



TRANSPORTATION SYSTEM PLAN POLICY ADVISORY AGENDA

Thursday, July 08, 2021 - 6:00 PM

Council Chambers, Newport City Hall, 169 SW Coast Highway

This will be a hybrid meeting, which means that it will be held electronically, via Zoom, with a limited number of people (up to 15) allowed to attend in-person. The meeting will be live-streamed at <https://newportoregon.gov>, and broadcast on Charter Channel 190.

Anyone interested in making public comment is allowed to attend in-person, subject to congregant limitations (up to 15).

Anyone wishing to provide real-time, virtual public comment should make a request at least four hours prior to the meeting, at publiccomment@newportoregon.gov, and request the Zoom meeting information.

Anyone wishing to provide written public comment should send the comment to publiccomment@newportoregon.gov. The e-mail must be received at least four hours prior to the scheduled meeting.

The agenda may be amended during the meeting to add or delete items, change the order of agenda items, or discuss any other business deemed necessary at the time of the meeting, and pursuant to the municipal code.

CALL TO ORDER AND ROLL CALL

Meeting Agenda.

[PAC Meeting #5 Agenda](#)

APPROVAL OF MINUTES

**Draft Transportation System Plan Policy Advisory Committee Meeting Minutes
of February 25, 2021.**

[Draft TSP Policy Advisory Comm Mtg Minutes 02-25-2021](#)

1. TSP DECISION-MAKING PROCESS AHEAD
2. DRAFT ROADWAY STANDARDS (SEE TECHNICAL MEMO #10)
3. DRAFT SOLUTIONS UPDATE
4. DRAFT APPROACH FOR OPEN HOUSE EVENT
5. PUBLIC COMMENT

FINAL MEETING - FALL 2021

HANDOUTS

Handout Files:

[Item #2 - Revised Draft Roadway Standards Memo \(TM 10\) with Appendix](#)

[Item #4 - Agenda and Outline for Online Open House.](#)

[PowerPoint Presentation](#)

ADJOURNMENT



Newport Transportation System Plan Project Advisory Committee Meeting #5

July 8, 2021 | 6 PM to 8:00 PM

Online Zoom Meeting & In-Person at Council Chambers

Meeting Objectives

- Review highlights of Roadway Standards (TM 10)
- Review highlights of Solutions (TM 8)
- Review outline for Open House event set for November

- 1. TSP Decision-Making Process Ahead**
- 2. Draft Roadway Standards (See Technical Memo #10)**
- 3. Draft Solutions Update**
- 4. Draft Approach for Open House Event**
- 5. Public Comment**

Final Meeting – Fall 2021

- Review draft Transportation System Plan

Handouts

- Item #2 – Revised Draft Roadway Standards Memo (TM 10)
- Item #4 – Agenda and Outline for Online Open House
- Update on Solutions (to be distributed at the meeting)

Other Resources

Project website: <https://sites.jla.us.com/newport-tsp>

Draft MINUTES
Transportation System Plan Policy Advisory Committee
Meeting #4
Newport City Hall Council Chambers
February 25, 2021

Committee Members Present by Video Conference: Jeff Hollen, Tomas Follett, Bob Berman, Dean Sawyer, Ralph Breitenstein, Judy Kuhl, Roy Kinion, Rosa Coppola, Lyle Mattson, Roland Woodcock, James Feldman, Dietmar Goebel, and Linda Niegebauer.

Committee Members Absent: Rich Belloni (*excused*), Bryn McCornack, and Fran Matthews.

City Staff Present by Video Conference: City Manager, Spencer Nebel; Community Development Director, Derrick Tokos; and Executive Assistant, Sherri Marineau.

Consultants Present by Video Conference: Carl Springer, and Ben Weber.

1. **Call to Order & Roll Call.** Meeting started at 6:02 p.m.
2. **Approval of Minutes.** Motion was made by Ralph Breitenstein, seconded by Rosa Coppola to approve the September 9, 2020 Transportation System Plan Policy Advisory Committee meeting minutes as written. The motion carried unanimously in a voice vote.
3. **Highlights of Fall/Winter Outreach Events.** Springer reviewed the project schedule and noted the next meeting would happen in the spring. He gave highlights of the outreach summary, and reviewed the issues related to the TSP goals relating to the themes, and common messages.

Kuhl thought they did a great job on compiling information and noticed the trend on bike lanes and walking were hot categories. Berman thought it was a great presentation to summarize comments. He voiced concerns that the written mailing outreach was limited to the senior citizens in the city and he was in under the impression that the outreach would be broader. Berman wanted to see this expanded, and thought this might have distorted some of the responses. Mattson asked how good the responses were in respect to all cross sections of the community. He asked if it was a group isolated focus or were there any groups advising memberships to make comment. Mattson thought the amount of bike responses outweighed the bicycles he say in town. Tokos noted there had been strong participation from folks interested in bike/pedestrian issues. The younger demographics didn't participate as much as the older, which wasn't unusual. One of the things they were trying to do was to get a reasonable amount of input so they had a represented sample of the community. By in large that was in the materials. Tokos reported that 300 people participated in the online open house, and another 300 hard copies of surveys came in. They did a targeted outreach with different groups in the community. This was on top of the initial stakeholder outreach that was done to build the public input on what the key issues were. Tokos thought that they could try to reach out to other groups that might be underrepresented at this point. At the initial outreach they picked up groups that weren't heavily reflected in the community outreach through stakeholder engagement. Tokos felt they were in pretty good shape in terms of balance.

Follett reported that he was on the Bike and Pedestrian Committee and the consensus of who they talked to was that they didn't feel safe to bike in Newport because of the level of traffic safety on the streets. Hollen felt the comments were disproportionate and the bike/pedestrian was something they could comment on. He noted that he didn't see any comments about Oceanview Drive and didn't think earlier discussions focused on this. He had talked to people in the biking community who wanted biking integrated into the TSP. Mattson asked if people were looking for bike paths or a way to use infrastructure to move back and forth on the road. Follet thought visitors were looking for bike paths and residents were looking at the infrastructure. Tokos explained that the TSP was looking at addressing the needs of all transportation modes, not one mode at the expense of the other.

4. **Review of the Financial Forecast.** Springer reviewed the overview of existing revenue sources and projected funds through 2040. Berman thought there was a third Urban Renewal District that could contribute to funding. Tokos explained that this was the McClean Point District which was a smaller and almost strictly a sewer urban renewal district to get a future sewer station to handle wastewater from residential development. Outside of patching up Bay Blvd, Tokos didn't anticipate any other transportation related work in association with that district.

Springer reviewed the existing funding that was annualized. Tokos noted what was compiled in the memo was for stormwater and streets because they were typically commingled as projects. Nebel explained that there were regular maintenance expenses and they primarily used state gas taxes for day to day maintenance of the street systems. He thought it would be helpful to separate out what the day to day operational costs were to understand what was left over to do capacity increases, expansion of streets and things of that nature. Tokos noted they had begun to do this with the memo to pick up what they needed to have to meet current needs and what was expected to meet maintenance needs moving forward. He noted that as they ramped up the northside urban renewal project work they built in additional staff resources because there would be a large number of capital projects they needed to make sure they had sufficient staff resources allocated to make sure projects could be completed in the timeframe they have to be.

Springer reviewed the funds available for additional capital projects or public services. He then reviewed the illustrations of additional options for revenue. Nebel noted that increasing the local fuel tax was an item the City Finance Work Group was recommending the City Council consider before the voters to generate additional funds for rebuilding and maintenance of street systems. The Council would consider this on their March 1st meeting. This plan was for the next five years. Berman noted that every time there was a need for revenue they would start to talk about increasing fees. He felt this would likely get pushback.

Springer reported that when they were done with their solutions analysis and feedback from the Committee and public, they would have a comprehensive list of services and programs to augment the process. For each of these things they would then come up with the funding that was required to make them happen. This analysis would allow the City to come up with what they would most likely be able to afford. Nebel asked if the Urban Renewal funding was the component for transportation or if was the entire Urban Renewal annual amount in the analysis. Tokos believed he had pulled out the transportation amounts but would check on this.

Berman asked of the information that was listed on the additional funding was for significant sources of funding. Springer explained that these were listed as opportunities for the city to use but they were not counting on them for investments. The Statewide improvement program was the typical process the State went through with the highway system to make decisions on where to make investments. Springer explained how cities competed for funding and noted that these were fairly modest amounts of money. Feldman noted that if this was for the pavement conditions on Hwy 101 it would score well for a STIP project and there could be funding for the project. This could possibly be a good opportunity to pursue some bike and pedestrian funding for enhancements. A lot of the STIP programs were based on formulas and it depended on the condition of the roads. Tokos noted that it was his understanding that in the ODOT memo they were assuming \$10.8 million coming through the program that would land with the STIP. He sensed this might be a little low. The project on the signal relocation about to go under construction in South Beach had \$4.5 to \$5 million of State and Federal funds tied into the project that had \$2.5 million from the South Beach Urban Renewal District. They were able to work a cost sharing into the STIP and those tended to be the big projects with big cost figures and a significant State/Federal match. This depended on the changing landscape with Federal funding, how it trickled down through ODOT, and how funding was made available. It was a hard thing to project and it was safe to go with the \$10.8 million in the report. Nebel suggested they put together a grid of the funds in categories of what they could potentially fund to understand how the funds might be used.

Berman asked if the Federal Grants Access Fund could be used for things like the improvements on Lighthouse Drive. Tokos explained it could for mainly the north end. They were working on the Bureau

Land Use Management on a separate study focusing on the intersection on Lighthouse Drive and the access to the outstanding natural area. The results of this work would be targeted for this fund.

5. **TSP Decision Making Process Ahead of Us.** Springer reviewed the project schedule. He explained the milestones ahead for the TSP adoption. They would be confirming the direction of the solution analysis in response to the technical work and public feedback at this meeting.

Dietmar asked if there could be another work session before the hearings. Springer thought they could do that but noted the alternative would be to move the work session to a later date. Goebel wanted the Planning Commission and City Council to have the same thinking after the recommendation. Tokos explained they could do a joint work session meeting with the City Council and Planning Commission before the Committee's Meeting #6 and the first hearing. It would be good to have the policy making bodies take a look at this before it went to a public hearing.

Hollen thought that when they had the details on the plan they should have another meeting. Nebel thought the joint meeting was a good place for this and they should circle back with the Council and Commission before the open house in case there were specific direction, questions or input they would like to obtain from the process. This could be done internally depending on the budget for the consultant's commitment, which could be discussed. Goebel reiterated that what he wanted was for the Council and Commission to get together a discuss any community concerns and iron them out before the public hearing. Nebel thought they could do this without necessarily having the full support they had for the committee meeting. This was something they could talk about. Goebel didn't think the consultants needed to be in attendance.

Coppola asked about the proposal for raising taxes. She asked if this was just a suggestion or if it was already happening. Nebel explained that these were just ideas. This was a recommendation at that point and nothing formalized. These were potential sources of revenue. Nebel reported that the City Finance Work Group identified that the Council should consider a gas tax adjustment. The change would have to be voted on by the citizens of Newport. Nothing beyond this was planned.

6. **Initial Findings of Solution Evaluations.** Springer reviewed the project maps. Follet pointed out that there was a big gap between NE 12th and NE 20th Streets that had a 100 foot elevation difference.

Springer reviewed the evaluation summary sheets and the proposed priority pedestrian network. He noted that there were some enhanced crossings for Agate Beach and US 20. Tokos noted the intersection at NE 60th Street and Highway 101 would be an enhanced crossing. The US 20 enhanced crossing was at US 20 and Eads Street. There had been a discussion to add something in the vicinity of the Agate Beach Wayside where surfers crossed Highway 101 by the surf shop. Springer noted this was on the list for the next round of edits. Tokos reported that they anticipated the Bike and Pedestrian Committee taking a look at this to give their comments. Kuhl asked what the enhanced crossing at the surf shop would be. Tokos explained it could be a flashing beacon or something that would catch people's eyes so they had enough time to respond. Feldman noted that the TSP would call for an enhanced crossing and engineering studies in the development of this, but the TSP didn't get into the fine details. Tokos reported that they would anticipate having a refuse island at the NE 60th Street and Highway 101 location.

Springer reviewed the proposed priority bike network. Follet suggested making a google map people could zoom into so they could see the details better. Springer could provide that on the next iterations.

Berman noted the Yaquina Heights Drive was not recommended as a bike route but seemed more practical than US 20. Follett would add it as a route. Goebel asked how the bike and pedestrian routes would change when they determined the couplets. Springer explained that it depended on what they chose to do, and these needed to be adaptive to respond to that. Tokos added that the next outreach would be to look at the types of solutions that could address the needs of the community. Goebel thought that if they were doing couplets on Highway 101 or US 20 it would set the tone for pedestrian ways and bike lanes there. Springer explained if they went ahead with a couplet the bikes and pedestrians would be a part of the solutions and would have to be adjusted later. They would have that information by the next meeting.

Springer reviewed the North Newport/Agate Beach map. Hollen noted that 73rd Street had very little residential traffic there. He advocated for a signal at 60th Street because there was a new housing project there which was a major issue traffic. Hollen didn't think there needed to be a crossing at 55th Street. He thought there was little or no pedestrian problems near the surf shop at 52nd Street and thought they just needed directions on crossing the highway.

Berman thought something should be done at 60th Street. There was a lot of commercial traffic on 73rd Street to cross Highway 101. Berman didn't think they should rule out a signal at 73rd Street. Kuhl noted she lived near the area and used this intersection. Having a turn lane was helpful and she was more concerned that it was in a 50 MPH speed zone. Kuhl was concerned that 73rd Street was too narrow for the big trucks. Kinion thought that something eventually needed to be done at 73rd Street.

Springer reviewed the Central Newport map. Hollen was in favor of signals at 36th and 31st Streets. 31st Street could be maintained as a one way road heading east instead of having all the traffic going up to 60th Street. Goebel noted that the previous City Manager, Don Davis had a proposal to use the old traction right-of-way available for bike and pedestrians and asked if this was still available. Tokos noted this was the Spruce railroad right-of-way on the west side of Highway 101 and confirmed it was on the list. Berman thought it would be nice to have a bike/pedestrian route that tourists could use and thought this should be resurrected. Hollen thought that if there was a signal at 36th Street to stop the traffic intermittently it would make it easier to get out from Oceanview Drive heading north. Tokos wanted to emphasize that they wanted to reflect the UGB amendment on the maps. The numbers on housing were about half of what they expected with the UGB amendment. They wanted to make sure to pick them up all the new housing developments as background assumptions when assessing if it was viable or not. Springer reported this would be included in their analysis.

