currently, N Pettet Dr has bike lanes, so connecting the Chestnut greenway seamlessly to the Pettet Dr bike route would be ideal. While the intersection could be left as it is, implementing a variation of the protected intersection would allow for a safe, seamless transition between the Chestnut Greenway and the Pettet bike lanes (see Figure D10). Benefits of this intersection include:

- Having a forward stop bar, making cyclists much more visible to oncoming and turning vehicles;
- Turning vehicle speeds will be greatly reduced due to tighter corner radii;
- Crossing distances will be greatly reduced for both pedestrians and cyclists making crossing safer and more comfortable;
- Slower through traffic due to the use of speed humps on Pettet and Maxwell, and;
- Improved driver awareness of the intersection, due to the use of textured pavers, green paint, and high visibility flashing signs.

All other minor intersections

All other minor roads that intersect the Chestnut Corridor (including N Belt St) will be forced to stop through the use of stop signs. The reason for this is two fold: First, in order to create an effective greenway, bikes and pedestrians travelling along the greenway should have unimpeded flow, with the only exception being at arterial roads, where a minor delay is acceptable. Lastly, there were quite a few complaints from West Central residents commenting on the frequency of side impact crashes at intersections throughout the neighborhood. Residents suspect the lack of regulatory stop or yield signs at intersections. The city appears to have a position where local street intersections are safer without regulatory signs. Whether or not if that is the case, stop signs should be implemented at a minimum at crossings with the corridor to play it safe, since a vehicle-bike side-impact collision would likely result in serious injury or death to the cyclist.

Chestnut Corridor Alternatives

Through the input of the community, four recommended alternatives for the future of Chestnut Street were

developed: (1) a Neighborhood Greenway Alternative; (2) a Shared Use Path Alternative; (3) A Separated Bike-way Alternative, and; (4) a Separated Bikeway with Parking Alternative. The following section will explore each alternative in depth, listing its features, strengths, and weaknesses. In addition to these four alternatives, the No Build Alternative is also explored.

Neighborhood Greenway Alternative

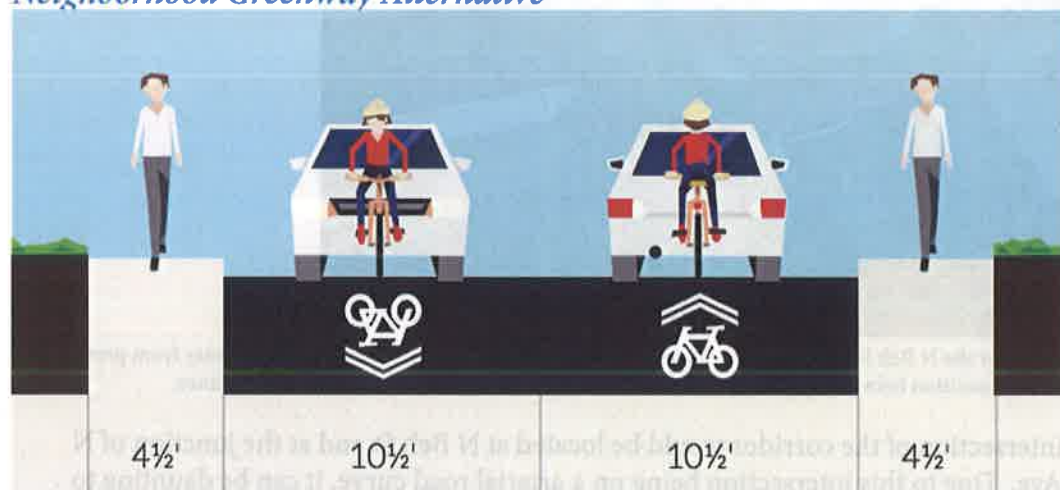


Figure D11 – Cross section of N Chestnut St at Dutch Jake's Park under the Neighborhood Greenway Alternative. This cross section is representative of what the whole Chestnut corridor would look like under the Neighborhood Greenway Alternative. ROW = 30'

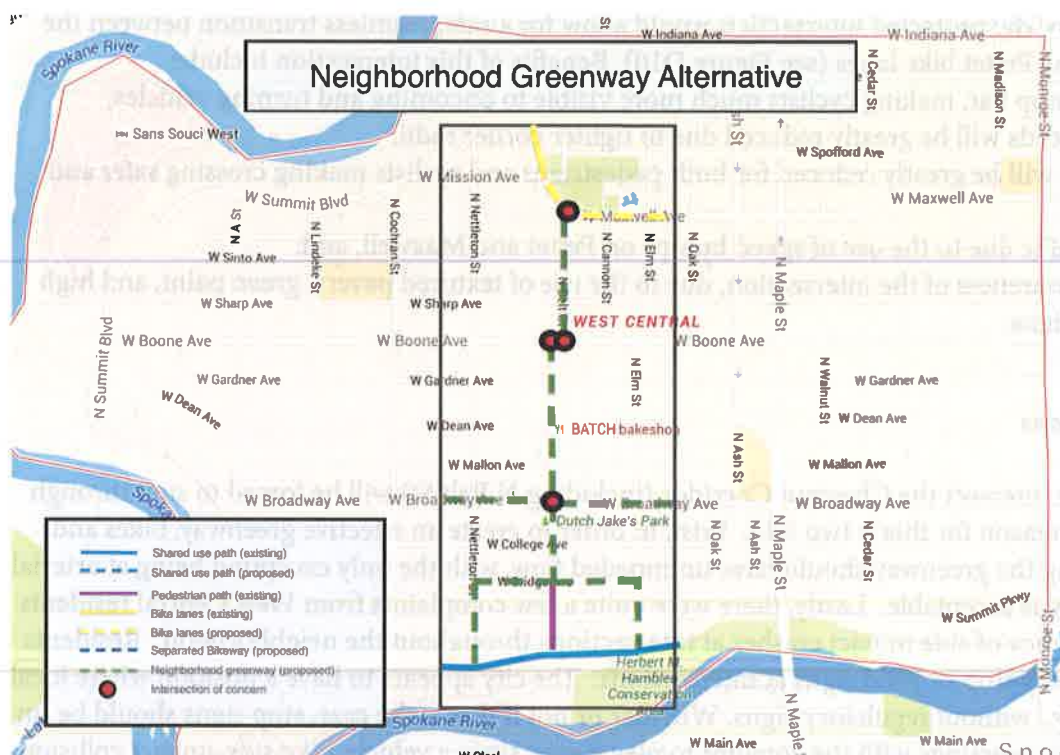


Figure D12 – Map depicting the Neighborhood Greenway Alternative. (see also Figure D8).

Neighborhood greenways (also known as bicycle boulevards) are typically located on local streets with low volumes of automobile traffic (≤ 2000 ADT) and low speed limits (≤ 20 MPH) where bicycles and pedestrians are given priority. They typically include no more than one shared travel lane in each direction and discourage cut-through traffic through the use of speed bumps and traffic diverters. Neighborhood greenways have been implemented with much success in many communities, such as in Portland, OR. N Chestnut St will make a good candidate for

a neighborhood greenway due to it being a local road with a low speed limit and traffic volume, and due to the lack of parking on the street (car doors are a threat to cyclists).

Under this alternative, N Chestnut St will be made into a neighborhood greenway along its entirety, and will keep the current widths of the roadway and sidewalks (see Figure D11). The Chestnut Greenway will run between N Pettet Dr and W Bridge Ave (see Figure D12). At W Bridge Ave, the greenway splits east-west to N Elm St and N Nettleton St, where the greenways then run north-south, connecting to Centennial Trail (see Figure D6). Additionally, just north of W Boone Ave, the greenway could either run in a straight line to connect to Chestnut at W Sharp Ave (cut-through route) or divert onto N Belt St (N Belt St route; refer back to Figure D8 & D9). The benefit of continuing the greenway in a straight line across W Boone Ave is that it: (1) avoids putting cyclists through an awkward diversion between N Chestnut St and N Belt St, and; (2) minimizes vehicle bike-vehicle conflict. The disadvantages are that: (1) the greenway will need to cross private property; (2) N Chestnut St is an unpaved alley north of Sharp, and; (3) it terminates just shy of the N Pettet Dr arterial at AM Cannon Park, though this could be remedied by connecting onto W Maxwell Ave and then onto N Belt Ave towards N Pettet Dr.



Figure D13 – A typical sharrow pavement marking.

Neighborhood greenways typically implement sharrows to indicate the presence of bicycles to drivers and to remind everyone to share the road safely (see Figure D13). Sharrows on N Chestnut St will be painted at the start and end of each block at a minimum, though sharrows could also be added midblock at intersections with east-west alleys. Sharrows on N Chestnut St will also serve a wayfinding purpose for cyclists through West Central, supplemented by wayfinding signs located along the greenway to direct people to destinations. At a minimum, wayfinding signs should be located at least every three blocks and should be located at intersections of bike routes or where the bike route makes a turn onto another street. Wayfinding signs or signs indicating the presence of the greenway should also be placed at the start of the block at W Bridge Ave, W Broadway Ave, W Dean Ave, W Boone Ave, and W Maxwell Ave.

Neighborhood greenways also aim to slow vehicular traffic, typically through the use of speed humps, which have a gradual rise so that bikes can easily pass over them (see Figure D14). Chicanes generally are not recommended as they can create conflict between vehicles and cyclists, especially on narrow roads.



Figure D14 – Example of speed humps on a residential street in Seattle.

The minimum frequency of speed humps is one per block. Speed humps on N Chestnut St could either be located midblock near the alleys or two per block (between the alleys and the intersections). At the location of speed humps, small curb extensions (approx. 1' each) could be employed, which would allow for the placement of small lamp posts along the corridor.

It is also typical of neighborhood greenways to allow for mostly unimpeded bike flow along the length of the greenway. Therefore, cross traffic across N Chestnut Street will give way to those travelling on N Chestnut St to allow for unimpeded bike flow along Chestnut. This will be implemented through the use of stop signs, except on arterial roads such as W Broadway Ave, W Boone Ave, and N Pettet Dr.

Lastly, curb ramps will need to be added to all intersections along the Chestnut Greenway where they do not already exist to allow for wheelchair access.

List of Features – Neighborhood Greenway Alternative

Between W Bridge Ave and W Maxwell Ave

- Sharrows and signage will indicate the presence of a greenway.
- Wayfinding signage and pavement markings, along with pedestrian scaled lighting will be located along the greenway.
- Speed humps will slow and discourage vehicular traffic on N Chestnut St.
- Cross traffic across N Chestnut St will be required to stop to allow for unimpeded bike flow along Chestnut, except at arterials.
- Crossings at arterials would be eased through implementation of traffic calming devices.
- Curb ramps will be added at all intersections for wheelchair accessibility.

Table of Strengths & Weaknesses – Neighborhood Greenway Alternative

Neighborhood Greenway Section	
Strengths	Weaknesses
<ul style="list-style-type: none"> • Compliant with the Bike Master Plan designation north of Broadway. • Greenway a good fit for Chestnut considering its low vehicle speeds and volumes. • Provides a north-south bike and pedestrian corridor through West Central (G1). • Discourages cut-through traffic on Chestnut (G2). • Encourages bike and foot traffic around the park, improving safety (G3). • Crossings at arterials would be eased through implementation of traffic calming devices. • Besides work at arterials, it does not significantly alter the streetscape on Chestnut, reducing costs. • No parked cars to interfere with cyclists. 	<ul style="list-style-type: none"> • Street may not accommodate many pedestrian amenities within right-of-way. • Cyclists still have to share the road with vehicles. • Sidewalk widths remain narrow. • No parking for residents or park users.