Berman questioned what was included in the changes for the Oceanview Drive. He thought the road needed a full reconsideration and he would vote to close the road to make it a bike and pedestrian route. Hollen noted that there didn't seem to be a way to widen Oceanview without going in the gullies. He liked the idea of continuing a bike and pedestrian lane parallel to Highway 101 from Oceanview down to where it hit Big Creek Park. Goebel thought closing Oceanview to a one way and making a dead-end was counterproductive and felt there would be a lot of pushback. He thought the route needed a lot of work such as sidewalks. Goebel noted that the north end was used a lot as an alternate route.

Springer asked what the other Committee members thought of a one-way approach for Oceanview. Hollen was opposed to this. Woodcock liked the idea of pushing traffic off of Oceanview and onto Highway 101 for bikes and pedestrians. Follett reminded that this would only be a small part of Oceanview. Goebel asked what area would be one way on Oceanview. Follet explained it would be between 15th and 12th Streets. Goebel noted this was a local street used all of the time and there would be a lot of pushback on this. Nebel thought there has been a lot of discussion on Oceanview. He thought it was important to gauge what the options were and try to come to some sort of closure on this. Nebel wanted to see more input from public before they made a decision to leave it as is or make changes. If they didn't do this, it would come back to them. Tokos noted that the one way was linked to a related project to swing Oceanview over to Nye Street. Hollen thought that the extension of Nye Street to Oceanview Drive at 15th Street did provide an alternative for bikes to go down Nye Street to the post office. He thought this would be a safer route than going through Nye Beach.

Springer reviewed the downtown Newport map. Hollen noted that businesses in this area didn't have sufficient parking and improvements might revitalize the area. Goebel asked if they were looking at a lane change in the morning and afternoons at the middle school on 7th and Harney Street. There was a lot of traffic congestion in this area. Berman thought they should reconsider the closing of Eads Street at the High School when there were kids present. This was why people went up 7th to get to Harney because they couldn't get through to US 20. Berman suggested a controlled cross walk there instead. Follett thought a roundabout at Harney and 7th would be good, along with a covered breezeway. Sawyer noted there was a tunnel underneath Eads Street to the high school that was used for utilities. Nebel thought the Moore Drive

and US 20 intersection had a lot of turning movements that didn't allow cross traffic to go through. He thought that a roundabout at that location would help the traffic flow.

Mattson noted that the Deco District on Highway 101 had parking on the sides. If this was removed, it would give them the ability to have a bike lane. Springer noted they were considering reallocating the highway space and wanted to see left turn lanes on the highway. It could serve as an interim measure taken while other things were in the works such as couplets. Berman supported this but cautioned to take away the only parking for some of the businesses in this area. This might put people out of business by eliminating parking. Berman voiced his concerns about the north end of the couplets. He thought having traffic go around City Hall could create a traffic problem. Berman liked the south end of the couplet, though. Springer agreed that the north end needed to be looked at. Goebel asked if they were looking at a shorter couplet. Breitenstein noted the hospital had concerns about traffic from the couplet affecting ambulances and their staff, and thought the north end of the couplet was a concern.

Springer reviewed the Southeast Newport map. Berman asked how a traffic circle at Moore and US 20 would work for pedestrians. Springer explained they could be designed for pedestrians. They wouldn't be next to the circle and further removed. This could be done, but his concern was more about the grade approaching the highway to make sure there was enough visibility.

Springer reviewed the US 101 couplet next. Goebel had concerns with putting a couplet in front of a hospital and thought it would be problematic. Breitenstein like the shorter couplet so it didn't interfere with the hospital. The traffic going north would cut off around the Chamber of Commerce. Springer noted they haven't figured out where the north end would come back to Highway 101. Tokos noted that they needed to take a hard look at a way to bring the couplet back to US 20 to take some pressure off of the US 20 and Highway 101 intersection. They could also look at widening the turn lanes. Springer thought that if they left it as it was, they should widen the left turn lanes to US 20. Nebel asked if they would have the capabilities to direct the traffic going east bound on US 20 to continue down 9th Street and merging into Highway 101 instead of on US 20. Springer thought this was possible but noted the critical part was the north leg of the traffic turning from Highway 101 to US 20.

Berman asked if there was any consideration for a couplet where 7th Street was the northbound traffic and Highway 101 was the southbound. Sawyer didn't see how they could get it further south than Angle Street and thought this would be problematic. Goebel noted they would have to build a bridge across 9th Street with this. Springer explained this was dropped and kept the one to continue the couplet on Highway 101 on US 20 up to about 10th or 12th Streets. Nebel reminded that they needed to be thinking about how they looked at the traffic issues in this area and how to make the area viable and part of the community again. Hollen suggested closing off Olive Street from US 20 so the traffic couldn't come out of Olive Street onto Highway 101. He also thought there should be a signal near Hurbert Street and Highway 101 at the area by the Post Office. Springer noted they had the flexibility to rethink where their traffic control made more sense to provide safe options for making turns where the demand is highest.

Springer reviewed the US 20 Highway Couplet. A discussion ensued regarding if the Committee was determining which couplet they wanted at that time. Springer explained they were looking at different ideas they liked and then they would be giving the Committee different versions to look at. Sawyer thought that having two major signal lights close to each other on the 2nd Street option would be a problem. It would be hard to go through the lights when someone had to turn north on Highway 101 and there was a second signal right after it. Goebel thought this would also affected the High School parking lot on 2nd Street and creating a hazard for the kids. Breitenstein thought that they might not want to worry about couplets and look to just widen sections of Highway 101. This would be a lot less money and simpler. Tokos reminded that this was one of the options on the table. What they would be telling the public was what they could and couldn't do. Every option had positives and negatives they would have to sort through. Nebel acknowledged that sometimes the drawings were hard to understand. He thought they should use aerial images with photos of buildings for people to visualize this better. Springer thought they could do that and do a street view as well.

Mattson has questions on how the east side of the US 20 couplet would come back together. Springer thought this was going to be complicated. Mattson questioned what they were gaining with this. Tokos noted that one of the reason to do this was to get enough traffic on the other streets and get more exposure. If they added double left turns for traffic heading south on Highway 101, a couplet would add real-estate to do the extended merge onto US 20. Springer noted that if they did the 2nd Street couplet there wouldn't be an approach to the highway going westbound and meant they wouldn't need a second southbound turn lane on that east leg.

Berman asked if a traffic circle on Harney would help. Springer thought this was a possibility. They could do a roundabout at Harney and at Highway 101. It would have to be a two lane roundabout and they would have better diagrams at the next meeting. Follett asked for a rendering on what it was going to look like as well. Mattson suggested separate slides.

Springer reviewed the couplet options that would be refined, and then covered the Harney Street Extension. Goebel asked if the north end of the bike path would be at the north end of the water plant. Tokos didn't think they would land there and there was still an option to do an alignment that would bring it back in between Big Creek Park and the water plant. Nebel noted that depending on what happened to the dam there might be other property east of the dam to look at to open up more options on the extension. Nebel asked if this extension was buildable because it would go through wetland and other sensitive areas. Springer noted the consultant assigned to this was working with the interim City Engineer to work through this. Follett noted there had been plans to do a bridge across Jefferies Creek and asked if the plans could be accessed. Tokos explained there was limited information on this and most was done by a developer. There might be an alignment drawing but there weren't a lot of details. Hollen asked if the extension would come in off of 36th Street to access Highway 101. Springer confirmed this. Hollen had concerns on this because there was a canyon there and he didn't see people going the Harney route to bypass Newport. Berman requested the Committee have a chance to look at the details on the maps before the public saw the final presentation. Hollen also noted that he didn't think large trucks would use the Harney extension and asked who they were targeting to use it. Nebel thought there would be use there because there was a lot of traffic that used Harney Street. If they could avoid Highway 101 they would. Nebel thought it would be more residential traffic. It wasn't intended to be a bypass but for residential use. Springer reported that he could distribute the details to the Committee before the open house.

7. **Public Comment.** Tokos reviewed the two letters between the City and ODOT. The TSP plan would include goals and polices relative to how the State would go about planning for a replacement of the Yaquina Bay bridge. One of the questions during the outreach to the State was they wanted to see it in the existing alignment. What they heard from the State was that they understood there needed to be some certainty to that given the level of investment and balance in the system would rely on that, and they were willing to frame that tactfully in the TSP. Feldman thought that if there was a goal and policy statement in the Newport TSP, and a project to the effect, it would help guide the decisions later when the time came to fund and design something.

Nebel noted that the information collected so far showed that the majority of people wanted the bridge in the same location. He didn't know if they needed to further refine this based on the second round of input or make the general assumption that there would be a statement in the plan that the community wanted the bridge to stay where it was at. Nebel asked if they needed to get further input in the second round of comments before it was included in the plan. Gebel thought the bridge was an icon for the city and replacing it would be a problem. He thought they also needed to look at a second bridge option as well rather than replacing the bridge. Nebel noted if the bridge remained, ODOT would want to donate the bridge to the city, and something he didn't think they could accept. The question was if they needed to see further input in this process to see if they needed a statement in the plan regarding the location of the bridge going forward. Feldman noted the feedback from the initial event was pretty clear on this. Tokos explained there was clear response in terms of preference to see the crossing stay in the present alignment. They needed input on what was being done in the next 20 years and their expectations on the realistic timeframe that the bridge needed to be replaced. Nebel thought that building on the communication with the Director on the bridge would be critical thing going forward. A project like this was typically several decades in the process

for it to happen and thought they needed to continue pushing ODOT to begin this process. ODOT's letter talked about ways to fund the bridge replacement, like tolls. This would be a challenge with communities connected to the bridge to get them to support the construction of a new bridge with tolls. If the Committee was comfortable with this they should state it clearly that it was the intent of the plan to have the bridge remain at that location. The next issue was to push ODOT to see what the plan for dealing with the bridge was as it approached the end of its life span.

Woodcock asked if there was any talk about making the old bridge a bike and pedestrian bridge, and then have a new bridge built somewhere else. Feldmann noted that if the city was willing to take over the bridge this would be a possibility. It would mean the city would have to maintain the existing bridge. Hollen didn't see any realistic alternatives for another bridge. He asked if the bridge started to fail and needed to be replaced, would ODOT pay for this. Feldmann explained there was a number of funding scenarios for this. ODOT was spending a lot of money over the next 20 years to maintain the bridge and the TSP was a 20 year plan. This could be a project for the next TSP. Goebel reminded the city didn't have funds to replace the bridge. Feldman reported ODOT had money but there were other bridges that were more of a priority. Nebel thought that the city and state couldn't wait until the bridge failed. A long range plan needed to be started in order to have a discussion on a solution. Goebel reminded that they were going to be spending money on Highway 101 so they needed to make a decision on where the bridge would be. Nebel noted that what he was hearing from the Committee was that they wanted to get some feedback on if the intent for the bridge was to be in the current alignment instead of another location. This would effect where couplets would be placed and why it needed to be figured out. The Committee was in general agreement with this.

8. **Public Comment.** Tokos acknowledged the public comment received from Wendy Engler that had to do with the Lighthouse Drive connection and her request for further discussion on this. He thought this was something they might be able to further vet through the Bike and Pedestrian Committee.

9. **Adjournment.** Having no further business, the meeting adjourned at 8:45 p.m.

Respectfully submitted,

Sherri Marineau
Executive Assistant

TRANSPORTATION STANDARDS MEMO

DATE: June 30, 2021

TO: Project Management Team

FROM: Rochelle Starrett, Kevin Chewuk, Carl Springer | DKS

SUBJECT: Newport TSP Update

Project #17081-007

Technical Memorandum #10: Transportation Standards

This document provides an overview of the transportation system standards recommended for Newport. Included is a detail of the recommended transportation system classifications, including multimodal corridors, to support the movement of all people, details on the recommended design of streets, and performance standards to ensure that the network functions as outlined in this document. Together, these standards will help ensure future facilities are designed appropriately and that all facilities are managed to serve their intended purpose.

MULTIMODAL STREET SYSTEM CLASSIFICATIONS AND CORRIDORS

All streets in Newport include a functional classification and proposed supplemental corridors to help support the movement of all people and help the city work towards achieving the transportation Goals and Objectives. Functional classifications from the 2012 Transportation System Plan (TSP) were reviewed to propose new functional classifications for Newport's streets. The proposed new functional classifications along with the existing roadway functional classification are summarized below. The 2021 TSP update also identifies new supplemental corridors for pedestrian, bicycle, and freight travel. The new corridors identify locations where special priorities for these modes are recommended and help to ensure the transportation system is comfortable, convenient, safe, and well-connected for all users. The roadway functional classification ultimately determines the facility type and cross-section design requirements for each mode.

The 2021 TSP recommended functional classification map and 2021 TSP recommended supplemental corridors do not include the proposed US 101 or US 20 couplet alternatives for simplicity. In the event these alternatives are advanced through the 2021 TSP update, revisions to these maps will be required.

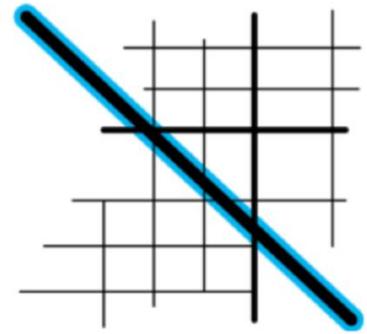
ROADWAY FUNCTIONAL CLASSIFICATION

The motor vehicle classifications for streets help support the movement of vehicles by indicating the street's intended level of mobility, access, and use for vehicles. A city's street functional classification system is an important tool for managing the transportation system. It is based on a hierarchical system of roads in which streets of a higher classification, such as arterials, are designed for a higher level of mobility for through movements, while streets of a lower classification are designed to facilitate access to adjacent land uses. From highest to lowest intended use, the recommended classifications are Arterial, Major Collector, Neighborhood Collector, and Local Streets. Streets with higher intended usage generally limit access to adjacent property in favor of more efficient motor vehicle traffic movement (i.e., mobility). Local roadways with lower intended usage have more driveway access and intersections, and generally accommodate shorter trips to nearby destinations.

This recommended set of classifications differs from those in the current 2012 TSP. The City currently uses the designations of Principal Arterial, Minor Arterial, Collector, and Local Streets.

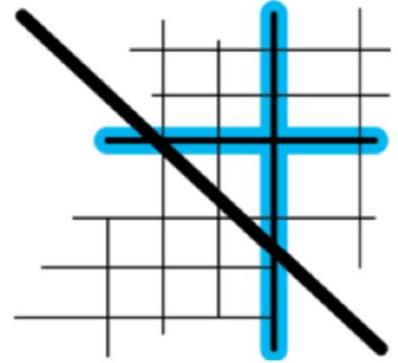
ARTERIAL STREETS

Arterial streets (seen at right) are primarily intended to serve regional and citywide traffic movement. Safety should be the highest priority on Arterials and separation should be provided between motor vehicles and people walking, and bicycling. Safe multimodal crossings should also be provided to key destinations. Arterials provide the primary connection to collector streets. Where an Arterial intersects with a Neighborhood Collector or Local Street, access management and/or turn restrictions may be employed to reduce traffic delay. The only Arterial streets in Newport are US 101 and US 20 which are also classified by the FHWA as Rural Other Principal Arterials.



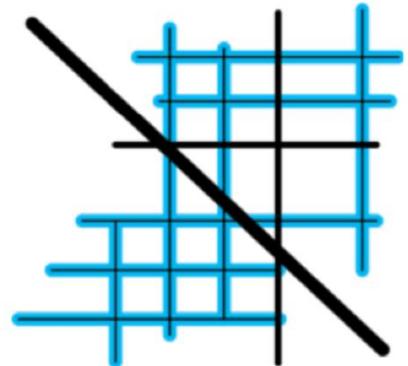
MAJOR COLLECTOR STREETS

Major Collector Streets (seen at right) are intended to distribute traffic from Arterials to streets of the same or lower classification. Safety should be a high priority on Major Collectors. Where a Major Collector street intersects with a Neighborhood Collector or Local Street, access management and/or turn restrictions may be employed to reduce traffic delay.



NEIGHBORHOOD COLLECTOR STREETS

Neighborhood Collector streets (seen at right) distribute traffic from Arterial or Major Collector streets to Local Streets. They are distinguishable from Major Collectors in that they principally serve residential areas. Neighborhood Collector streets should maintain slow vehicle operating speeds to accommodate safe use by all modes and through traffic should be discouraged. Where a Neighborhood Collector street intersects with a higher-classified street, access management and/or turn restrictions may be employed to reduce traffic delay and discourage through traffic.



LOCAL STREETS

All streets not classified as Arterial, Major Collector, or Neighborhood Collector streets are classified as Local Streets (seen at right). Local Streets provide local access and circulation for traffic, connect neighborhoods, and often function as through routes for pedestrians and bicyclists. Local Streets should maintain slow vehicle operating speeds to accommodate safe use by all modes.

Private Streets

Private Streets are a special type of Local Streets that are used to facilitate access to specific properties or small neighborhoods. Private Streets can include driveways or private roadway connections that serve four or fewer parcels;¹ the City of Newport is not responsible for maintenance on Private Streets. These streets are not shown on the following functional classification maps.

RECOMMENDED CHANGES TO ROADWAY CLASSIFICATIONS

Figure 1 shows the recommended functional classifications in Newport. These are recommended to better reflect the intended function in the movement of motor vehicles. Due to Newport's unique

¹ *Newport Municipal Code: 13.05.005 Section J.*

<https://www.newportoregon.gov/dept/adm/documents/newportmunicipalcode.pdf>

topography and environmental constraints, typical spacing guidelines for arterial and collector streets cannot always be applied. The 2021 TSP recommends maintaining US 101 and US 20 as Arterials in conjunction with an off-highway network of collector streets. This change recognizes that many of Newport’s existing Minor Arterial roads function as collector streets rather than minor arterials. The 2021 TSP also recommends splitting the collector designation into a new Major Collector and a new Neighborhood Collector classification to identify locations on collectors where local access needs should be accommodated while maintaining a local street character for pedestrians and bicyclists. Introducing two levels of collectors will better establish transportation priorities for different streets in Newport.

The current functional classifications from the 2012 Newport TSP² were reviewed to identify locations where reclassifications should be considered. The recommended reclassifications summarized in Figure 1 and Table 1 will provide better system spacing and connectivity.

TABLE 1: RECOMMENDED ROADWAY FUNCTIONAL CLASSIFICATION CHANGES			
ROADWAY	EXTENTS	EXISTING FUNCTIONAL CLASSIFICATION	RECOMMENDED FUNCTIONAL CLASSIFICATION
NE 31ST ST	US 101 and NE Harney St	Arterial	Local
SE MOORE DR	HWY 20 and SE Bay Blvd	Minor Arterial	Major Collector
SE BAY BLVD	SE Moor Dr and City Limits	Minor Arterial	Major Collector
SE MARINE SCIENCE DR	US 101	Minor Arterial	Major Collector
SW ABALONE ST	US 101 and SW Abalone St	Minor Arterial	Major Collector
SE FERRY SLIP RD	SE Marine Science Dr and Ash St	Minor Arterial	Major Collector
NE HARNEY ST	End of Road and Hwy 20	Minor Arterial	Major Collector
NE HARNEY ST	NE 31 st St and NE Big Creek Rd	Minor Arterial	Neighborhood Collector
NE AVERY ST	City Limits and NE 73 rd St	Collector	Major Collector

² Newport Transportation System Plan, 2012.

https://www.oregon.gov/ODOT/Planning/TPOD/tsp/city/city_of_newport_tsp_2012.pdf

TABLE 1: RECOMMENDED ROADWAY FUNCTIONAL CLASSIFICATION CHANGES

ROADWAY	EXTENTS	EXISTING FUNCTIONAL CLASSIFICATION	RECOMMENDED FUNCTIONAL CLASSIFICATION
NE 73RD ST	NE Avery St and US 101	Collector	Major Collector
NW/NE 11TH ST	NW Oceanview St and NE Eads St	Collector	Major Collector
NW 15TH ST	NW Oceanview Dr and US 101	Collector	Major Collector
NW/SW NYE ST	NW 11 th St and SW 2 nd St	Collector	Major Collector
NE BENTON ST	NE 12 th St and NE 3 rd St	Collector	Major Collector
SE COOS ST	NE 3 rd St and SE 2 nd St	Collector	Major Collector
SE 2ND ST	SE Coos St and SE Benton St	Collector	Major Collector
SW 7TH STREET	SW 2 nd St and SW Hubert St	Collector	Major Collector
SE/SW 10TH ST	SE 2 nd St and SW Angle St	Collector	Major Collector
SE FOGARTY ST	4 th St and SE Bay Blvd	Collector	Major Collector
SW ELIZABETH ST	W Olive St and SW Bayler St	Collector	Major Collector
ASH ST	SE Ferry Slip Rd and SE 40 th St	Collector	Major Collector
SE 40TH ST/SE HARBOR DRIVE	US 101 and SE College Way	Collector	Major Collector
SE 62ND PL	US 101 and End of Road	Collector	Major Collector
SW 9TH ST	SW Angle St and SW Bay St	Collector	Major Collector
SW NATERLIN DR	US 101 and SW Bay St	Collector	Major Collector

TABLE 1: RECOMMENDED ROADWAY FUNCTIONAL CLASSIFICATION CHANGES

ROADWAY	EXTENTS	EXISTING FUNCTIONAL CLASSIFICATION	RECOMMENDED FUNCTIONAL CLASSIFICATION
SW BAY ST	SW Naterlin Dr and SW Bay Blvd	Collector	Major Collector
SW BAY BLVD	SW Bay St and SE Moore Dr	Collector	Major Collector
NW 6TH ST	NW Nye St and US 101	Collector	Major Collector
NE 6TH ST	US 101 and NE Benton St	Collector	Major Collector
NW 3RD ST	NW Nye St and US 101	Collector	Major Collector
NE 3RD ST	NE Eads St and NE Harney St	Collector	Major Collector
NE YAQUINA HEIGHTS DR	NE Harney St and US 101	Collector	Major Collector
SW CANYON WAY	SW 10 th St and SW Fall St	Collector	Major Collector
SW HURBERT ST	SW 10 th St and SW 7 th St	Collector	Major Collector
SW FALL ST	SW Canyon Way and SW Bay Blvd	Collector	Major Collector
SE 35TH ST	SE Ferry Slid Rd and End of Road	Collector	Major Collector
60TH ST	US 101 and NW Gladys St	Collector	Neighborhood Collector
55TH ST	58 th St and US 101	Collector	Neighborhood Collector
NE 36TH ST	US 101 and NE Harney St	Collector	Neighborhood Collector
NW OCEANVIEW ST	US 101 and NW 12 th St	Collector	Neighborhood Collector
NW EDENVIEW WAY	NW Oceanview St and NW 20 th St	Collector	Neighborhood Collector

TABLE 1: RECOMMENDED ROADWAY FUNCTIONAL CLASSIFICATION CHANGES

ROADWAY	EXTENTS	EXISTING FUNCTIONAL CLASSIFICATION	RECOMMENDED FUNCTIONAL CLASSIFICATION
NW/NE 20TH ST	NW Edenview way and NE Crestview Pl	Collector	Neighborhood Collector
NW SPRING ST	NW 12 th St and NW 8 th St	Collector	Neighborhood Collector
NW 8TH ST	NW Spring St and NW Coast St	Collector	Neighborhood Collector
NW NYE ST	NW 15 th St and NW 11 th St	Collector	Neighborhood Collector
NE 12TH ST	US 101 and NE Eads St	Collector	Neighborhood Collector
NE EADS ST	12 th Street and Hwy 20	Collector	Neighborhood Street
NE 6TH ST	NE Benton St and NE Eads St	Collector	Neighborhood Collector
NW 6TH ST	NW Coast St and NW Nye St	Collector	Neighborhood Collector
NW 3RD ST	NW Nye St and NW Cliff St	Collector	Neighborhood Collector
W OLIVE ST	US 101 and SW Elizabeth St	Collector	Neighborhood Collector
SW 7TH ST	SW Hubert St and SW Bayley St	Collector	Neighborhood Collector
SW HURBERT ST	SW 7 th St and SW 2 nd St	Collector	Neighborhood Collector
SW ABBEY ST	SW 6 th St and SW 11 th St	Collector	Neighborhood Collector
SW HARBOR WAY	SW 11 th St and SW 13 th St	Collector	Neighborhood Collector
SW 13TH ST	SW Harbor Way and SW Bay St	Collector	Neighborhood Collector

TABLE 1: RECOMMENDED ROADWAY FUNCTIONAL CLASSIFICATION CHANGES

ROADWAY	EXTENTS	EXISTING FUNCTIONAL CLASSIFICATION	RECOMMENDED FUNCTIONAL CLASSIFICATION
NW COAST ST	NW 11 th St and SW 2 nd St	Collector	Neighborhood Collector
SW 2ND ST	SW Elizabeth St and SW Nye St	Collector	Neighborhood Collector
NE 7TH ST	NE Eads St and NE 7 th Dr	Collector	Neighborhood Collector
NE 6TH ST	NE 7 th Dr and End of Road	Collector	Neighborhood Collector
SW HARTFIELD DR	SW 10 th St and SW Bay Blvd	Collector	Neighborhood Collector
60TH ST	NW Gladys St and NW Biggs St	Collector	Local
NW BIGGS ST	NW 60 th St and NW 55 th St	Collector	Local
NW NYE ST	NW 15 th St and NW 16 th St	Collector	Local
NE BENTON ST	NE 11 th St and NE 12 th St	Collector	Local
NE 1ST ST	US 101 and Eads Street	Collector	Local
SW 2ND ST	NW Nye St and SW Angle St	Collector	Local
SW ALDER ST/SW NEFF WAY	SW 2 nd St and US 101	Collector	Local
SE 50TH ST/SE 50TH PL	US 101 and End of road	Collector	Local
SE 4TH ST	SE Fogarty St and SE Harney St	Collector	Local
SE HARNEY ST	SE 4 th St and SE 2 nd St	Collector	Local
SE 2ND ST	SE Harney St and SE Moore Dr	Collector	Local

TABLE 1: RECOMMENDED ROADWAY FUNCTIONAL CLASSIFICATION CHANGES

ROADWAY	EXTENTS	EXISTING FUNCTIONAL CLASSIFICATION	RECOMMENDED FUNCTIONAL CLASSIFICATION
SE 32ND ST	US 101 and SE Ferry Slip Rd	Collector	Local
SE FOGARTY ST	Hwy 20 and SE 4 th St	Local	Major Collector
SW ELIZABETH ST	SW Bayler St and SW Government St	Local	Major Collector
SW GOVERNMENT ST	SW Elizabeth St and Yaquina Bay State Park	Local	Major Collector
YAQUINA BAY STATE PARK	SW Elizabeth St and SW Naterlin Dr	Local	Major Collector
NW GLADYS ST	NW 60 th St and NW 55 th St	Local	Neighborhood Collector
55TH ST	Pinery and 58 th St	Local	Neighborhood Collector
NE 71ST ST	NE Avery St and Iron Mountain Rd	Local	Neighborhood Collector
NW 12TH ST	NW Nye St and US 101	Local	Neighborhood Collector
NW 77TH ST	US 101 and End of Road	Local	Private
NE 70TH ST/NE 70TH ST	NE Avery St and End of Road	Local	Private
NW 68TH ST	US 101 and End of Road	Local	Private
NE WINDHILL DR	NE 54 th St and Evergreen Ln	Local	Private
EVERGREEN LN	NE 54 ^h St and End of Road	Local	Private
NE 56TH ST	Evergreen Ln and 57 th St	Local	Private