Table D1 – Table of strengths and weaknesses of the Neighborhood Greenway Alternative.

Shared Use Path Alternative

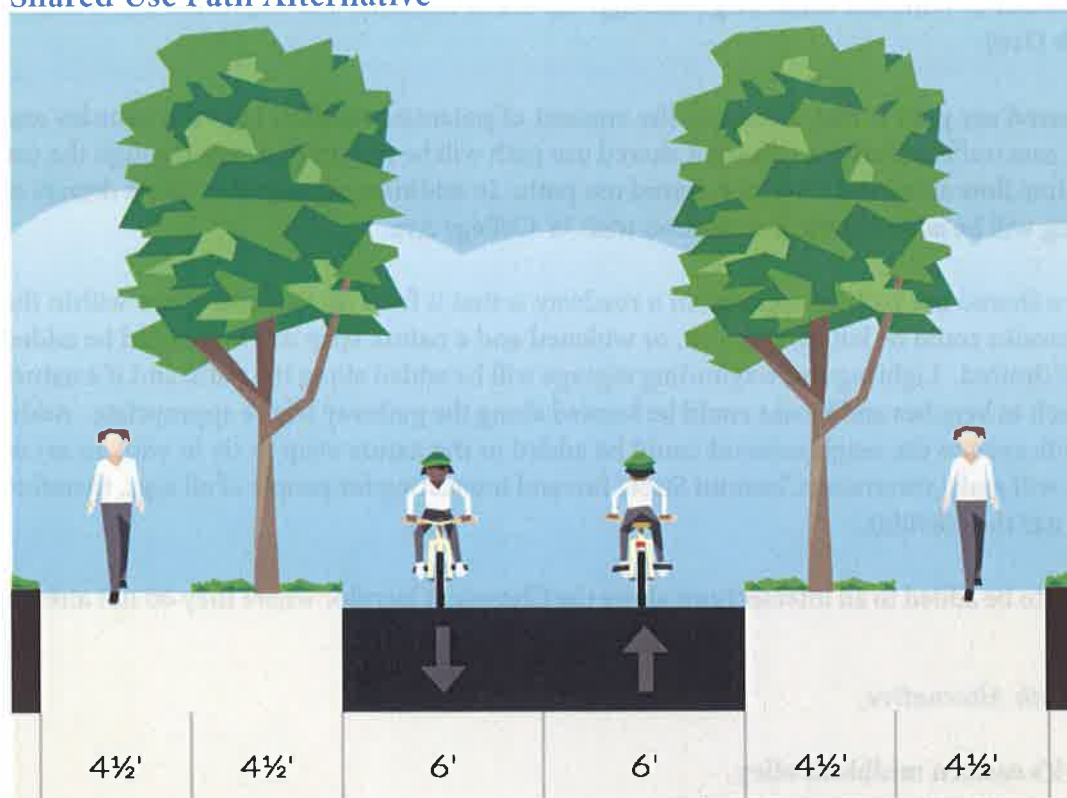


Figure D15 – Shared Use Path Alternative cross section of N Chestnut St at Dutch Jake's Park, which is representative of the Chestnut corridor south of the alley. ROW = 30'.

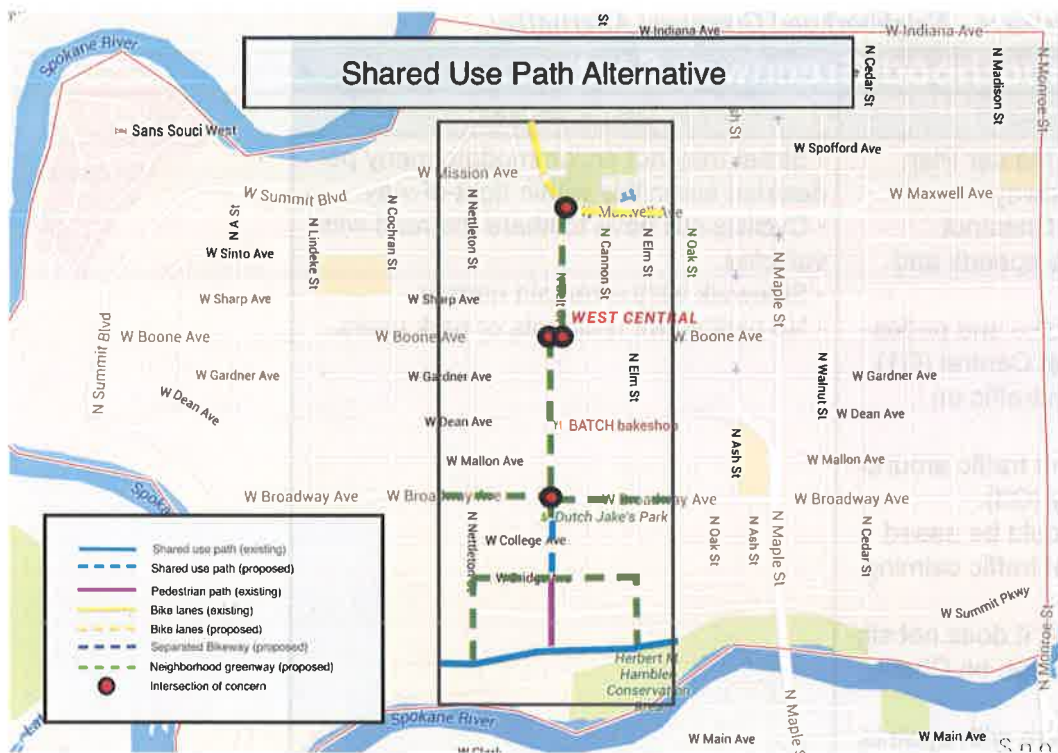


Figure D16 - Map depicting the Shared Use Path Alternative.

Under this alternative, N Chestnut Street north of the mid-block alley between W College Ave and W Broadway Ave will be a neighborhood greenway as described in the Neighborhood Greenway Alternative. South of the alley, N Chestnut Street will be closed to vehicular traffic (e.g., through the use of bollards) and converted into a shared use path (see Figure D15 & D16).

One benefit of having a shared use path is that it reduces the amount of potential conflicts between vehicles and cyclists and pedestrians. Cross traffic across the Chestnut shared use path will be required to stop through the use of stop signs, allowing for free flow along the Chestnut shared use path. In addition, signage that alerts drivers of the shared use path crossing will be added at the intersection with W College Ave.

Another benefit of having a shared use path as opposed to a roadway is that it frees up valuable space within the right-of-way. Existing sidewalks could be left in, torn out, or widened and a nature strip or swale could be added on both sides of the path, if desired. Lighting and wayfinding signage will be added along the path, and if a nature strip is added, amenities such as benches and kiosks could be located along the pathway where appropriate. Additionally, artwork with significance to the neighborhood could be added in the nature strip to tie in with an art or historic walking tour. This will make traversing Chestnut Street fun and interesting for people of all ages, therefore encourage more people to use the corridor.

Lastly, curb ramps will need to be added to all intersections along the Chestnut Corridor where they do not already exist.

List of Features – Shared Path Alternative

North of Dutch Jake's Park's eastern midblock alley

- Sharrows and signage will indicate the presence of a greenway.
- Wayfinding signage and pedestrian scaled lighting will be located along the greenway.
- Speed humps will slow and discourage traffic on N Chestnut St.
- Cross traffic across N Chestnut St will be required to stop to allow for unimpeded bike flow along Chestnut,

- except at arterials.
- Curb ramps will be added for wheelchair accessibility.
- No on-street parking.

South of Dutch Jake's Park's eastern midblock alley

- A shared use path primarily for use by cyclists and pedestrians.
- Sidewalks may be torn out, widened, or left as is.
- Cross traffic across N Chestnut St at W College Ave and W Bridge Ave will be required to stop to allow for unimpeded bike flow on Chestnut.
- Wayfinding signage and pavement markings, along with pedestrian scaled lighting will be located along the shared use path.
- Nature strip or swale with trees and/or landscaping could be added.
- Artwork and pedestrian amenities such as benches could be located in the nature strip if one is implemented.
- Curb ramps will be added for wheelchair accessibility.
- No on-street parking.

Table of Strengths & Weaknesses – Shared Path Alternative

Neighborhood Greenway Section	
Strengths	Weaknesses
<ul style="list-style-type: none"> • Compliant with the Bike Master Plan north of Broadway. • Greenway a good fit for Chestnut considering its low vehicle speeds and volumes. • Provides a north-south bike and pedestrian corridor through West Central (G1). • Discourages cut-through traffic on Chestnut (G2). • Encourages bike and foot traffic around the park, improving safety (G3). • Does not significantly alter streetscape, reducing costs. • No parked cars to interfere with cyclists. 	<ul style="list-style-type: none"> • Street may not accommodate many pedestrian amenities within right-of-way. • Cyclists still have to share the road with vehicles. • Sidewalk widths remain narrow. • No parking for residents or park users.
Shared Use Path Section	
Strengths	Weaknesses
<ul style="list-style-type: none"> • Compliant with the Bike Master Plan south of Broadway. • Provides a north-south bike and pedestrian corridor through West Central (G1). • Eliminates cut-through traffic (G2). • Encourages bike and foot traffic around the park, improving safety (G3). • Allows for ample room to add green space, lighting and signage, pedestrian amenities, and artwork. • More breathing room on pathways. • No parked cars to interfere with cyclists. 	<ul style="list-style-type: none"> • Requires significant re-engineering of the roadway, increasing costs. • Shared use path may not be worth the high costs on a low volume local street. • No parking for residents or park users.

Table D2 - Table of strengths and weaknesses of the Shared Use Path Alternative.