TABLE 1: RECOMMENDED ROADWAY FUNCTIONAL CLASSIFICATION CHANGES

ROADWAY	EXTENTS	EXISTING FUNCTIONAL CLASSIFICATION	RECOMMENDED FUNCTIONAL CLASSIFICATION
NE 57 TH ST	Evergreen Ln and NE 56 th St	Local	Private
NE 55 TH ST	Evergreen Ln and NE 54 th St	Local	Private
NE 54 TH ST	NE 55 th St and Evergreen Ln	Local	Private
NE 58 TH ST/NE 58 TH CT	NE Deer Ln and End of Road	Local	Private
NE DEER LN	End of Rd and NE 58 th St	Local	Private
NE 60 TH CT	NE Deer Ln and Evergreen Ln	Local	Private
NE 59 TH ST	NE Deer Ln and End of Road	Local	Private
NE 60 TH ST	Evergreen Ln and NE Deer Ln	Local	Private
NE 61 ST ST	Evergreen Ln and NE Deer Ln	Local	Private
NE 62 ND ST	NE Deer Ln and End of Rd	Local	Private
NE 32 ND ST	NE 31 st and NE Douglas St	Local	Private
NE DOUGLAS ST	NE 32 nd St and NE 35 th St	Local	Private
NE COOS ST	NE 32 nd St and NE 35 th St	Local	Private
NE BENTON ST	NE 32 nd St and NE 35 th St	Local	Private
NE 33 RD ST/NE 33 RD DR	NE Benton St and NE Avery St	Local	Private
NE AVERY ST	NE 33 rd St and NE 35 th St	Local	Private

TABLE 1: RECOMMENDED ROADWAY FUNCTIONAL CLASSIFICATION CHANGES

ROADWAY	EXTENTS	EXISTING FUNCTIONAL CLASSIFICATION	RECOMMENDED FUNCTIONAL CLASSIFICATION
NE 35TH ST	NE Douglas St and End of Road	Local	Private
NW CHEROKEE LN	NW Wade Way and End of Road	Local	Private
NW 42ND ST	End of Road and US 101	Local	Private
NW 43RD ST	End of Road and US 101	Local	Private
NW 44TH ST	End of Road and US 101	Local	Private
NW 45TH ST	End of Road and US 101	Local	Private
NW 46TH ST	End of Road and US 101	Local	Private
NW 48TH ST	End of Road and US 101	Local	Private
NW 33RD ST	NW Oceanview Dr and End of Road	Local	Private
NE 47TH ST	US 101 and End of Road	Local	Private
NE 50TH ST	US 101 and End of Rd	Local	Private
SW 62ND ST	US 101 ad SW Arbor Dr	Local	Private
SW ARBOR DR	End of Road and End of Road	Local	Private
SW 60TH LOOP	SW Arbor Dr and End of Road	Local	Private
SW 59TH ST	SW Arbor Dr and End of Road	Local	Private
SW 58TH ST	SW Arbor Dr and SW Cupola Dr	Local	Private

TABLE 1: RECOMMENDED ROADWAY FUNCTIONAL CLASSIFICATION CHANGES

ROADWAY	EXTENTS	EXISTING FUNCTIONAL CLASSIFICATION	RECOMMENDED FUNCTIONAL CLASSIFICATION
SW BARNACLE CT	SW 58th St and End of Road	Local	Private
SW 61ST ST	End of Road and SW Cupola Dr	Local	Private
SW CUPOLA DR	SW 61st and End of Road	Local	Private
SE DOGWOOD ST	SE 35th St and End of Road	Local	Private
SW ANCHOR WAY	US 101 and End of Road	Local	Private

FIGURE 1A: RECOMMENDED ROADWAY FUNCTIONAL CLASSIFICATION – AGATE BEACH

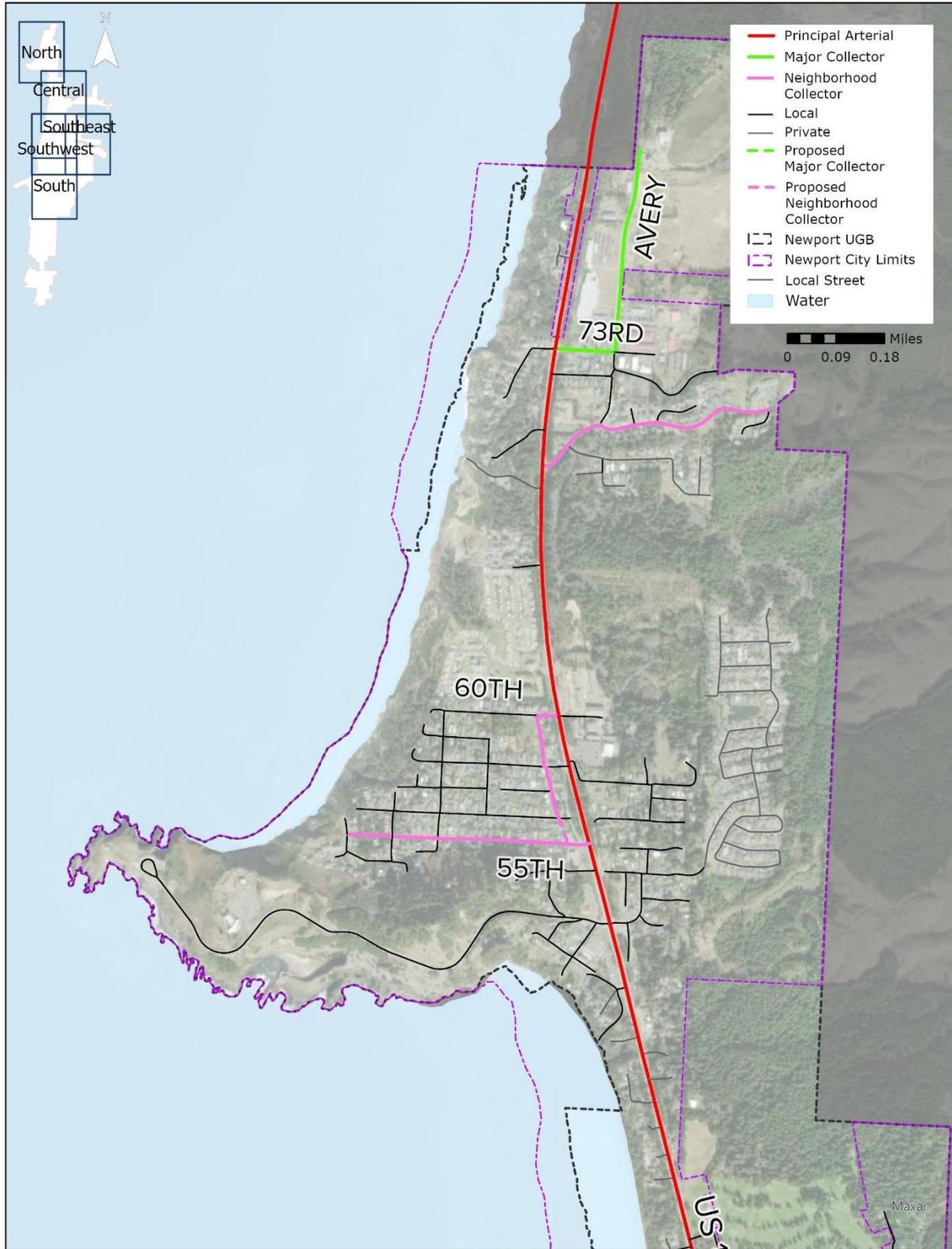


FIGURE 1B: RECOMMENDED ROADWAY FUNCTIONAL CLASSIFICATION – OCEANVIEW/HARNEY

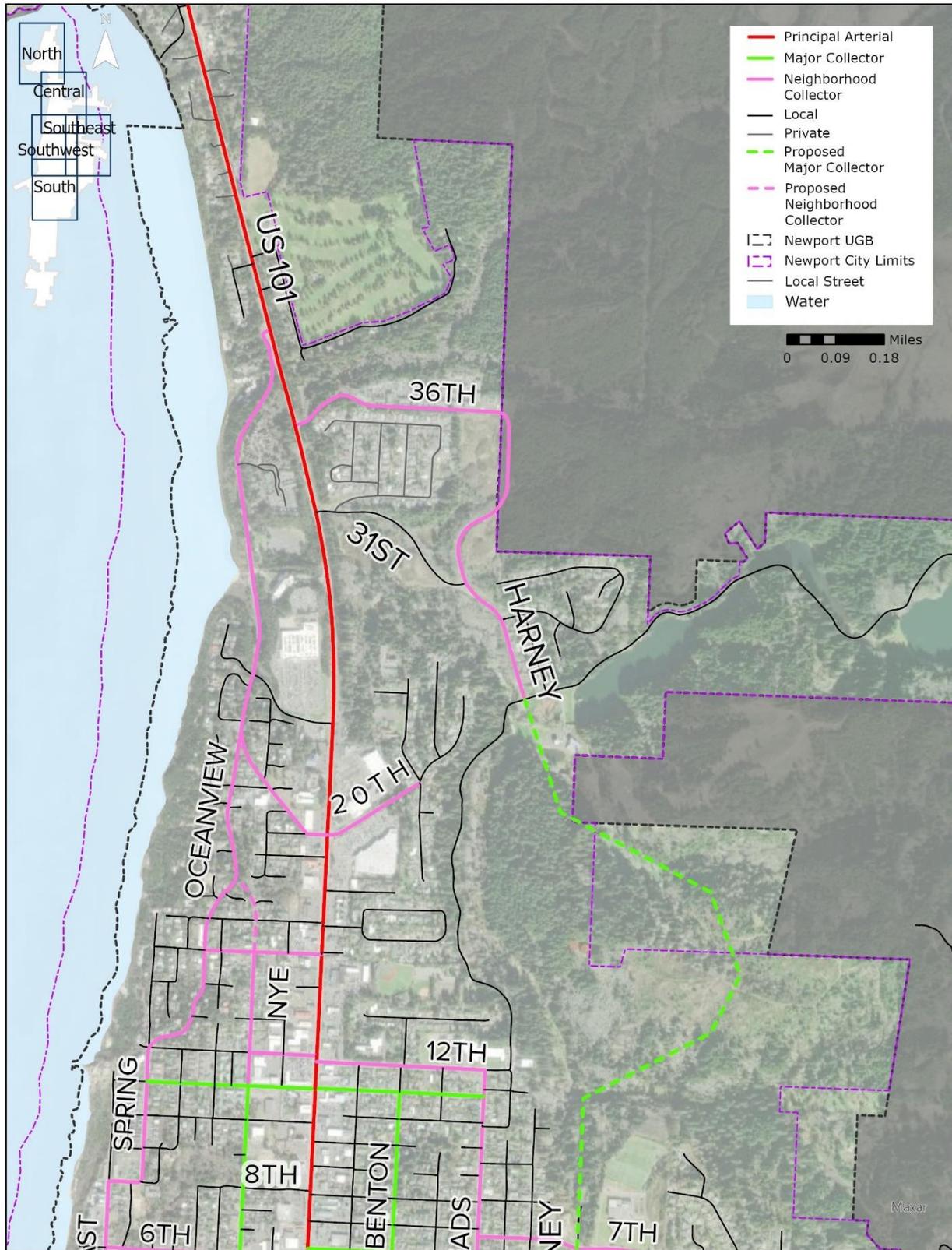


FIGURE 1C: RECOMMENDED ROADWAY FUNCTIONAL CLASSIFICATION – DOWNTOWN



FIGURE 1D: RECOMMENDED ROADWAY FUNCTIONAL CLASSIFICATION – EAST NEWPORT

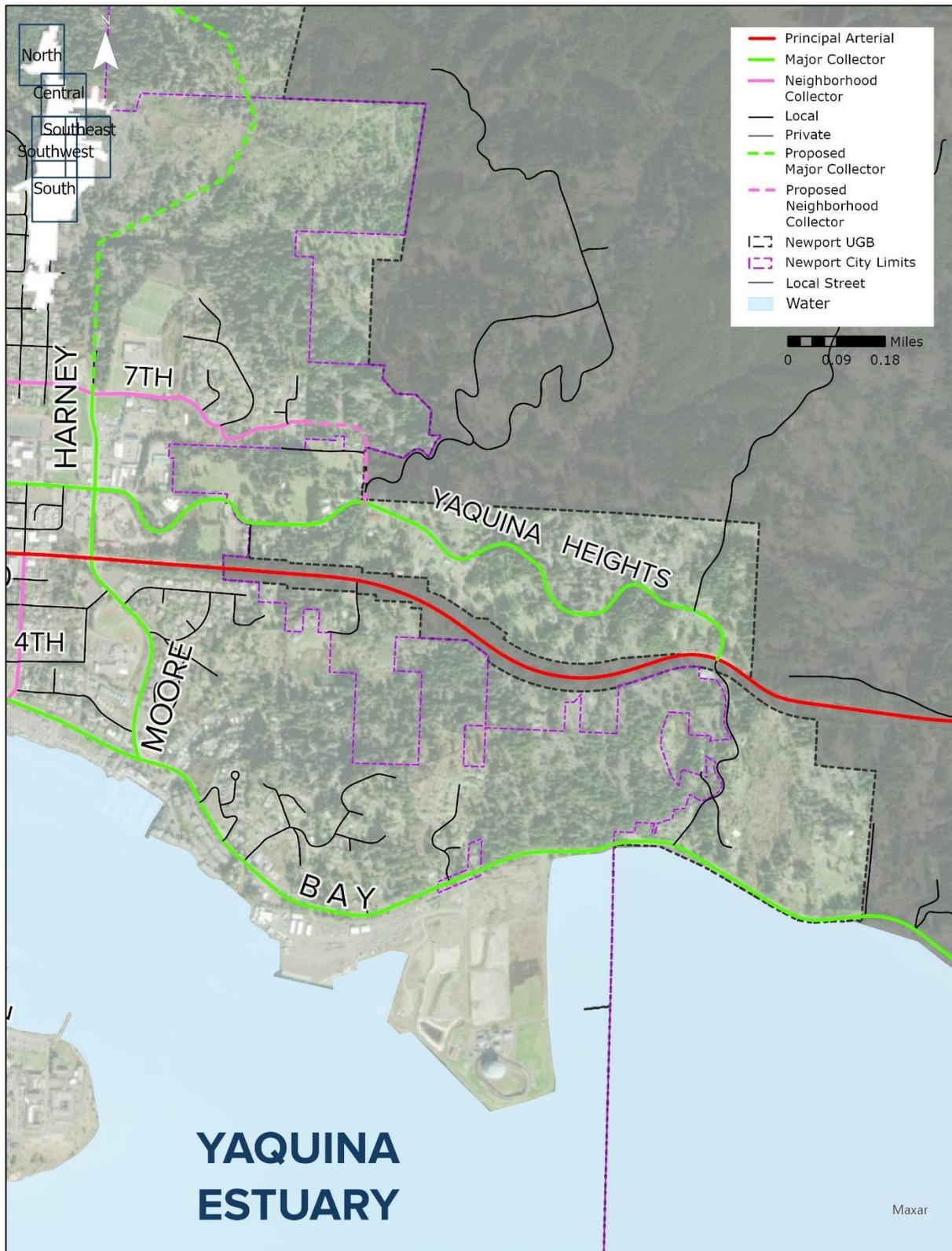
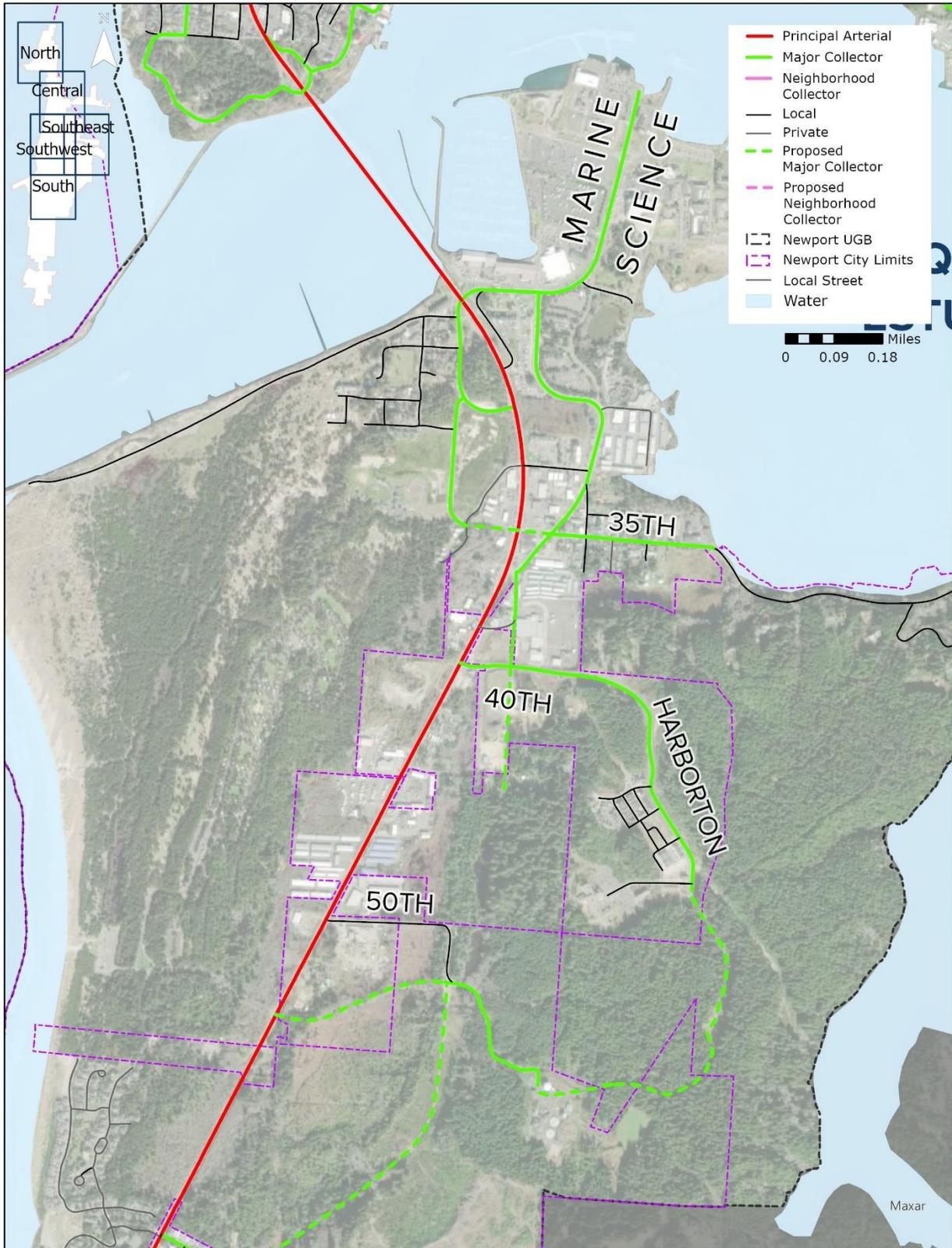


FIGURE 1E: RECOMMENDED ROADWAY FUNCTIONAL CLASSIFICATION – SOUTH BEACH



FREIGHT AND TRUCK CORRIDORS

Newport currently has two designated statewide freight routes. US 101 (north of US 20) is a National Network freight route while US 20 is a designated freight route in the Oregon Highway Plan (OHP). The National Network designates a set of highways based on geometric specifications (e.g., 12 feet travel lanes) specifically for use by large trucks while the OHP identifies freight routes based on the tonnage carried. Both of these corridors are also identified freight reduction review routes that requires the Mobility Advisory Committee to review and approve proposed changes to any reduction in the vehicle carrying capacity of these routes.³ US 101 south of US 20 is not a National Network freight route, OHP freight route, or reduction review route.

It is also recommended that the city identify local truck routes to supplement the statewide system. The proposed local network, summarized in Figure 2, includes NE 73rd Street, NE Avery Street, NE 36th Street, NE Harney Street, SW/E Bay Boulevard, SE Moore Drive, Yaquina Bay Road, US 101 (south of US 20), SE Marine Science Drive, SE Ferry Slip Road, SE 35th Street, and the future extensions of SE 50th Street and SE 62nd Street.

Newport will benefit from ensuring that its truck routes are designed to accommodate the needs of industrial and commercial activity. Establishing local truck routes that connect industrial areas with the state highway system and implementing freight-specific design treatments makes these routes more desirable for freight travel which can protect residential neighborhoods from freight traffic. Having designated freight routes will help the city better coordinate and improve its efforts regarding both freight and non-freight transportation system users, including the following:

- **Roadway and Intersection Improvements** can be designed for freight vehicles with adjustments for turn radii, sight distance, lane width, turn pocket lengths, and pavement design. Designated local trucks routes should provide wider travel lanes (i.e., 12 feet travel lanes). The intersection/roadway geometry and pavement design should also accommodate turning movements or loads from the identified design vehicle and be consistent with city code.
- **Bicycle and Pedestrian Improvements** – such as protected or separated bike facilities, enhanced pedestrian crossings, and other safety improvements – can be identified to reduce freight impacts to other road users, particularly along bikeways and walkways.
- **Roadway Durability** can be increased by using concrete instead of asphalt in areas with significant freight traffic.
- **Coordination with Businesses and Adjacent Jurisdictions** can ensure that local and regional freight traffic uses Newport’s freight routes to travel within the City.

³ Freight reduction review routes are governed by ORS 366.215. Changes to the horizontal or vertical clearance of the roadway are considered to reduce vehicle carrying capacity. More information on freight reduction review routes is available here: https://www.oregon.gov/ODOT/Planning/Documents/ORS_366.215_Implementation_Guidance.pdf