Separated Bikeway Alternative

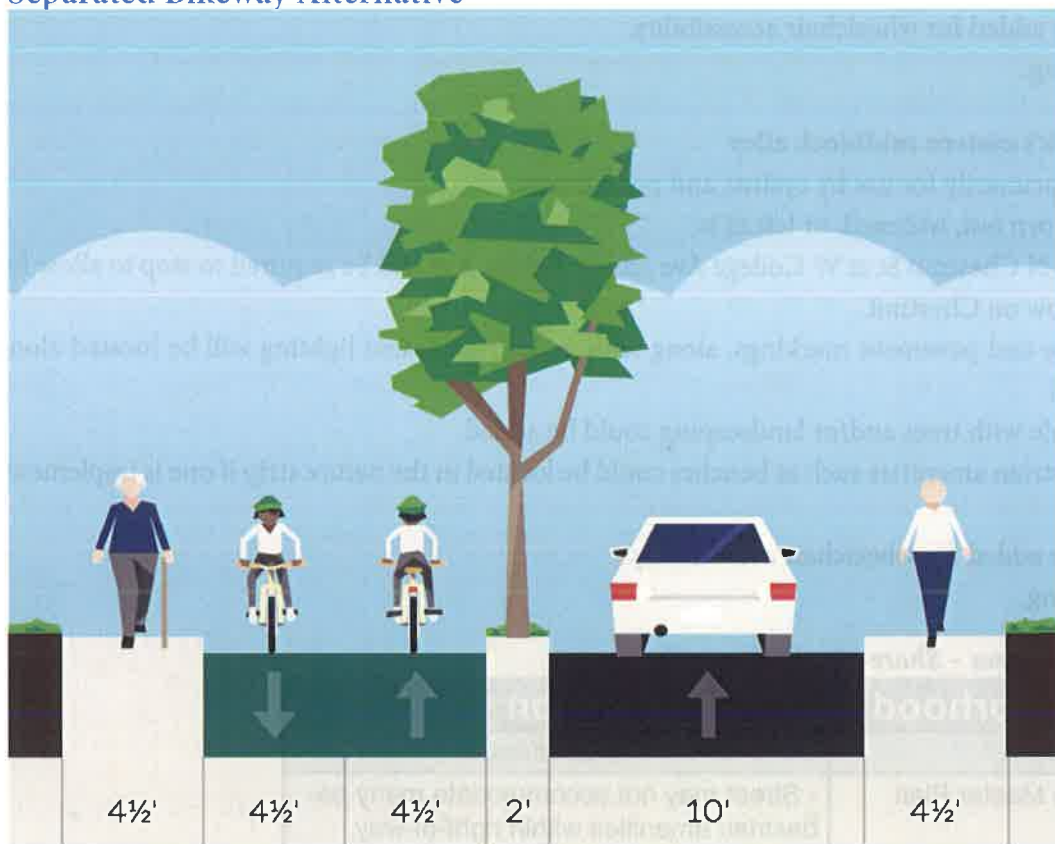


Figure D17 - Cross section of N Chestnut St at Dutch Jake's Park under the Protected Bikeway Alternative, which is representative of the Chestnut corridor south W Broadway Ave.

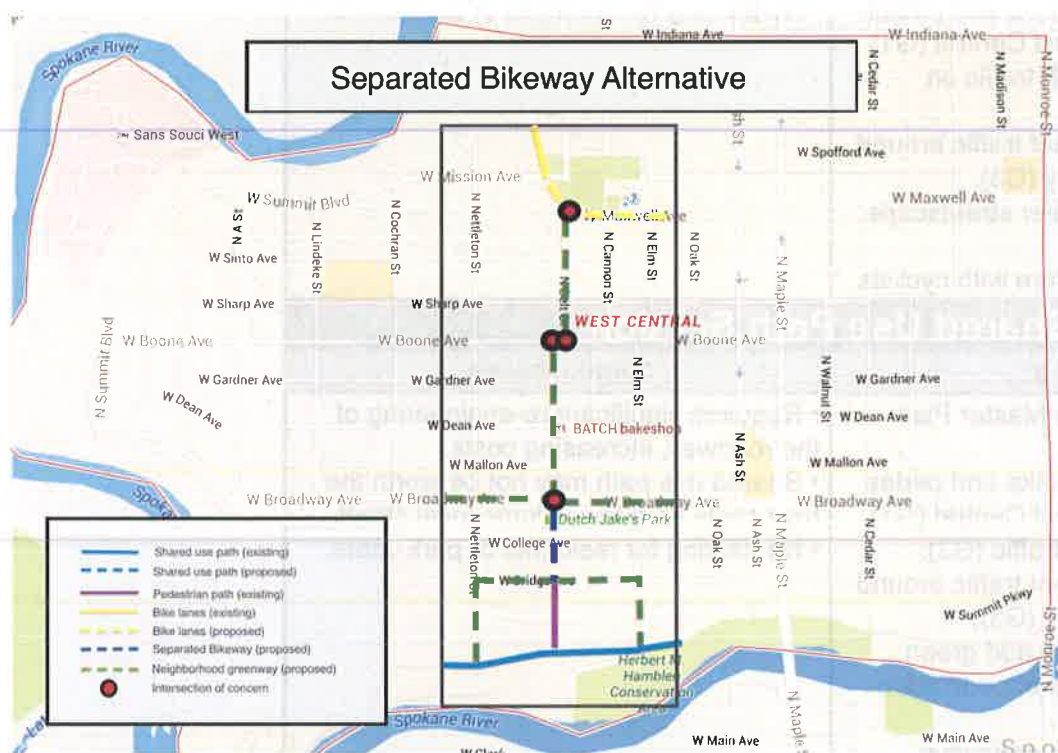


Figure D18 - Map depicting the Separated Bikeway Alternative (also relevant to the Separated Bikeway with Parking Alternative).

Under this alternative, N Chestnut Street north of W Broadway Ave will be a neighborhood greenway as described in the Neighborhood Greenway Alternative. South of W Broadway Ave, the west side of the N Chestnut Street right-of-way will be a 9' two-way protected bikeway and the east side will be a 10' northbound one-way road (see Figure D17 & D18). The bikeway and roadway will be separated by a 2' nature strip or swale buffer that will contain lighting, wayfinding signage, and street trees where appropriate. Additionally, benches and artwork with significance to the neighborhood could be added if a nature strip is used. The existing 4½' sidewalks will be left in on both sides to allow for pedestrian traffic along N Chestnut St. Parking would not be allowed along the corridor.

List of Features – Separated Bikeway Alternative

North of W Broadway Ave

- Sharrows and signage will indicate the presence of a greenway.
- Wayfinding signage and pedestrian scaled lighting will be located along the greenway.
- Speed humps will slow and discourage traffic on N Chestnut St.
- Cross traffic across N Chestnut St will be required to stop to allow for unimpeded bike flow along Chestnut, except at arterials.
- Curb ramps will be added for wheelchair accessibility.
- No on-street parking.

South of W Broadway Ave

- A 9' bikeway for exclusive use by cyclists.
- A 10' northbound roadway.
- A 2' nature strip separating the road and bikeway.
- Artwork and pedestrian amenities such as benches could be located in the nature strip.
- 4½' sidewalks on both sides of the road.
- Cross traffic across N Chestnut St at W College Ave and W Bridge Ave will be required to stop to allow for unimpeded bike flow on Chestnut.
- Wayfinding signage and pedestrian scaled lighting will be located along the nature strip. Artwork could also be added to tie in with an art walk or historic walking tour.
- Curb ramps will be added for wheelchair accessibility.
- No on-street parking.

Table of Strengths & Weaknesses – Separated Bikeway Alternative

Neighborhood Greenway Section	
Strengths	Weaknesses
<ul style="list-style-type: none"> • Compliant with the Bike Master Plan north of Broadway. • Greenway a good fit for Chestnut considering its low vehicle speeds and volumes. • Provides a north-south bike and pedestrian corridor through West Central (G1). • Discourages cut-through traffic on Chestnut (G2). • Encourages bike and foot traffic around the park, improving safety (G3). • Does not significantly alter streetscape, reducing costs. • No parked cars to interfere with cyclists. 	<ul style="list-style-type: none"> • Street may not accommodate many pedestrian amenities within right-of-way. • Cyclists still have to share the road with vehicles. • Sidewalk widths remain narrow. • No parking for residents or park users.
Separated Bikeway Section	
Strengths	Weaknesses
<ul style="list-style-type: none"> • Provides a north-south bike and pedestrian corridor through West Central (G1). • Reduces cut-through traffic on Chestnut (G2). • Encourages bike and foot traffic around the park, improving safety (G3). • Allows for room to add green space, lighting and signage, pedestrian amenities, and artwork. • No parked cars to interfere with cyclists. * Feels safer due to its separation from the road, which can increase usage. 	<ul style="list-style-type: none"> • Requires significant re-engineering of the roadway, increasing costs. • Separated bikeway may not be worth the high costs on a low volume local street. • No parking for residents or park users.

Table D3 – Table of strengths and weaknesses of the Separated Bikeway Alternative.

Separated Bikeway with Street Parking Alternative

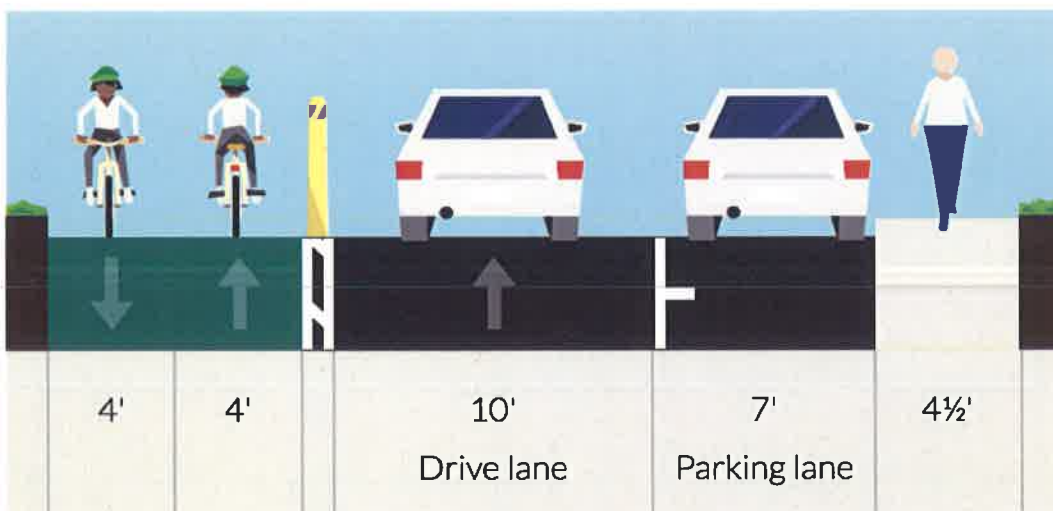


Figure D19 - Cross section of N Chestnut St at Dutch Jake's Park under the Separated Bikeway Alternative with Parking, which is representative of the Chestnut corridor south W Broadway Ave and north of W College Ave.

Under this alternative, N Chestnut Street north of W Broadway Avenue will be a neighborhood greenway as described in the Neighborhood Greenway Alternative. Between W Broadway Avenue and W College Avenue, the west side of the N Chestnut Street right-of-way will be a 8' two-way protected bikeway, the center will be a 10' northbound one-way road, and the east side will contain 7' parallel parking bays (see Figure D18 & D19). The bikeway and roadway will be separated by a painted line that could contain bollards or planter boxes. The sidewalk on the west side of Chestnut will need to be removed in order to accommodate the bikeway, roadway, and parking within the narrow right-of-way. Pedestrians will be diverted onto pathways through the park or onto the sidewalk on the east side of N Chestnut Street. Lighting and signage will be located on the western side of N Chestnut Street where appropriate. South of W College Avenue, N Chestnut Street will not contain any parking and will instead reflect the Separated Bikeway Alternative.

List of Features – Separated Bikeway Alternative with Parking

North of W Broadway Ave

- Sharrows and signage will indicate the presence of a greenway.
- Wayfinding signage and pedestrian scaled lighting will be located along the greenway.
- Speed humps will slow and discourage traffic on N Chestnut St.
- Cross traffic across N Chestnut St will be required to stop to allow for unimpeded bike flow along Chestnut, except at arterials.
- Curb ramps will be added for wheelchair accessibility.
- No on-street parking.