FIGURE 2A: NEWPORT FREIGHT NETWORK – AGATE BEACH

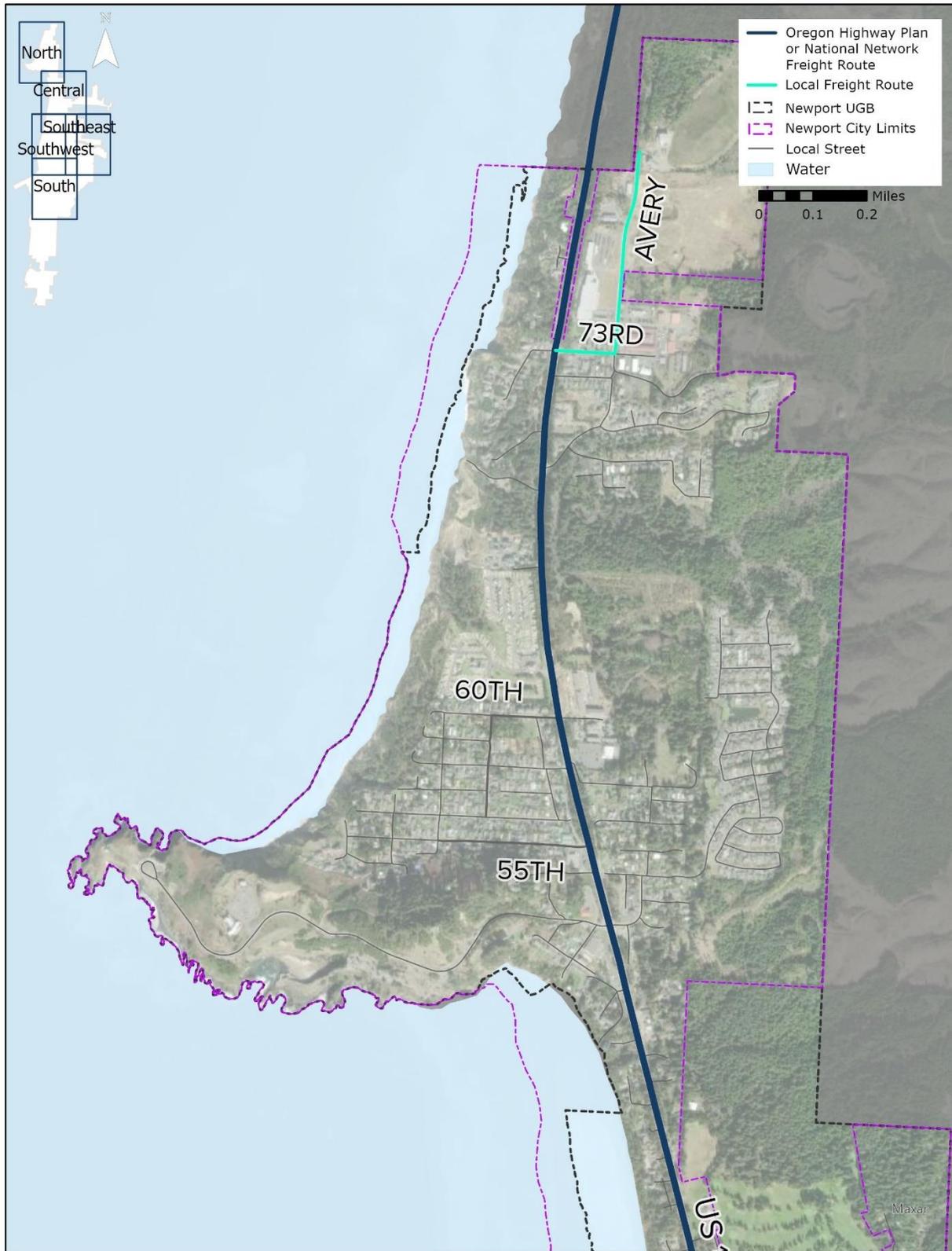


FIGURE 2B: NEWPORT FREIGHT NETWORK – OCEANVIEW/HARNEY

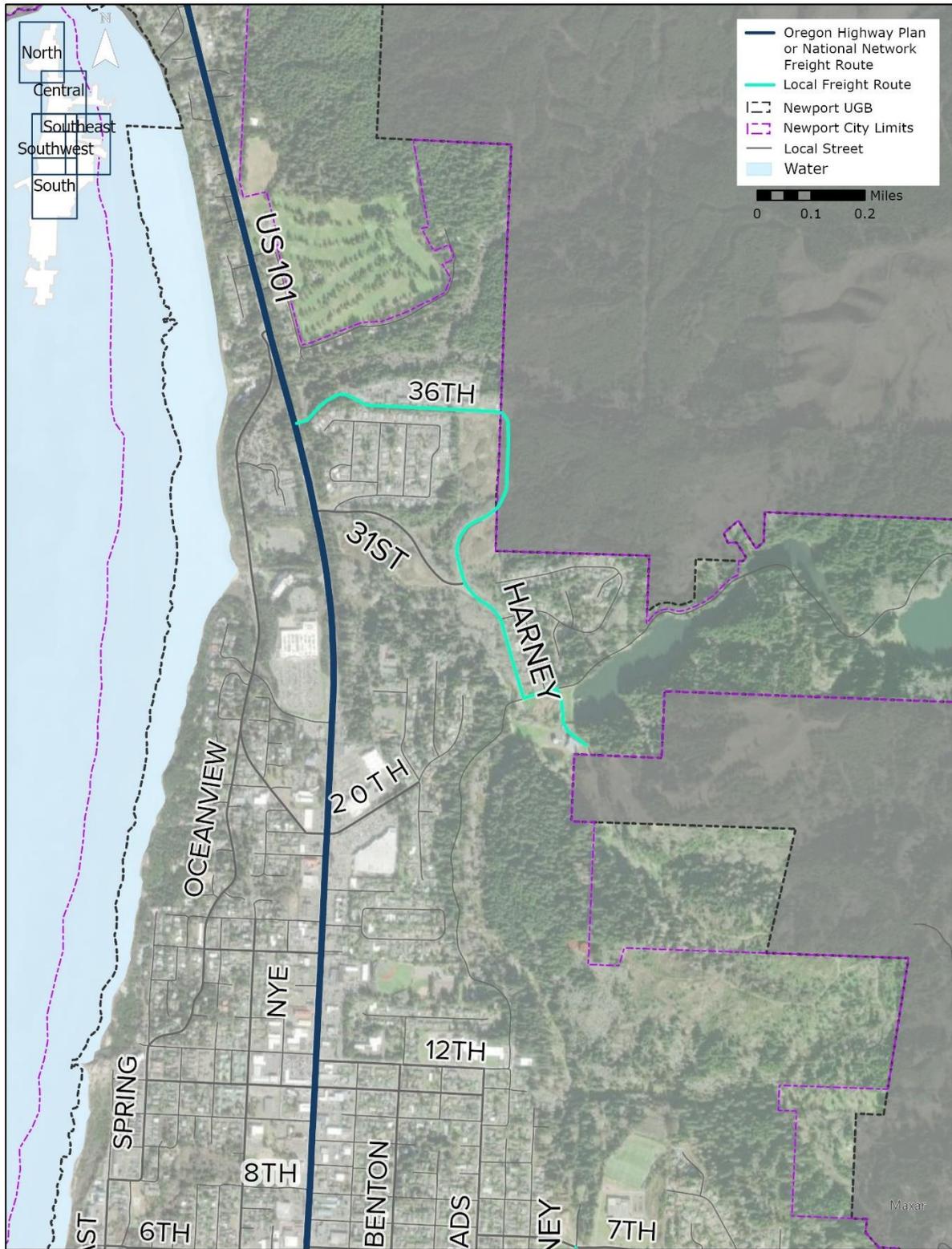


FIGURE 2C: NEWPORT FREIGHT NETWORK - DOWNTOWN

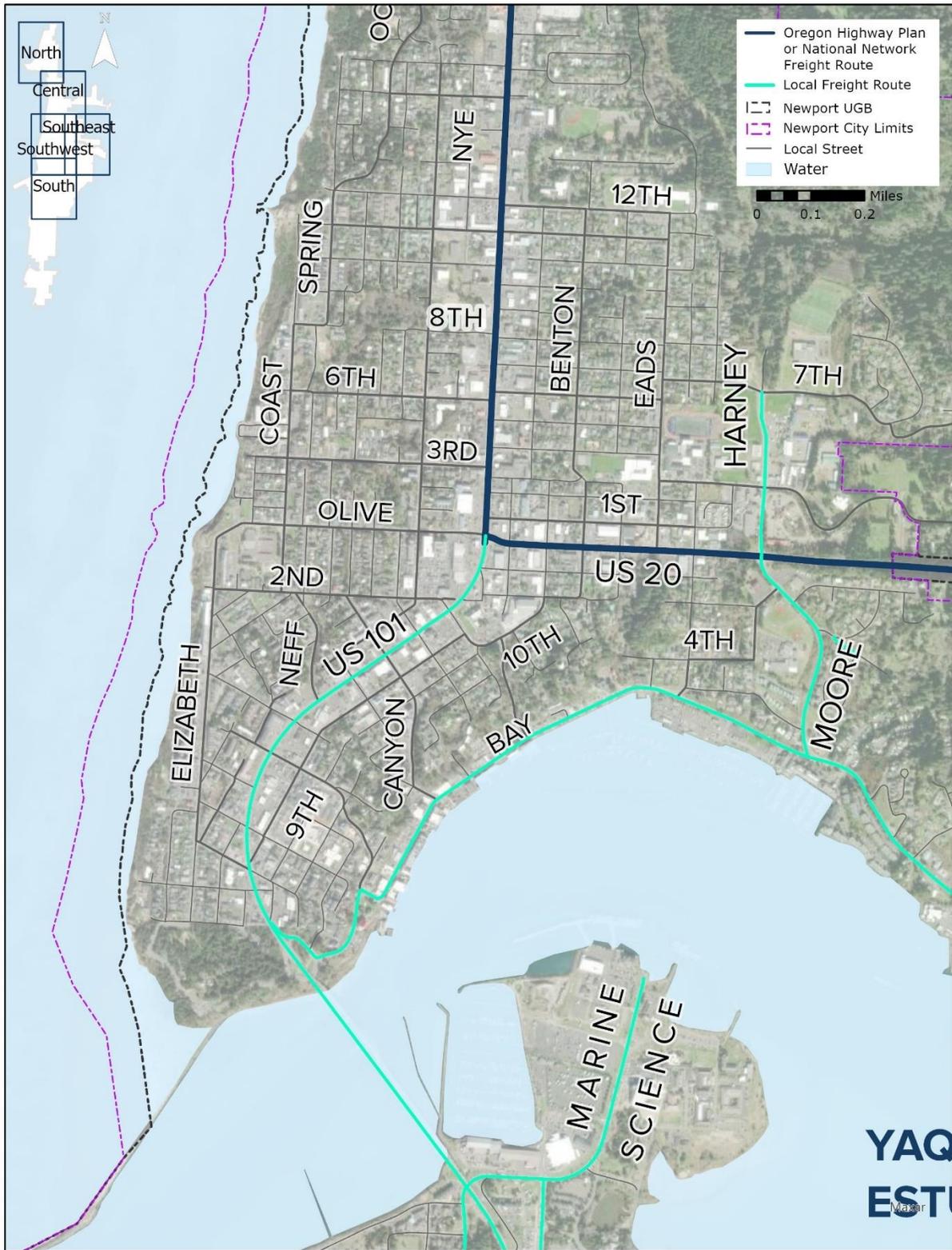


FIGURE 2D: NEWPORT FREIGHT NETWORK – EAST NEWPORT

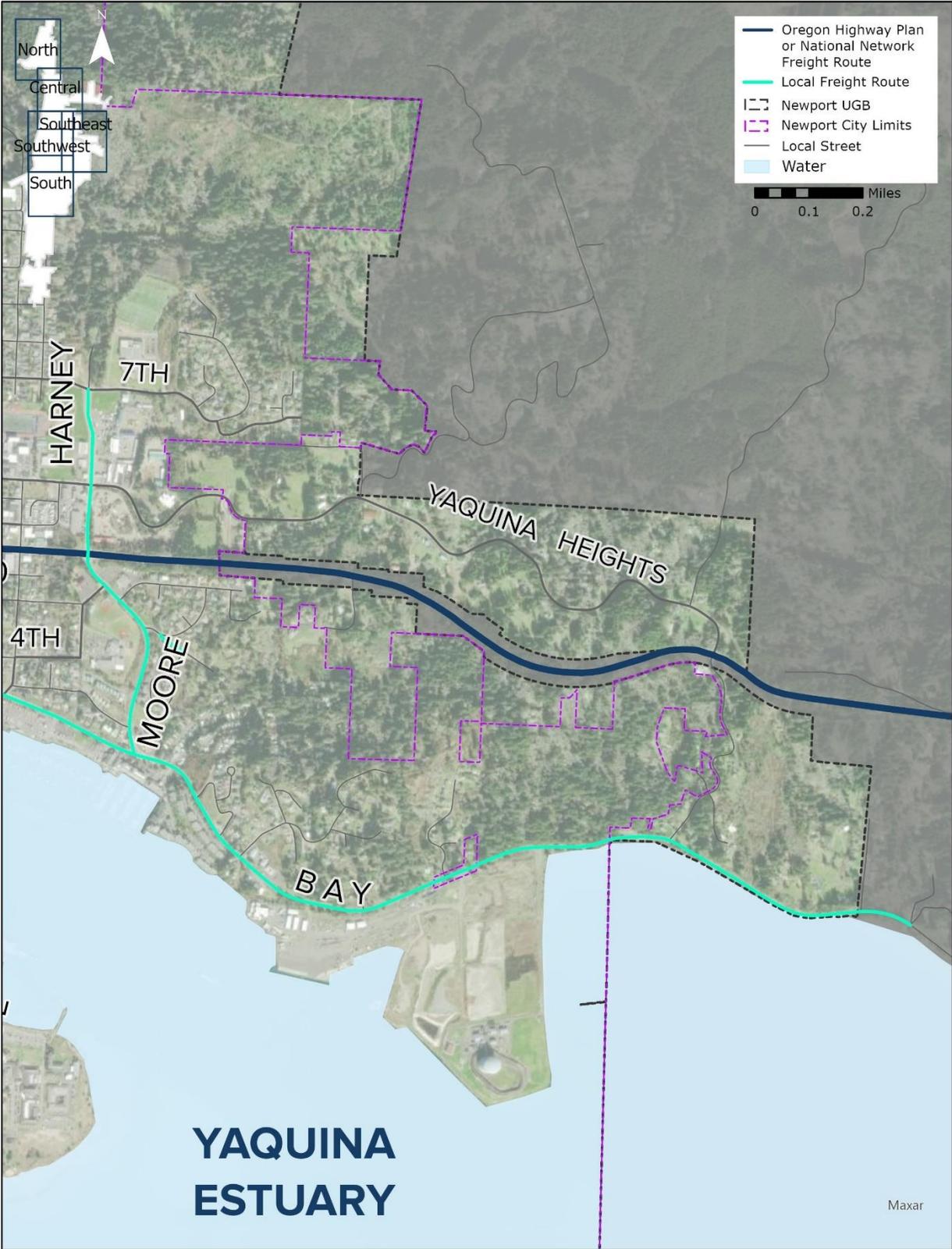
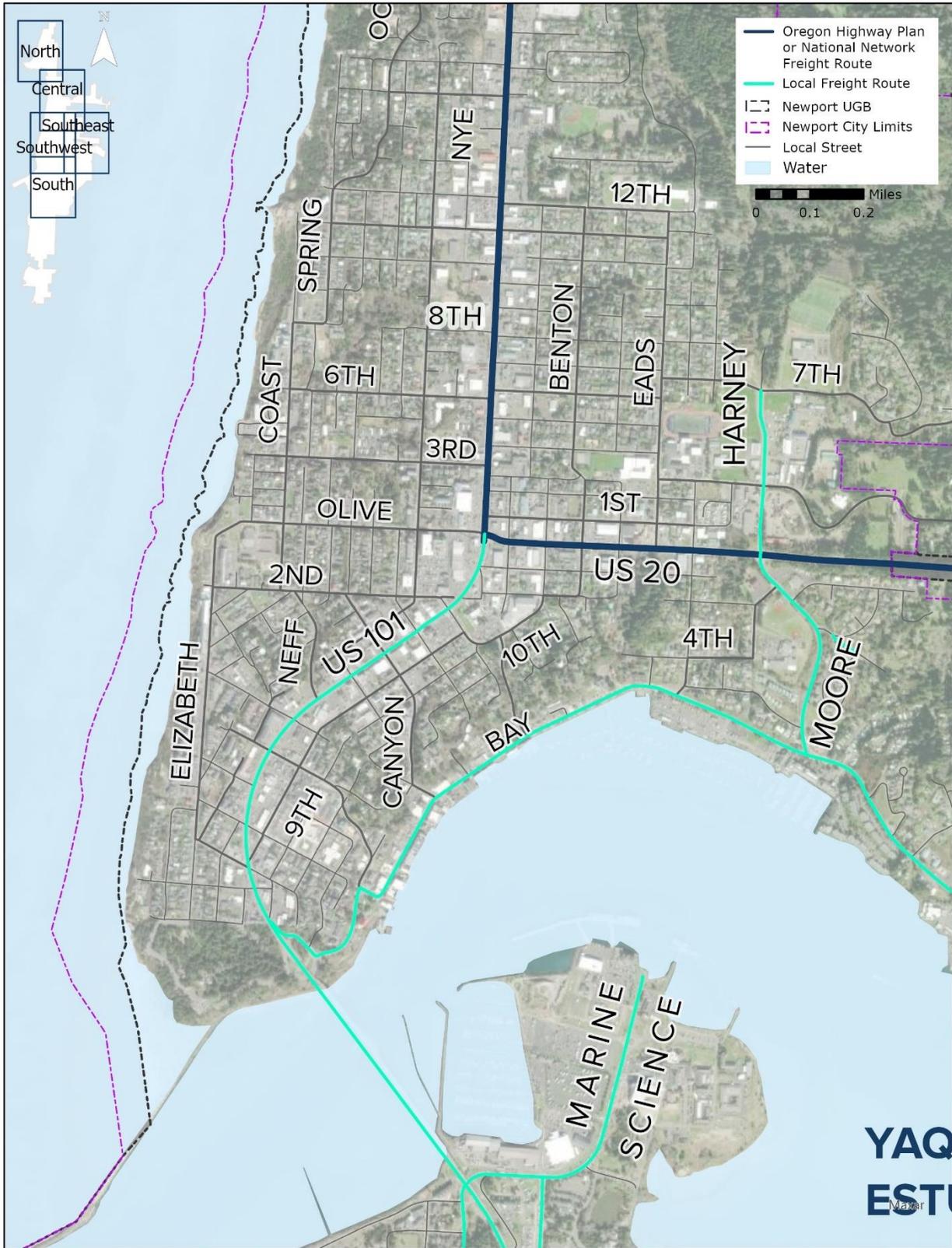


FIGURE 2E: NEWPORT FREIGHT NETWORK – SOUTH BEACH



PEDESTRIAN CORRIDORS

Identifying pedestrian corridors helps to support pedestrian movement and access to adjacent land use by identifying priority routes that connect popular destinations where pedestrian travel should be prioritized. The pedestrian corridors are applied to prioritize sidewalk infill projects and to determine the appropriate (i.e., preferred or acceptable) sidewalk configuration in constrained roadway conditions. Figure 3 shows the recommended pedestrian corridors in Newport, including Major Pedestrian streets and Neighborhood Pedestrian streets. All other streets are Local Pedestrian streets.

MAJOR PEDESTRIAN STREET

A Major Pedestrian street includes the most important corridors for pedestrian travel that link different parts of the city and provide access to Newport’s existing attractions (e.g., Nye Beach, Bayfront). These streets should include safe, convenient, and attractive facilities for pedestrians.

NEIGHBORHOOD PEDESTRIAN STREET

A Neighborhood Pedestrian street includes those connecting to Major Pedestrian streets and those providing access to schools, pedestrian trails, parks, open spaces, and other significant destinations. These streets may include safe, convenient, and attractive facilities for pedestrians.

LOCAL PEDESTRIAN STREET

All streets not classified as Major Pedestrian or Neighborhood Pedestrian streets are classified as Local Pedestrian streets. Local Pedestrian streets provide local access and circulation for pedestrians and must include safe and convenient facilities for pedestrians that are appropriate to the local street context.