South of W Broadway Ave and north of W College Ave

- A 8' bikeway for exclusive use by cyclists.
- A 10' northbound roadway.
- A 1/2' painted line buffer between the bikeway and the roadway, which may or may not include bollards or planter boxes.
- 7' wide parking bays on the eastern side of the road.
- One 4½' sidewalk on the eastern side of the road.
- Cross traffic across N Chestnut St at will be required to stop to allow for unimpeded bike flow on Chestnut, except at arterials such as Broadway.
- Wayfinding signage and pedestrian scaled lighting would be located on the western side of the street (in the park).
- Curb ramps will be added for wheelchair accessibility.

South of W College Ave

- A 9' bikeway for exclusive use by cyclists.
- A 10' northbound roadway.
- A 2' nature strip or painted buffer separating the road and bikeway.
- Wayfinding signage and pedestrian scaled lighting will be located along the nature strip, if one is implemented.

- Artwork and pedestrian amenities such as benches could also be located in the nature strip, if one is implemented.
- 4½' sidewalks on both sides of the road.
- Cross traffic across N Chestnut St will be required to stop to allow for unimpeded bike flow on Chestnut.
- Curb ramps will be added for wheelchair accessibility.
- No on-street parking.

Table of Strengths & Weaknesses – Separated Bikeway Alternative with Parking

Neighborhood Greenway Section	
Strengths	Weaknesses
<ul style="list-style-type: none"> • Compliant with the Bike Master Plan north of Broadway. • Greenway a good fit for Chestnut considering its low vehicle speeds and volumes. • Provides a north-south bike and pedestrian corridor through West Central (G1). • Discourages cut-through traffic on Chestnut (G2). • Encourages bike and foot traffic around the park, improving safety (G3). • Does not significantly alter streetscape, reducing costs. • No parked cars to interfere with cyclists. 	<ul style="list-style-type: none"> • Street may not accommodate many pedestrian amenities within right-of-way. • Cyclists still have to share the road with vehicles. • Sidewalk widths remain narrow. • No parking for residents or park users.
Separated Bikeway Section with Parking	
Strengths	Weaknesses
<ul style="list-style-type: none"> • Provides a north-south bike and pedestrian corridor through West Central (G1). • Reduces cut-through traffic on Chestnut (G2). • Encourages bike and foot traffic around the park, improving safety (G3). • Allows for some room to add green space, lighting and signage, pedestrian amenities, and artwork. • Allows for residents and users of the park to park their vehicles. • Parked cars don't interfere with cyclists since they are located on the opposite side of the street relative to the bikeway. • If bollards or planter boxes are used to separate bike traffic from car traffic, it can improve the feeling of safety, which can increase usage. • Lack of sidewalk on western edge of the street will force more foot traffic in the park. 	<ul style="list-style-type: none"> • Requires significant re-engineering of the roadway, increasing costs. • Separated bikeway may not be worth the high costs on a low volume local street. • Lack of sidewalk on western side of the street, possibly limiting park connections on the eastern edge.

Separated Bikeway Section	
Strengths	Weaknesses
<ul style="list-style-type: none"> • Provides a north-south bike and pedestrian corridor through West Central (G1). • Reduces cut-through traffic on Chestnut (G2). • Encourages bike and foot traffic around the park, improving safety (G3). • Allows for some room to add green space, lighting and signage, pedestrian amenities, and artwork. • No parked cars to interfere with cyclists. * Feels safer due to its separation from the road, which can increase usage. 	<ul style="list-style-type: none"> • Requires significant re-engineering of the roadway, increasing costs. • Separated bikeway may not be worth the high costs on a low volume local street. • No parking for residents or park users.

Table D4 - Table of strengths and weaknesses of the Separated Bikeway With Parking Alternative.

No Build Alternative

Under the No Build Alternative, the Chestnut corridor would remain as it is, with no improvements to the roadway or intersections. However, N Nettleton St and/or N Elm St may be used as alternative greenways to Chestnut. If the those streets become greenways, elements of this plan's designs and recommendations for Chestnut and its intersection could be applied.

No Build Alternative	
Strengths	Weaknesses
<ul style="list-style-type: none"> • No cost, unless greenway is constructed on Nettleton and/or Elm. • If a greenway is constructed on Elm, it would connect directly with Centennial Trail, continue on the same street father north than Chestnut and benefit from the school crossing on W Northwest Blvd. • If a greenway was constructed on Nettleton, the greenway would connect directly to Centennial Trail and pass by Olmstead Brothers Park. 	<ul style="list-style-type: none"> • Chestnut St may not accommodate many pedestrian amenities within right-of-way. • Sidewalk widths remain narrow on the Chestnut Corridor. • No parking on Chestnut for residents or park users. • Cyclists will not have a north-south bike route through West Central if no greenways are built. • Greenway on Nettleton won't pass by Dutch Jake's Park and will not continue far north. • Greenway on Elm won't pass by Dutch Jake's Park.

Funding for Chestnut Corridor Projects

Since traffic calming is a central aspect of many of the Chestnut Corridor alternatives and recommendations, some funding may be available through the City of Spokane's Neighborhood Traffic Calming program. Each Neighborhood Council is able to submit two applications for a traffic calming measure to be installed in their neighbourhood—one for a residential street and one for an arterial. Applications close March of every year (see Figure D20) and funding is limited. Therefore, selection is a competitive process. Each application that is submitted will go through a traffic analysis by the City of Spokane's Traffic Operations.



Figure D20 – City of Spokane's Traffic Calming Program's application timeline.

For more information on other funding sources that may be available at the local, state, or federal level for neighbourhood transportation projects, contact City of Spokane staff for the most current information.

Summary of costs

Costs estimates of many of the possible elements of the Chestnut Corridor are listed in the table below (Table D5). It is important to note that these cost estimates may not reflect the actual costs of the Chestnut Corridor features when implemented.

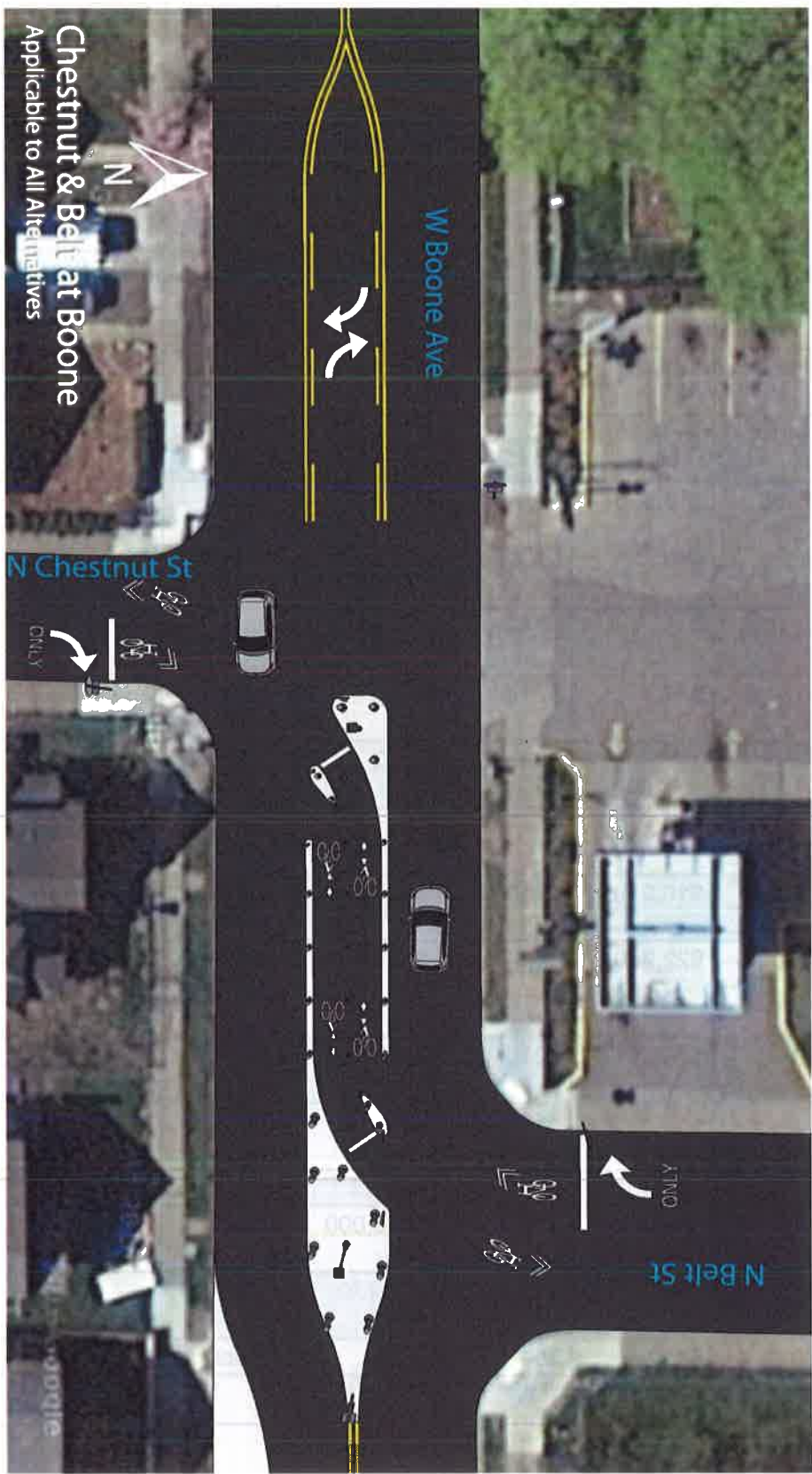
Cost Estimates of Potential Chestnut Street Features						
Features	Median cost	Average Cost	Min Cost	Max Cost	Cost unit	Number of Observations
Bench	\$1,660	\$1,550	\$220	\$5,750	Each	17
Bike rack	\$540	\$660	\$64	\$3,610	Each	21
Bikeway, bike lanes	\$89,470	\$133,170	\$5,360	\$536,680	Mile	6
Bikeway, signed bike route	\$27,240	\$25,070	\$5,360	\$64,330	Mile	6
Bikeway, signed bike route, roadway improvements needed	\$241,230	\$239,440	\$42,890	\$536,070	Mile	6
Bollards	\$650	\$730	\$62	\$4,130	Each	42
Curb extensions	\$10,150	\$13,000	\$1,070	\$41,170	Each	28
Curb ramp	\$740	\$810	\$89	\$3,600	Each	31
	\$12	\$12	\$3.37	\$76	Square foot	43
Curb ramp, truncated dome/ detectable warning	\$37	\$42	\$6.18	\$260	Square foot	15