FIGURE 3A: NEWPORT'S PROPOSED PEDESTRIAN CORRIDORS – AGATE BEACH

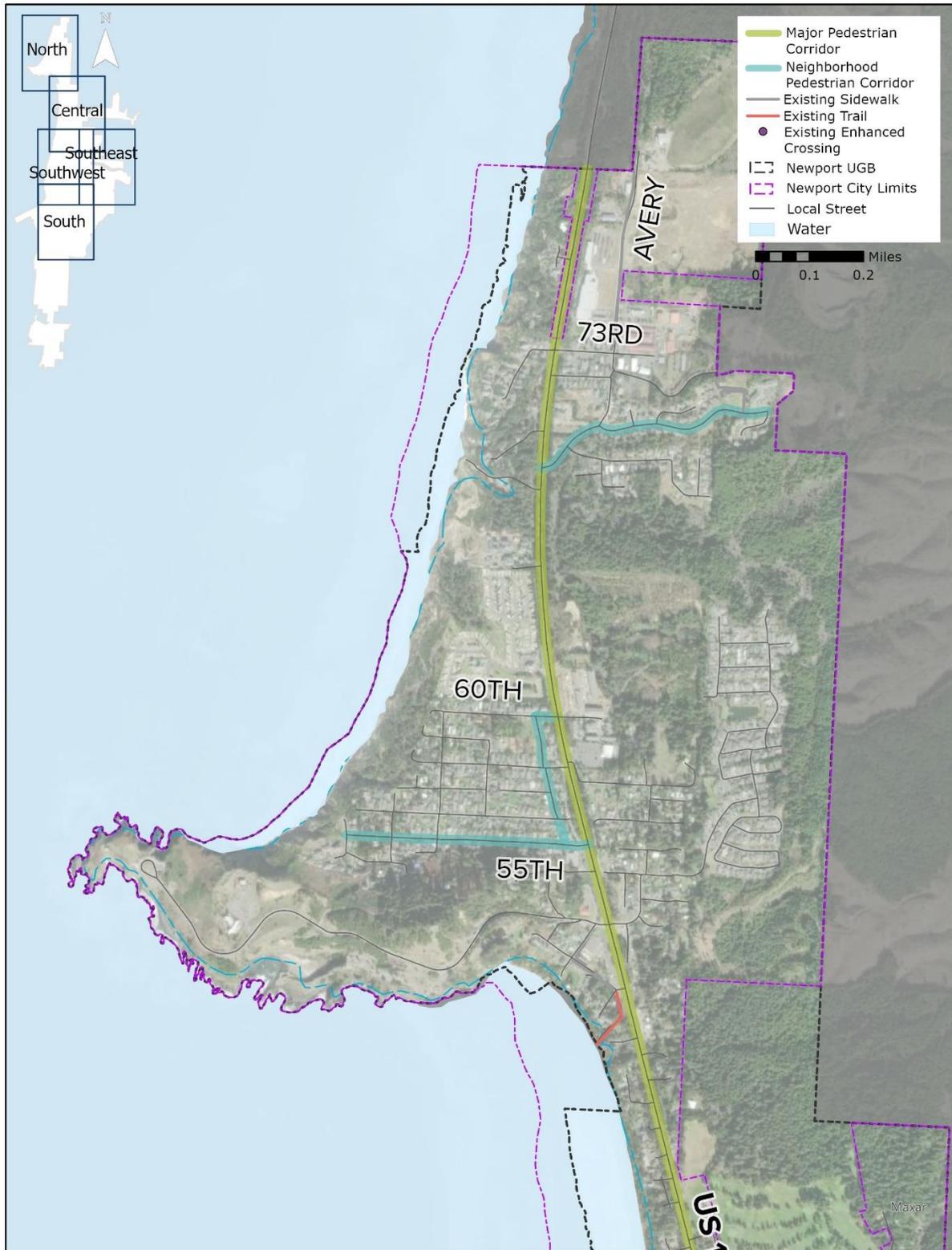


FIGURE 3B: NEWPORT'S PROPOSED PEDESTRIAN CORRIDORS – NYE BEACH

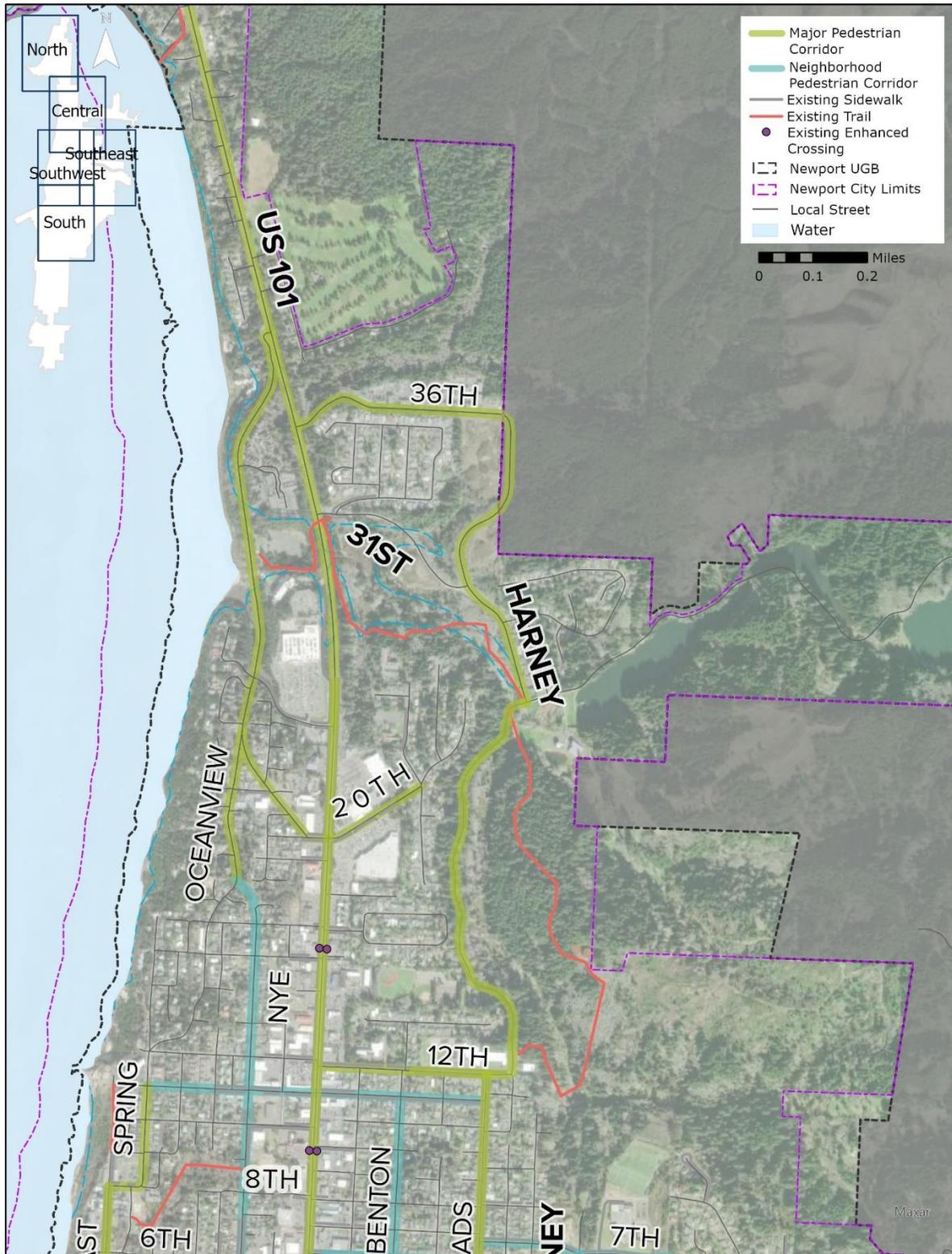


FIGURE 3C: NEWPORT'S PROPOSED PEDESTRIAN CORRIDORS - DOWNTOWN

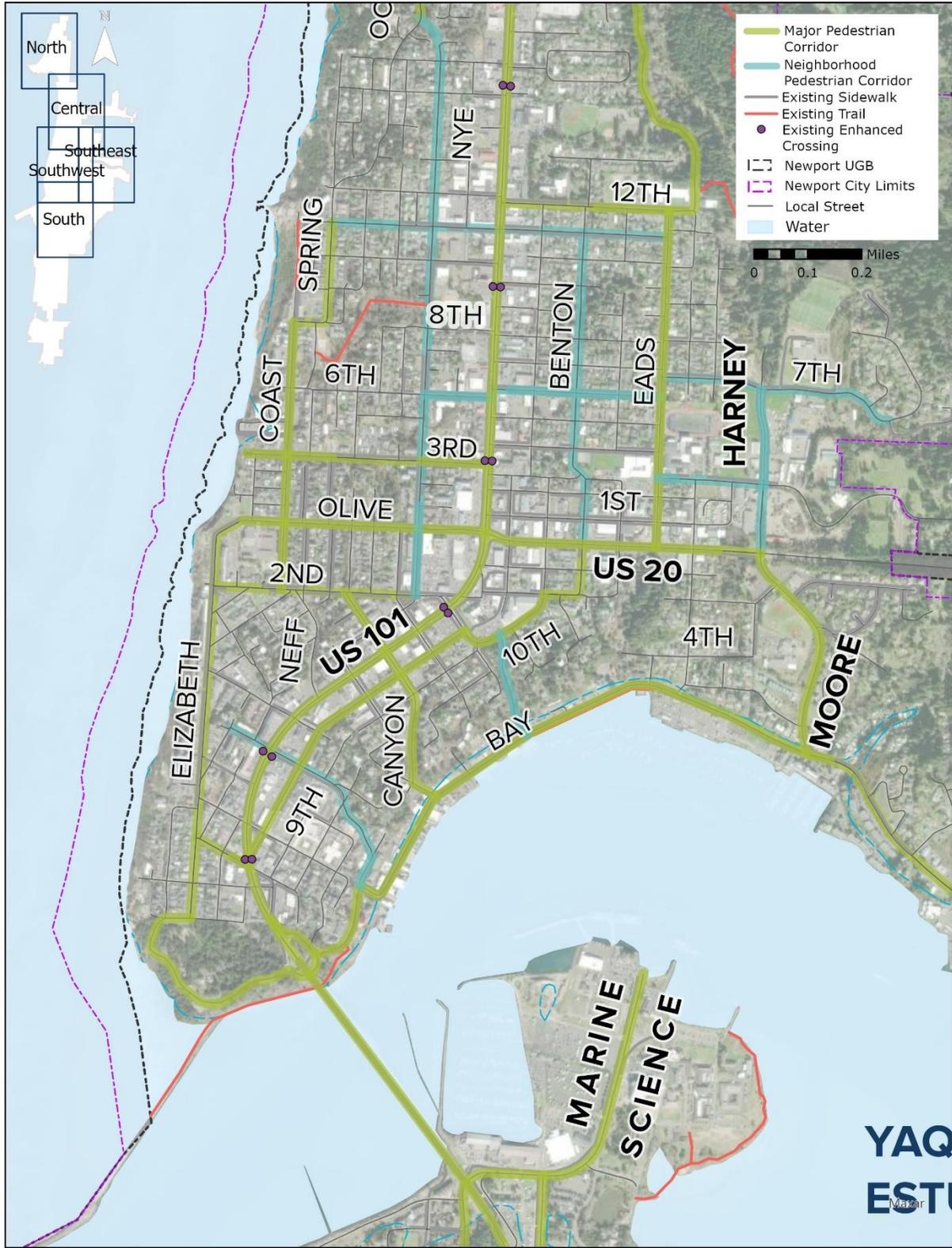


FIGURE 3D: NEWPORT'S PROPOSED PEDESTRIAN CORRIDORS - EAST

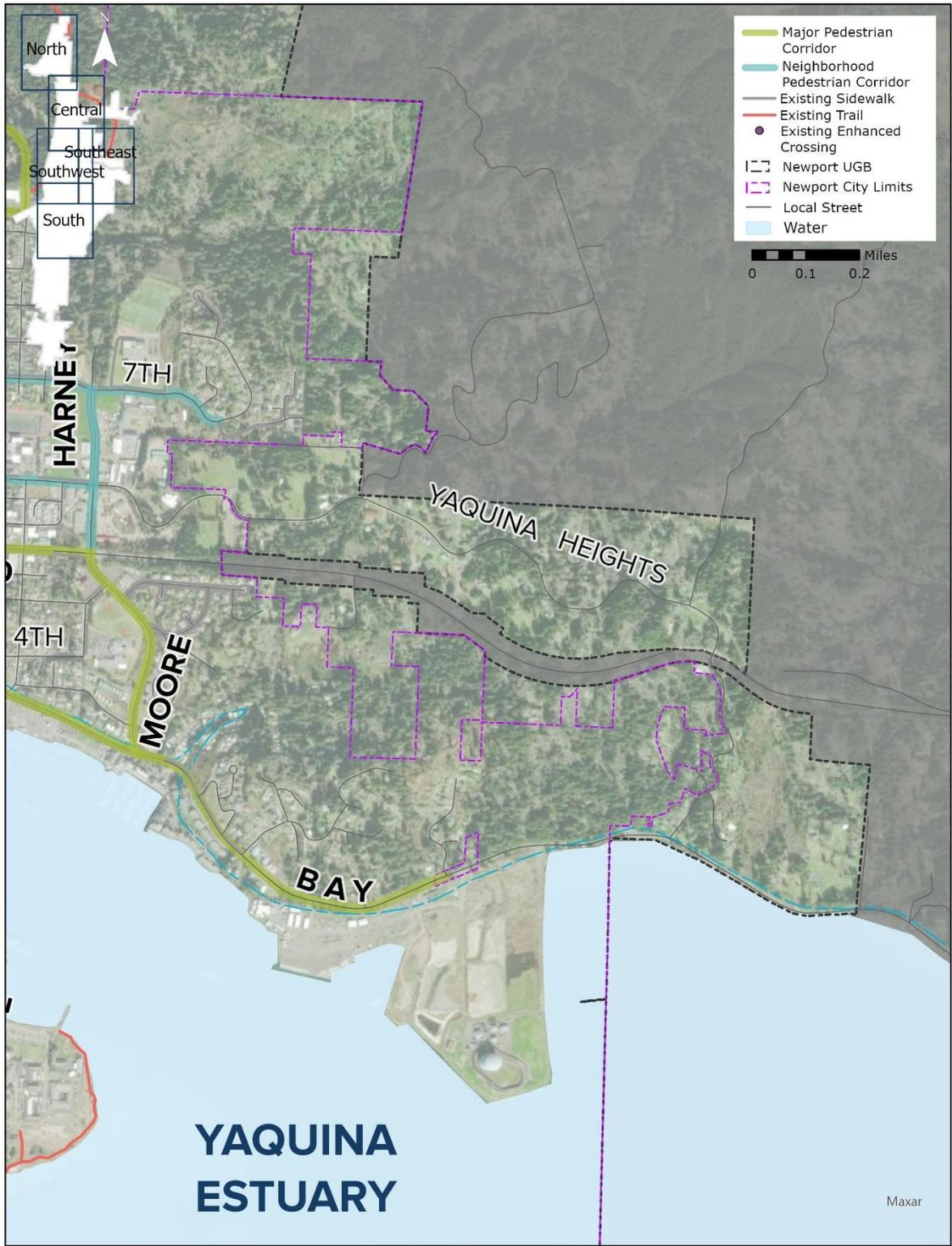
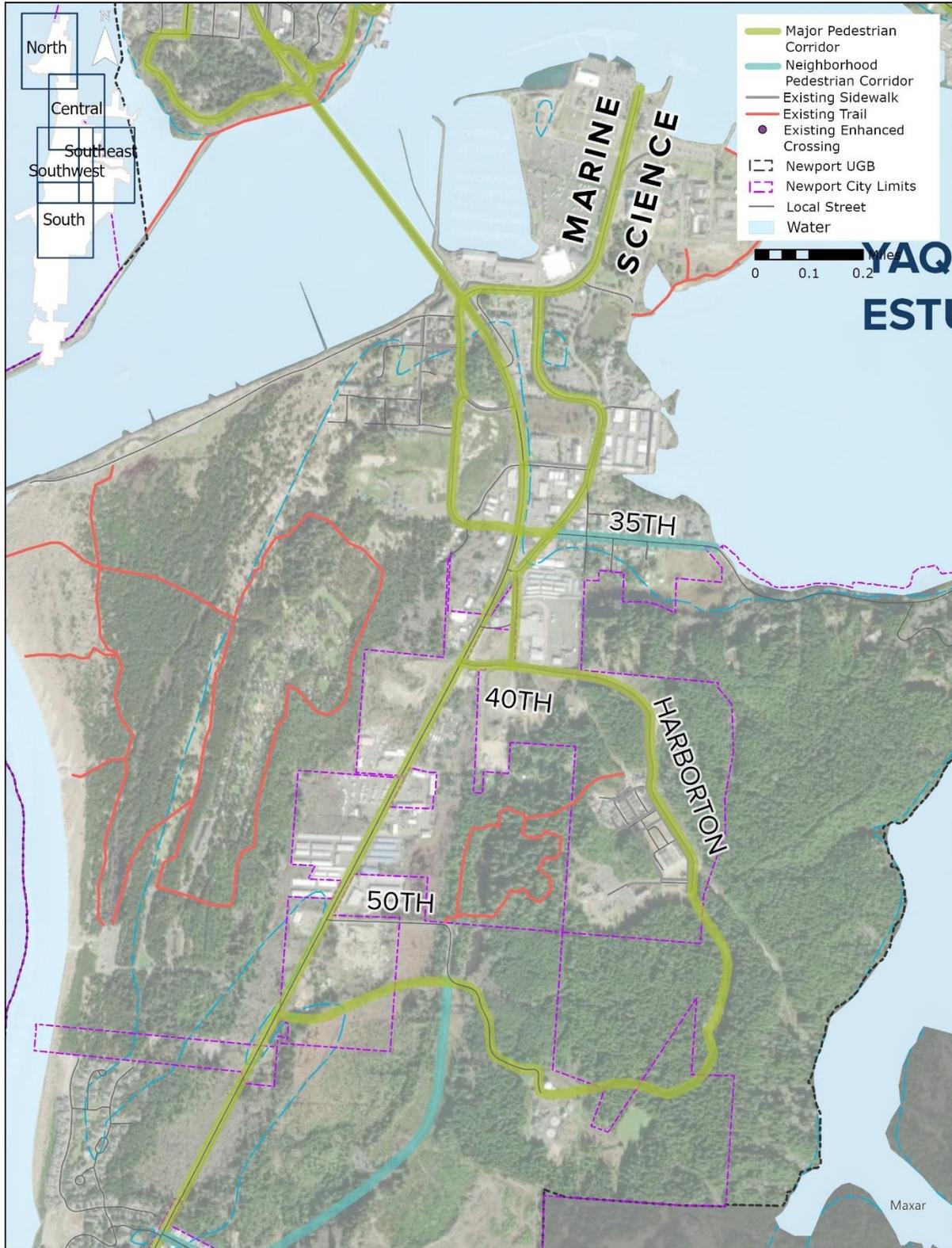


FIGURE 3E: NEWPORT'S PROPOSED PEDESTRIAN CORRIDORS – SOUTH BEACH



BICYCLE CORRIDORS

Identifying bicycle corridors helps to support the movement of people riding bikes. The bicycle corridors are applied to prioritize bicycle improvement projects and to determine the appropriate (i.e., preferred or acceptable) bicycle facility in constrained roadway conditions. Figure 4 shows the recommended bicycle corridors for Newport, including Major Bicycle, Neighborhood Bicycle, and Local Bicycle streets. The identified corridors are intended to provide a complete and connected bicycle network to facilitate travel for Newport’s residents on city streets. Where either US 101 or US 20 provide the only travel connection, a corridor was also identified on the state system. However, bicycle facilities constructed on state roadways are subject to review and approval by ODOT based on guidance from the Blueprint for Urban Design (BUD)⁴ and the Highway Design Manual (HDM),⁵ and consequently, lack of a bicycle corridor designation on US 101 or US 20 does not preclude the construction of future bicycle improvements.

MAJOR BICYCLE STREET