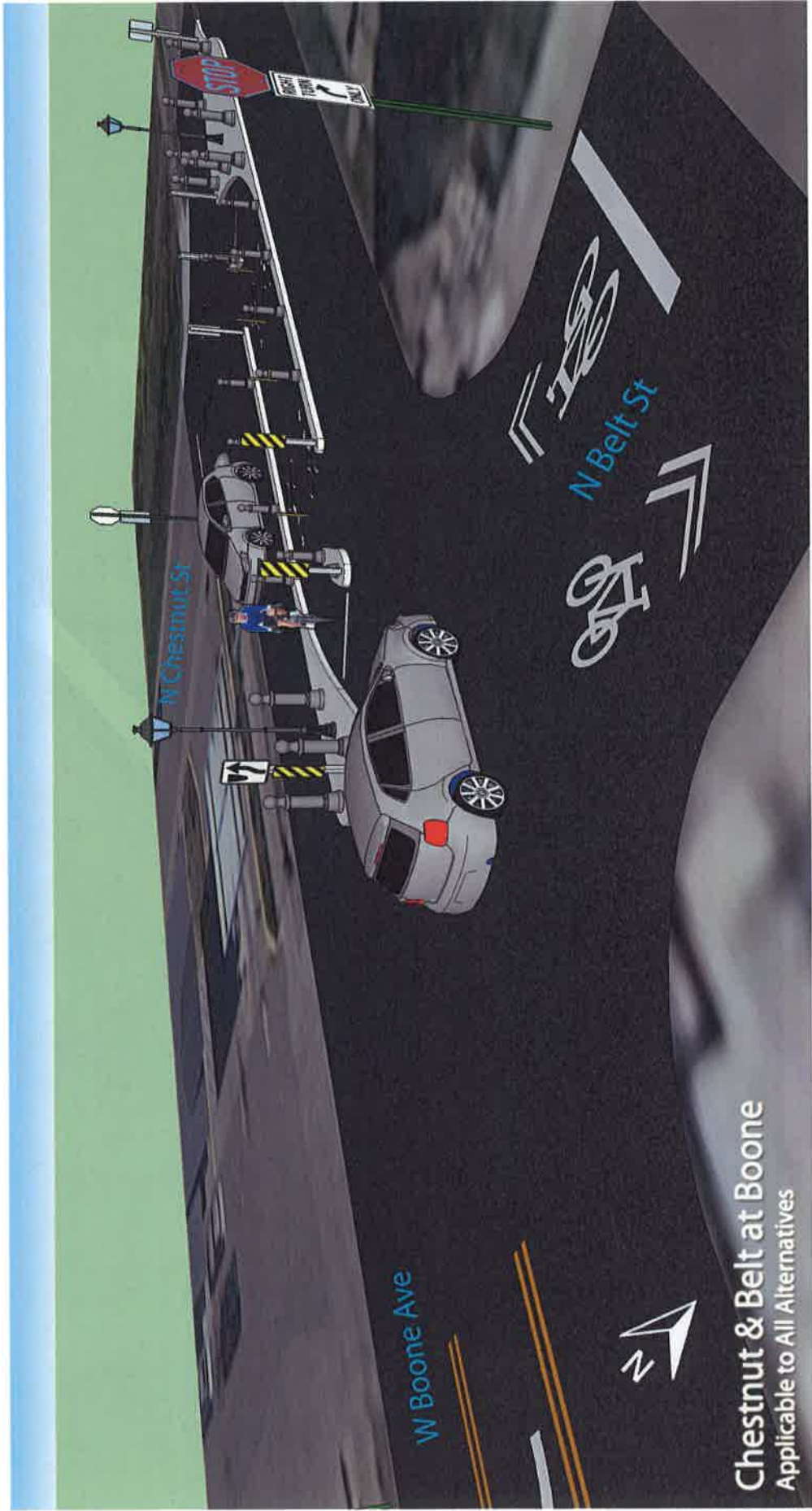
Lighting	\$3,600	\$4,880	\$310	\$13,900	Each	17
Pavement marking, advance stop/yield line		\$320	\$77	\$570	Each	5
		\$10	\$4.46	\$100	Square foot	4
Pavement marking, striped crosswalk	\$340	\$770	\$110	\$2,090	Each	8
	\$5.87	\$8.51	\$1.03	\$26	Linear foot	48
Pavement marking, high visibility crosswalk	\$3,070	\$2,540	\$600	\$5,710	Each	4
Pavement marking, shar-row	\$160	\$180	\$22	\$600	Each	39
Raised crosswalk	\$7,110	\$8,170	\$1,290	\$30,880	Each	14
Raised Intersection	\$59,160	\$59,160	\$12,500	\$114,150	Each	5
Raised median island	\$10,460	\$13,520	\$2,140	\$41,170	Each	19
	\$9.80	\$10	\$2.28	\$26	Square foot	15
Shared use path, asphalt	\$261,000	\$481,140	\$64,710	\$4,288,520	Mile	42
Sidewalk, concrete	\$27	\$32	\$2.09	\$410	Linear foot	164
Sidewalk, concrete + curb	\$170	\$150	\$23	\$230	Linear foot	7
Signage, bike route	-	\$160	-	-	Each	-
Signage, flashing beacon	\$5,170	\$10,010	\$360	\$59,100	Each	25
Signage, flashing (RRFB) beacon	\$14,160	\$22,250	\$4,520	\$52,310	Each	4
Signage, regulatory	\$220	\$300	\$210	\$560	Each	4
Signage, way-finding	-	-	\$530	\$2,150	Each	-
Speed humps	\$2,130	\$2,640	\$690	\$6,860	Each	14
Street closure, full	-	-	\$500	\$120,000	Each	-
Street closure, half	-	-	\$10,290	\$41,170	Each	-
Street tree	\$460	\$430	\$54	\$940	Each	7

Table D5 - Summary of costs of potential Chestnut corridor elements. Source: WSDOT.

Alternative Renderings

In the pages below are full page renderings of the Chestnut Corridor alternatives:





Chestnut & Belt at Boone
Applicable to All Alternatives



Belt at Pettet and Maxwell

Applicable to All Alternatives

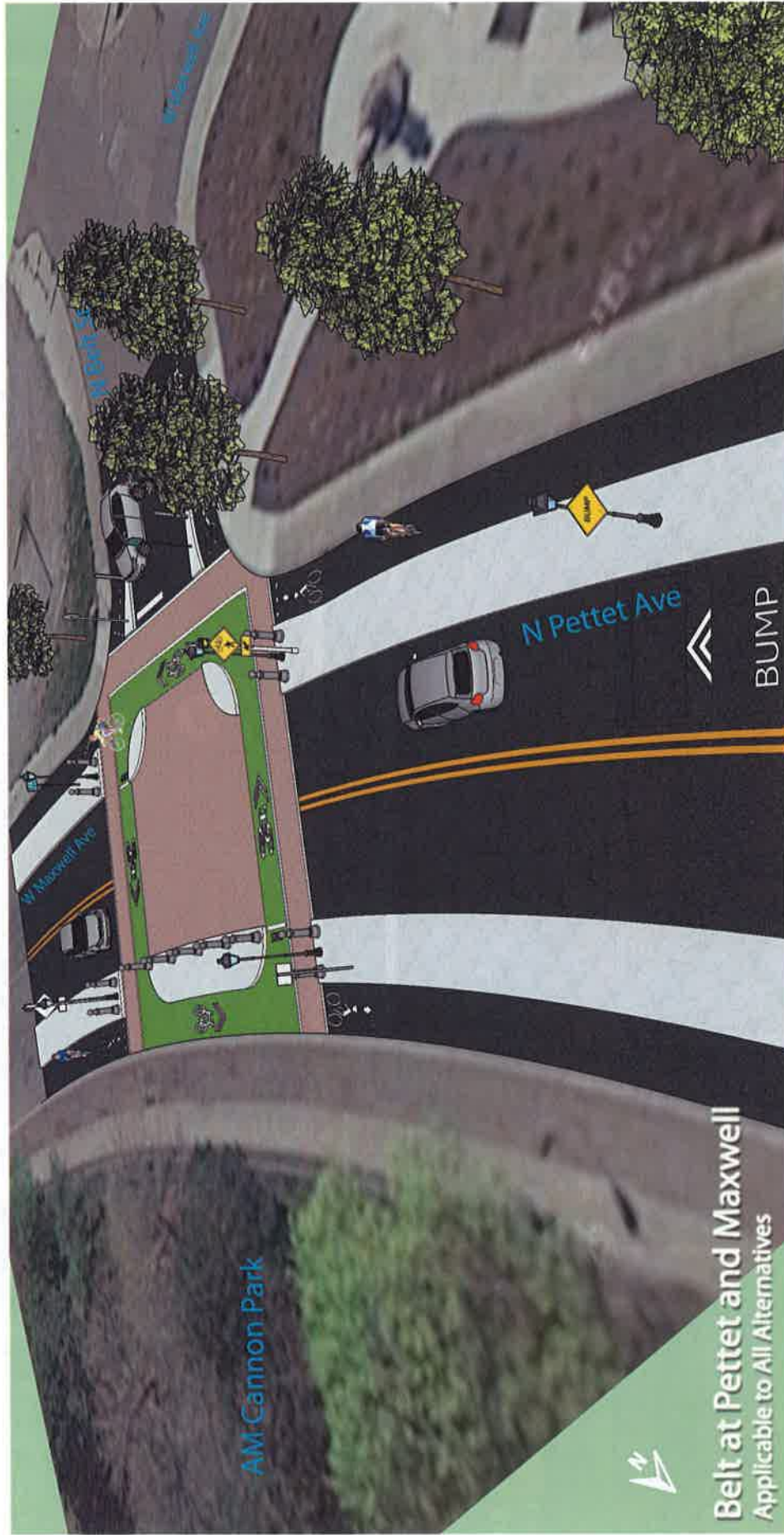


Belt at Pettet and Maxwell
Applicable to All Alternatives



Belt at Pettet and Maxwell

Applicable to All Alternatives



Belt at Pettet and Maxwell
Applicable to All Alternatives



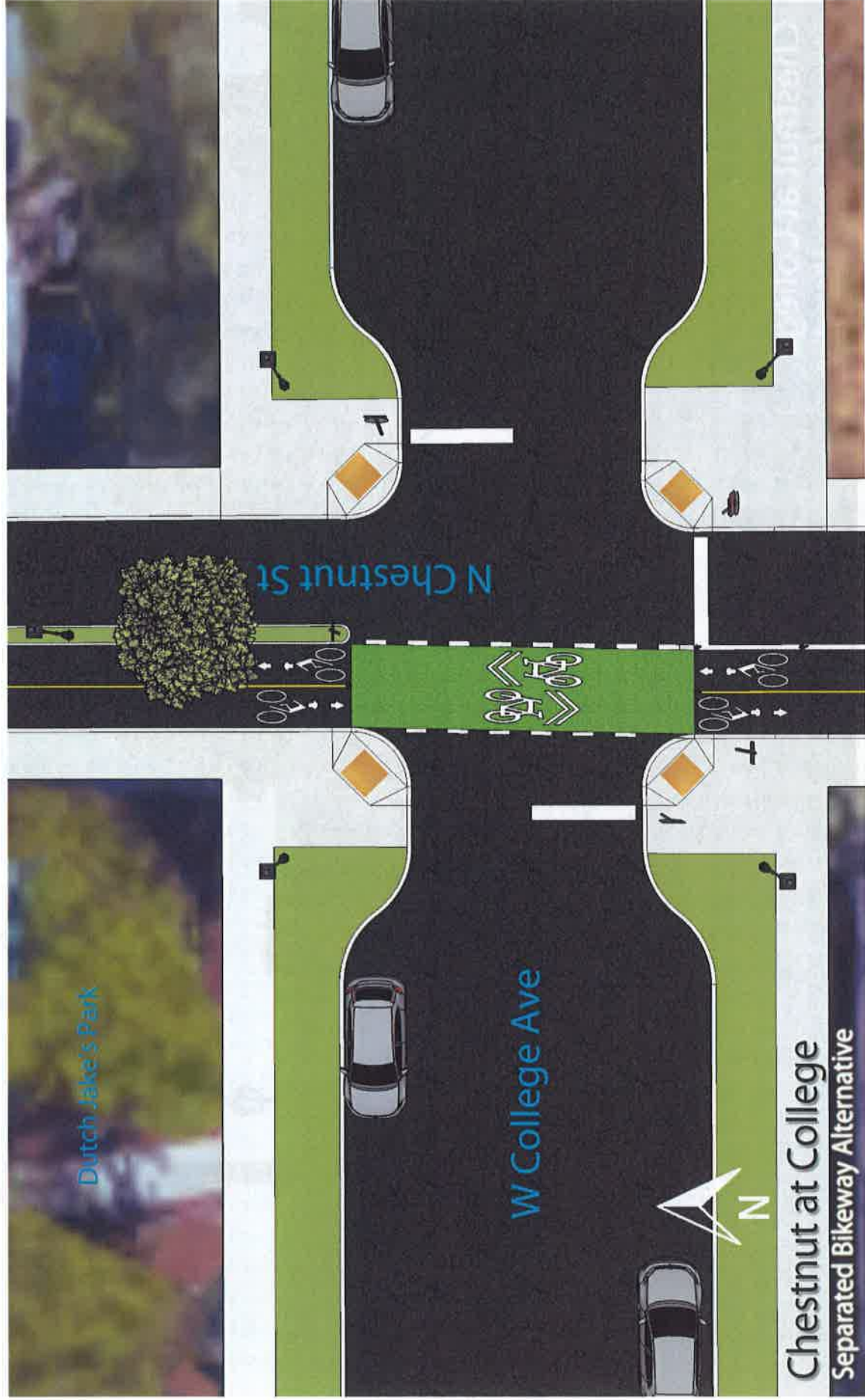
Chestnut between College and Broadway
Separated Bikeway Alternative

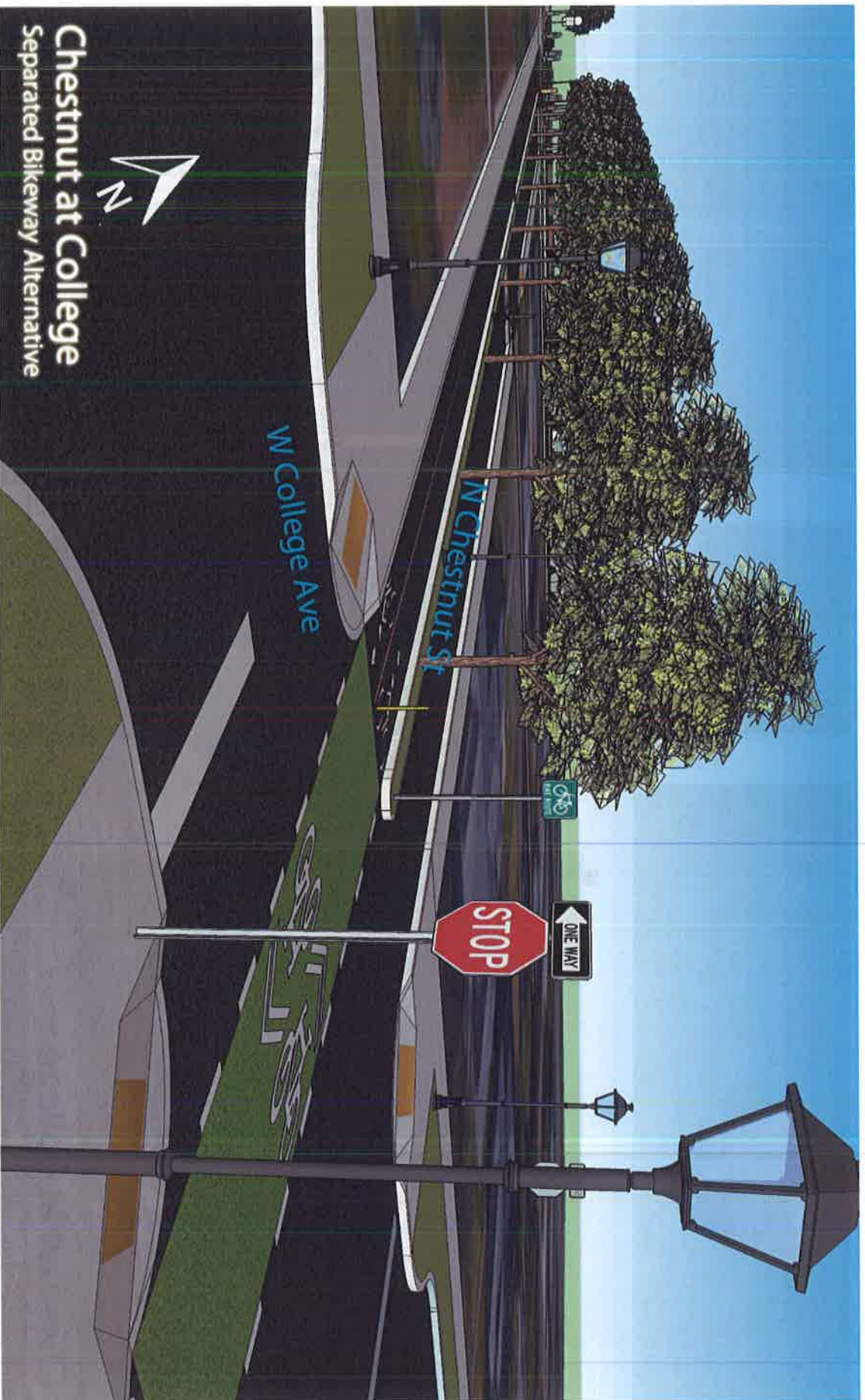


Chestnut at Broadway
Separated Bikeway Alternative



Chestnut at Broadway
Separated Bikeway Alternative





Chestnut at College
Separated Bikeway Alternative



Chestnut between College and Broadway
Separated Bikeway with Parking Alternative





Dutch Jake's Park

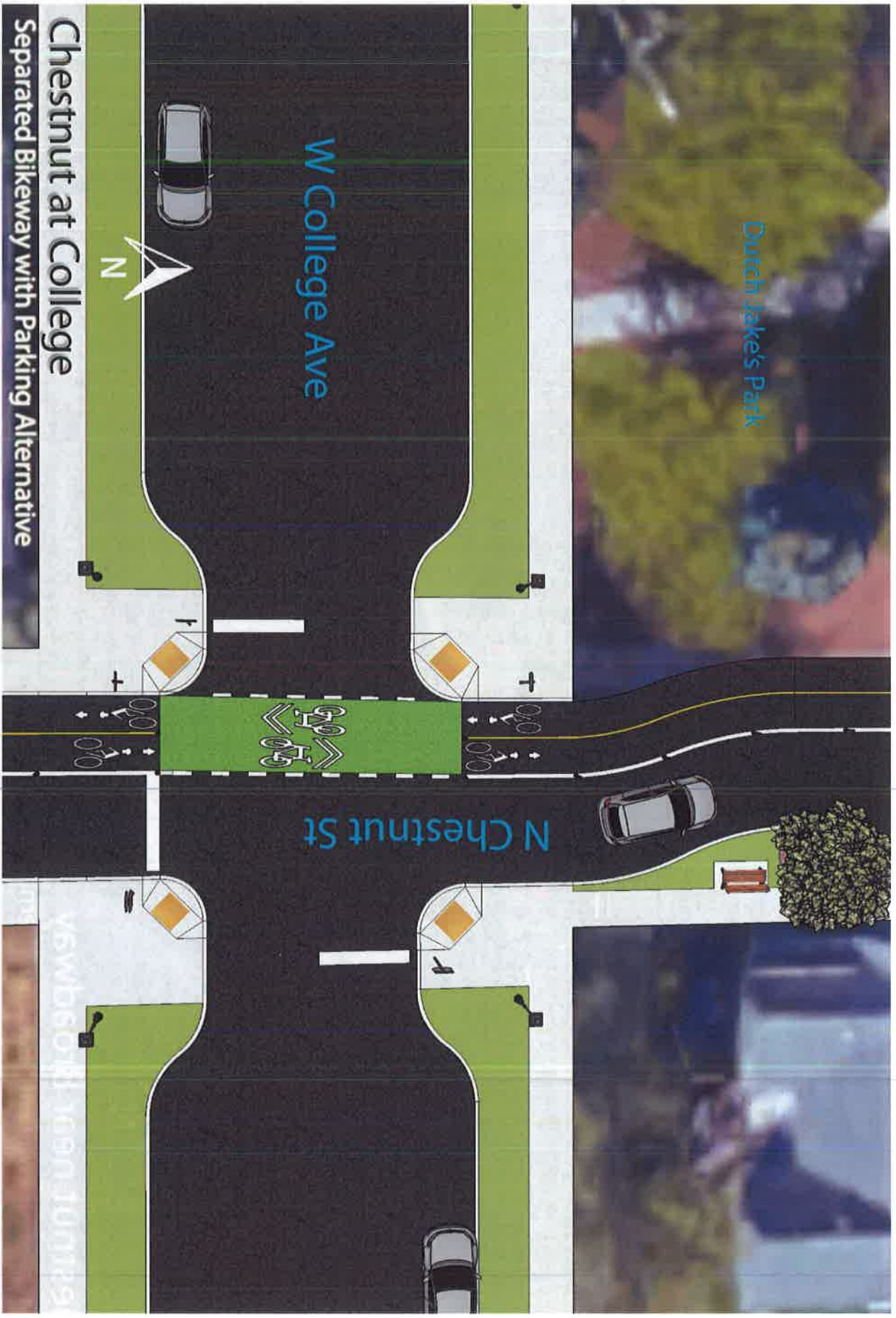
W College Ave

N Chestnut St



Chestnut at College

Separated Bikeway with Parking Alternative

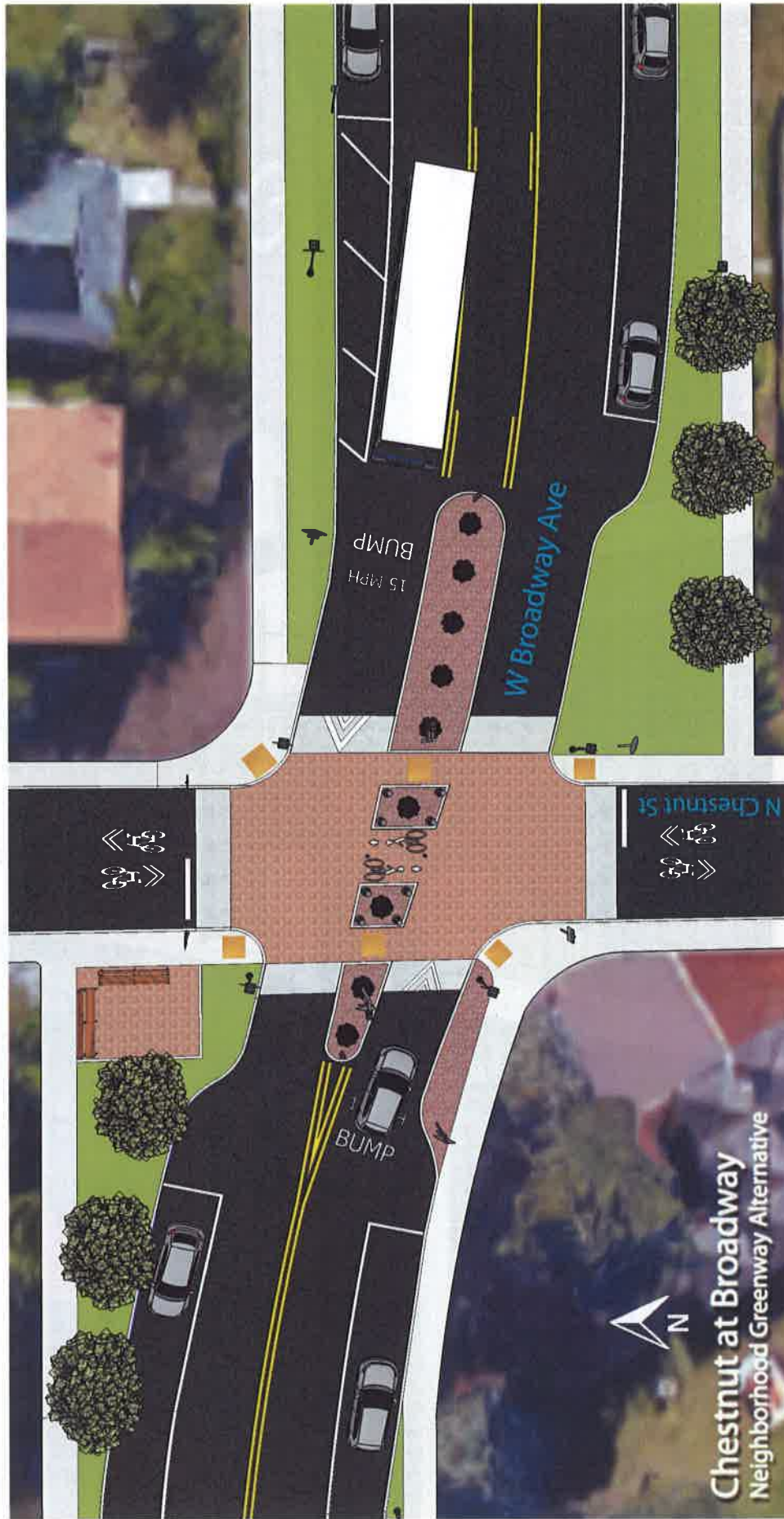


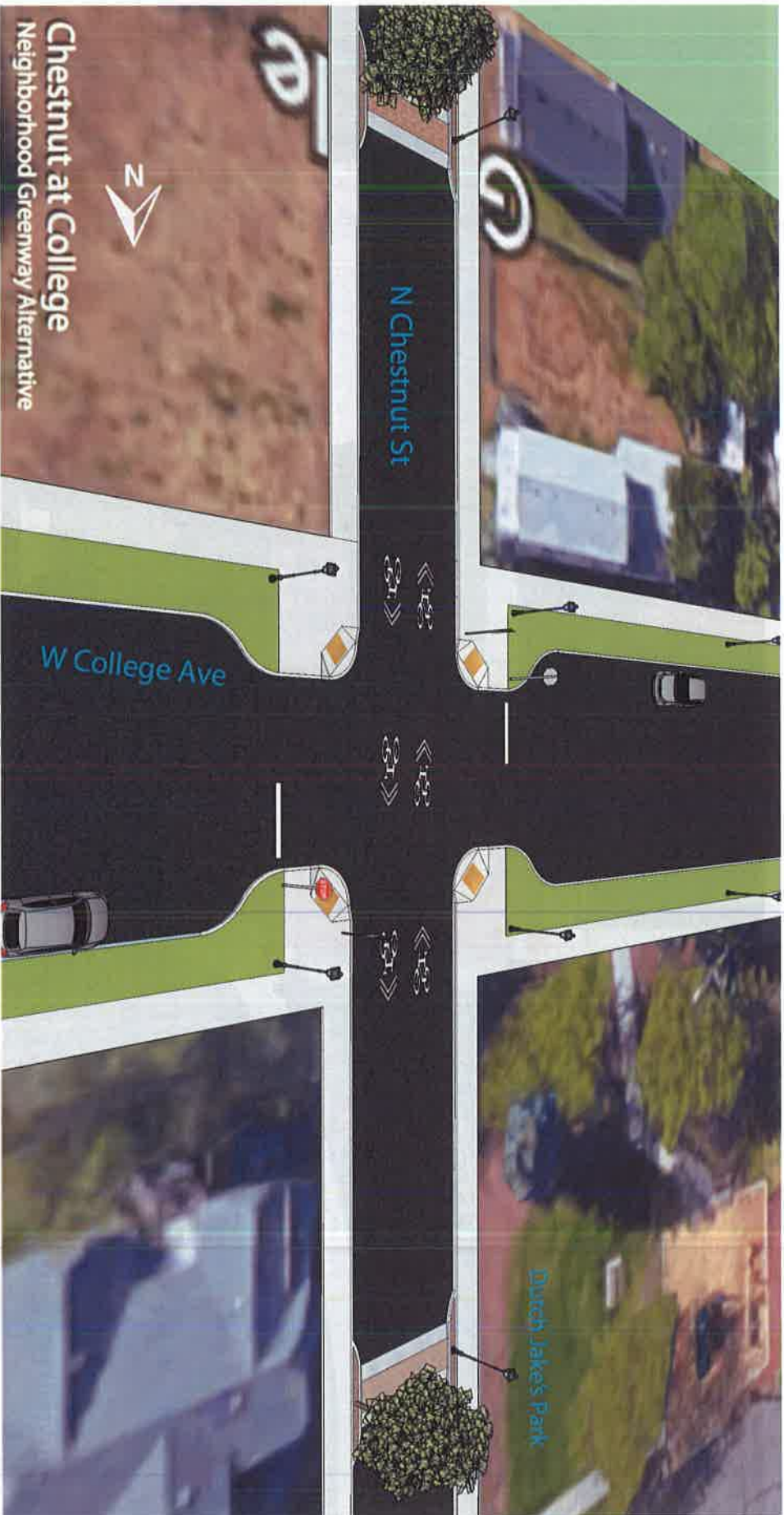


Chestnut at College
Separated Bikeway with Parking Alternative



Chestnut at College and Broadway
Neighborhood Greenway Alternative



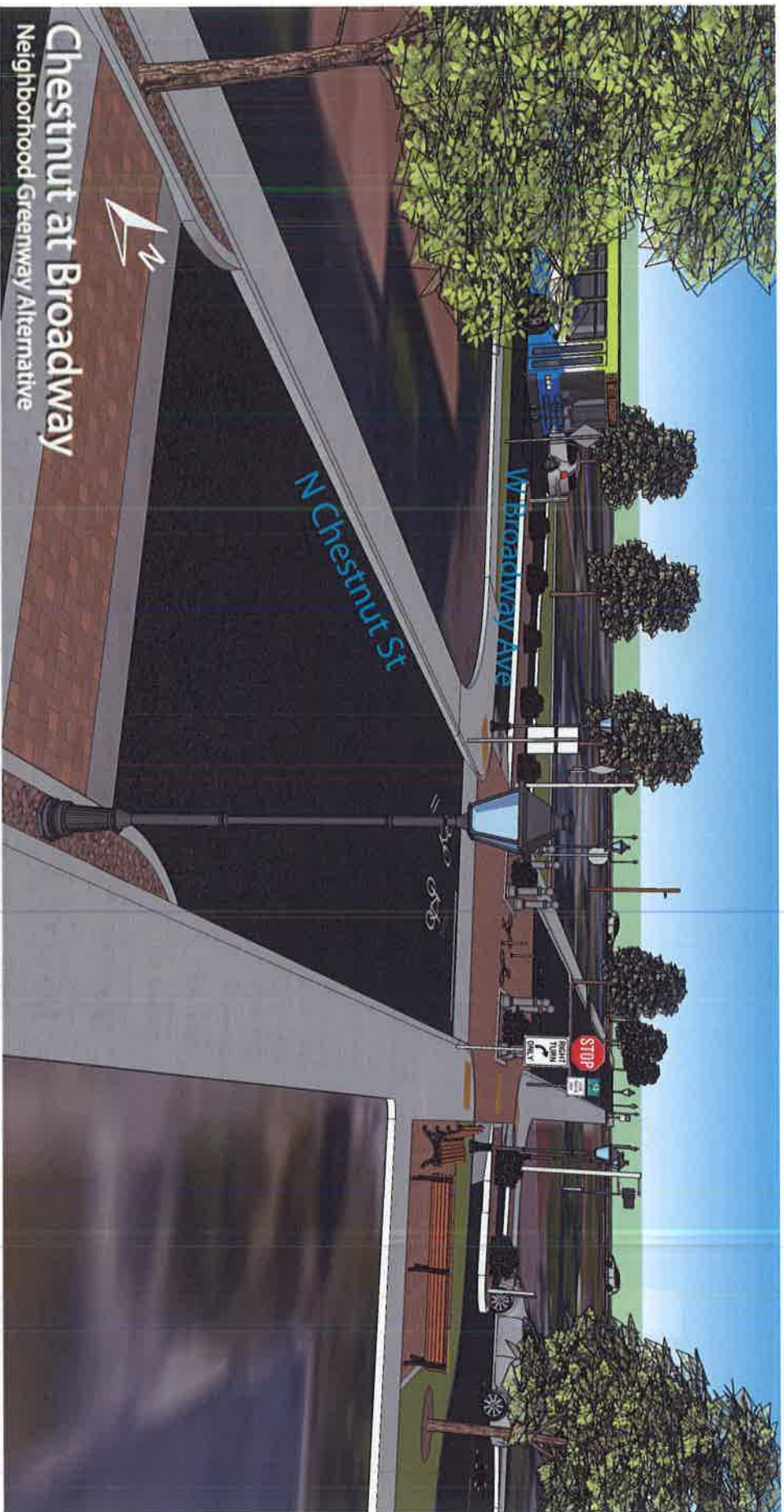




W College Ave

N Chestnut St

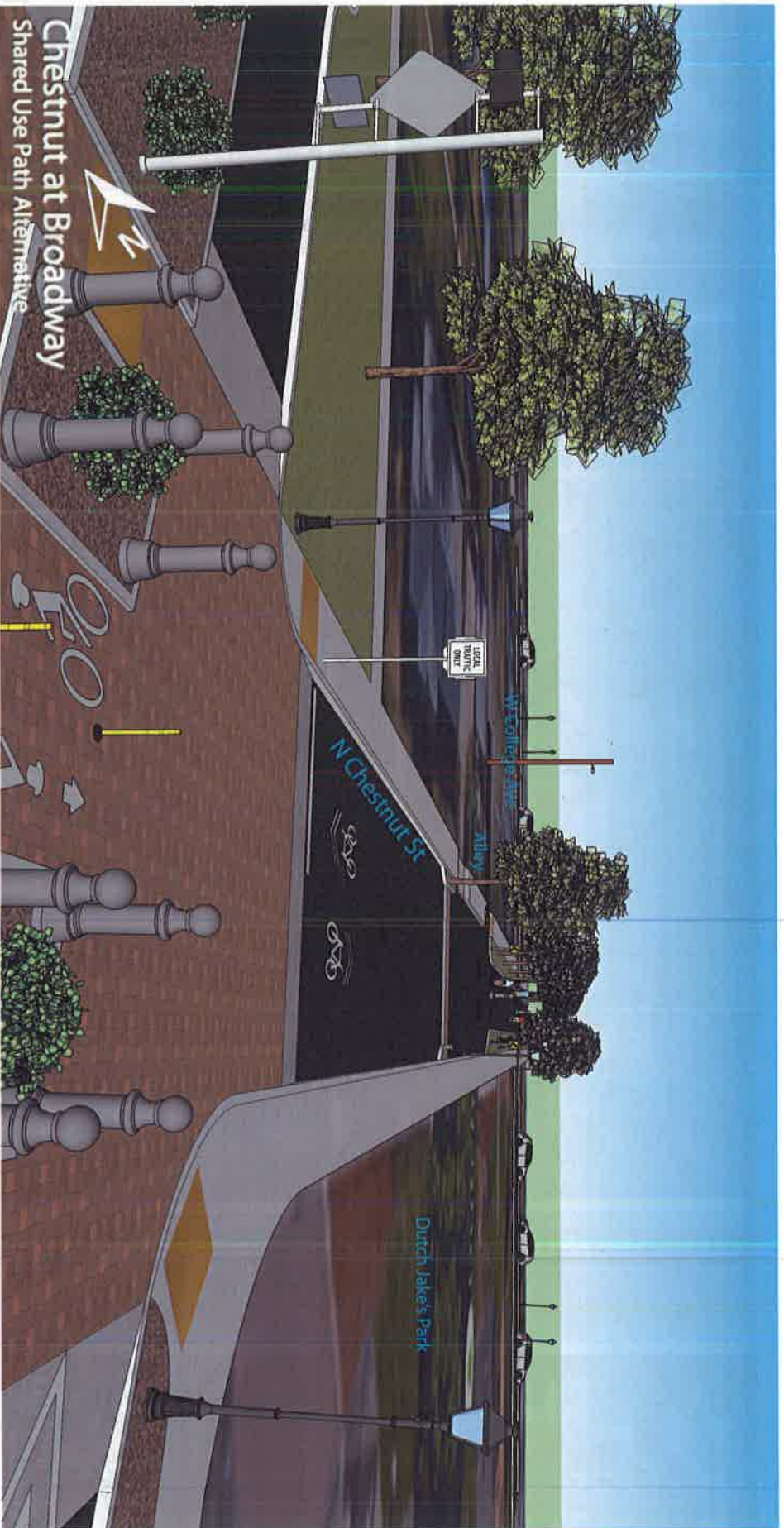
Chestnut at College
Neighborhood Greenway Alternative



Chestnut at Broadway

Neighborhood Greenway Alternative





Chestnut at Broadway

Shared Use Path Alternative





Chestnut at Dutch Jake's Park Midblock Alley

Shared Use Path Alternative



Chestnut at College
Shared Use Path Alternative



1 Dutch Jake's Mini Park

German-born mining tycoon Jacob Goetz, better known in Spokane as Dutch Jake, was part of this West

Central neighborhood from its beginning. His role in discovering the Bunker Hill and Sullivan mines in Idaho made him his fortune, but his fame came from his outstanding generosity and sense of fun. When Goetz opened the Spokane Hotel downtown, he was known to fire a cannon from the rooftop playground during celebrations, and his birthday parties famously lasted for days. After his death in 1927, former Spokane mayor W. J. Hindley said that Goetz's "capacity for friendship and his charity" had made him "known from one end of this country to the other." Neighbors of the local park insisted that the city council name it in Goetz's honor, refusing to even submit a list of alternative names. Construction of Dutch Jake's Park began in April of 1976.



2 Trolley Lines

The West Central neighborhood was platted in the 1880's when William Nettleton invested heavily in the area. As the neighborhood grew with new homes and businesses, people flocked to the area. Development was accelerated with the trolley system in 1899. The streetcar track remnants on Cochran and Dean were part of a system built by the Washington Water Power Co. Accessibility to Natatorium Park and the scenic views of the river provided a wonderful recreational retreat for the thriving community. The trolley system eventually gave way to buses in 1932, and the last streetcar ran in Spokane on August 31, 1936. There are trolley tracks peeking through the pavement all over Spokane but the lines on Cochran are some of the most well preserved in the area.



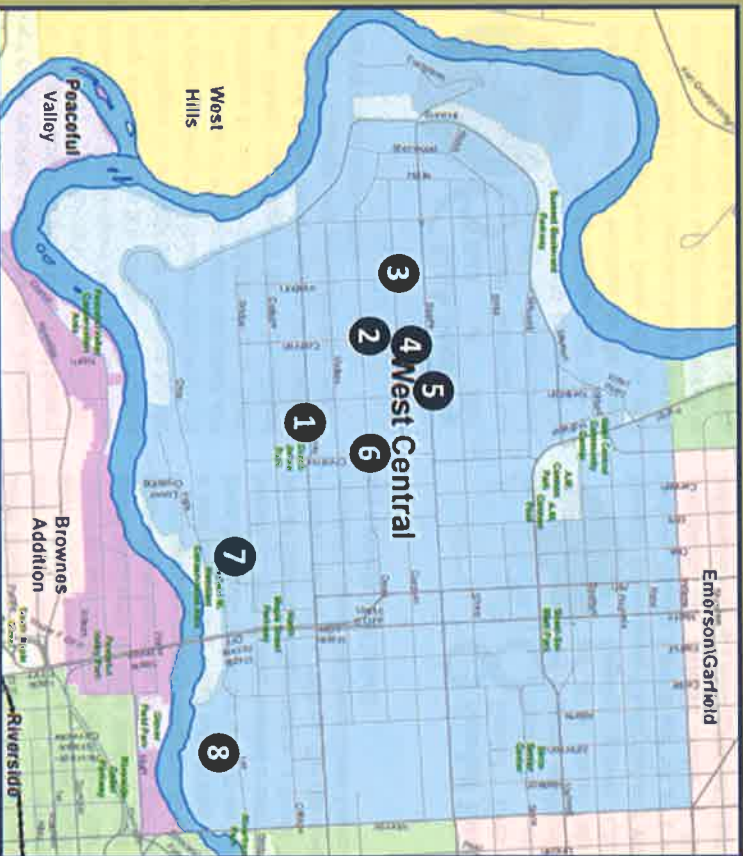
3 The Chamberlin House

William Nettleton and William Pettit may have platted the West Central area in 1887 but it was Gilbert Chamberlin and his son Ernest who designed and constructed many of the first houses. Chamberlin arrived in Spokane in 1899 and by 1912 he had built hundreds of homes for the bustling neighborhood. He credited his success to being a good businessman and a fair dealer. He also noted that the area was in great demand; streetcars were popular and the Natatorium Park brought families and visitors to the area in their hundreds. Chamberlin continued to invest in real estate in West Central for years to come. The house is a fine example of the classic Queen Anne style, featuring a pitched roof with multiple cross gables, decorative corbelled chimney cap, and a front-facing facade gable. Take a look at this beautiful home and see if you can spot other Chamberlin homes in the area!



4 Dutch Jake's House

This house on Gardner belonged to Jake and his wife Louisa. His best friend and business partner, Harry Baer, lived just around the corner near the minipark. The exterior has changed very little over the years though a new roof was added in the last two decades. The house was designed by architect Loren Rand. It displays many gothic characteristics, including an Oriel window and painted decoration in the gable. From all accounts, Dutch Jake spent most of his time at his casino and saloon in downtown Spokane. Pioneer historian William L. Lewis summed up Dutch Jake's life, writing, "In the entire Northwest, there is probably no more simple, kindly or bighearted individual, and probably no man better known to the public."





5 Doyle's Ice Cream

An icon of small businesses in Spokane, the beloved Doyle's Ice Cream Parlor has been serving the West Central neighborhood since 1940. Originally owned and run by Arthur Doyle, who opened his business at the age of 28, it regularly receives awards for best ice-cream in the area and is famous for its Huckleberry cone. Jerry Gill, the new owner of Doyle's, lived just two houses down from the ice-cream shop when he was a boy and has no intention of changing its nostalgic feel. The store has the original working soda fountain fixtures as well as the antique 1940s ice-cream equipment and continues to sell favorite treats such as 'Black and Whites' and 'Banana Splits'. In addition to its icy treats, Doyle's houses an incredible display of vintage and collectible toys, games, and ice-cream memorabilia.



6 Batch Bakeshop

Built in 1905, Batch Bakeshop was originally a family-owned butcher shop known as St. Paul's Market and one of the few commercial buildings in the mostly residential neighborhood. From 1910 to 1936 it was owned by the Danielson family, and was notable for housing a neighborhood church in its basement as well as being a general meeting place for local community members. In 1936, the St Paul's Market closed but the building continued to operate as a meat and grocery market until the 1960's under the name The Dean Avenue Market. Today the interior of the store has been completely renovated but still features the original meat hooks used in the butcher shop a hundred years ago. Stop in for a coffee and a cupcake.



7 Shaktown

Spokane was a thriving community in the early twentieth century with an infrastructure that boasted railways, streetcars and the rise of a new "machine"—the automobile. The city was exploding with new home construction, but beneath the Monroe Street Bridge lived a small community of men who wanted no part of the city developing above them. As early as 1911, Adolph Engel was one of the first residents of the 'village' that was called Shaktown by other Spokane locals but affectionately known as the North River Bank Community amongst its residents. At its peak it held about thirty small houses that ranged from bare huts to modest one to two room homes. In 1937, it even boasted a main street and an honorary village mayor, a World War I veteran named J. L. Wilcox. The city council eventually closed Shaktown down because it was a potential fire hazard.



8 Kendall Yards

Kendall Yards is Spokane's newest and hippest neighborhood but it is named after a forgotten pioneer, Charles Kendall. Before James Glover had ever visited Spokane, Charles Kendall had set up a small community that included twelve to fifteen buildings including a trading post and a general store. Glover and his partner, Jasper Matheny, visited the small outpost in 1873, when Charles Kendall had just died. Today, in addition to offering affordable housing, Kendall Yards has attracted new businesses, new partnerships, and local artists & entrepreneurs. Take a stroll along the trail and stop for a beer at Nectar Beer & Wine or enjoy some Taps at the Wandering Table!

Spokane Historical

A project by Eastern Washington University

For more stories on West Central and Greater Spokane check out www.spokanehistorical.org



Historic West Central Walking Tour



Self-Guided Tour

A collaboration between Eastern Washington University's History and Urban Planning Departments