A Major Bicycle street includes corridors linking different parts of the city, and those providing primary access to key attractions within Newport. The bike facilities should be high quality for the roadway functional classification and emphasize safe, convenient, and comfortable bicycle travel. Although both US 101 and US 20 provide key connections for bicycle travel within Newport, without significant capital improvements, these streets will likely remain a barrier for bicyclists. Where feasible, a Major Bicycle street has been designated on parallel city streets that are more suitable to bicycle travel.

NEIGHBORHOOD BICYCLE STREET

A Neighborhood Bicycle street includes those connecting to Major Bicycle streets and those providing access to schools, bicycle paths, parks, open spaces, and other significant destinations. These routes establish direct and convenient bicycle routes and provide bicycle facility coverage within ¼ of a mile of any given point in the city. These routes may include wayfinding to direct bicyclists to other areas of Newport

LOCAL BICYCLE STREET

All streets not classified as Major Bicycle or Neighborhood Bicycle streets are classified as Local Bicycle streets. Local Bicycle streets provide local access and circulation for bicyclists in a shared roadway environment (without shared lane markings). The low vehicle speeds and volumes make them suitable for shared bicycle travel.

⁴ ODOT. *Blueprint for Urban Design*. https://www.oregon.gov/odot/Engineering/Documents/RoadwayEng/Blueprint-for-Urban-Design_v1.pdf. 2020.

⁵ ODOT. *Highway Design Manual*. <https://www.oregon.gov/odot/Engineering/Pages/Hwy-Design-Manual.aspx>. 2012.

FIGURE 4A: NEWPORT'S PROPOSED BICYCLE CORRIDORS - AGATE BEACH

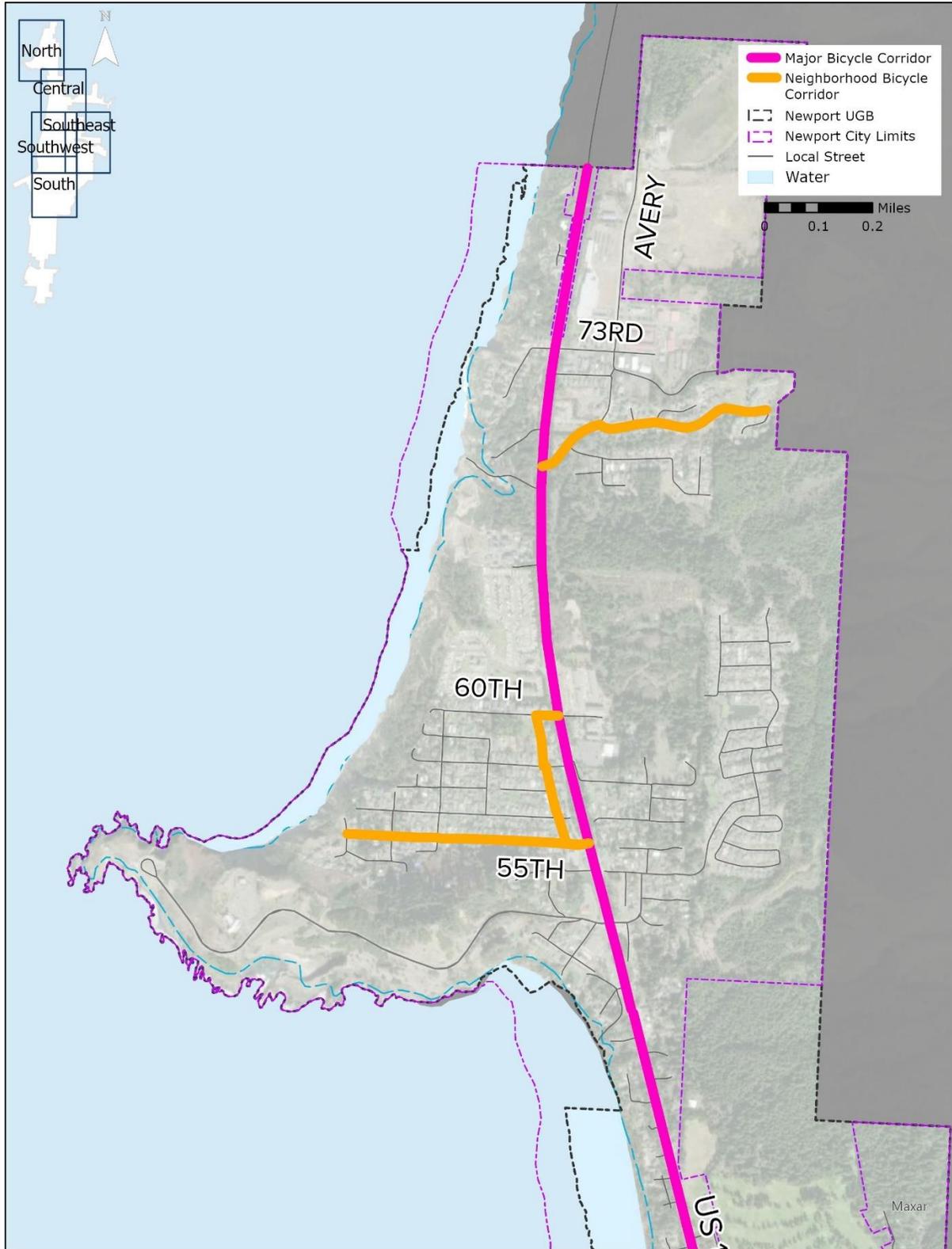


FIGURE 4B: NEWPORT'S PROPOSED BICYCLE CORRIDORS - NYE BEACH

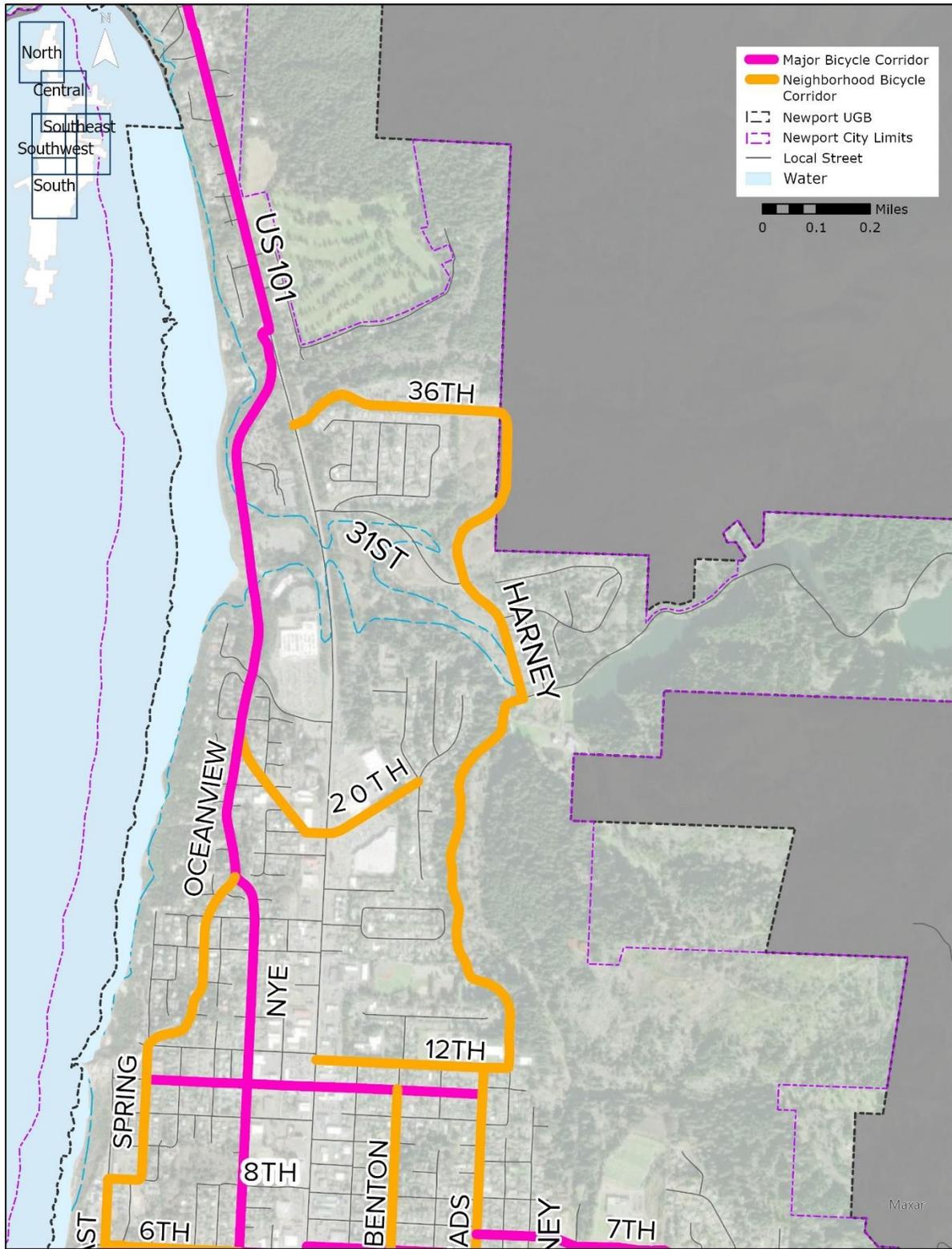


FIGURE 4C: NEWPORT'S PROPOSED BICYCLE CORRIDORS - DOWNTOWN

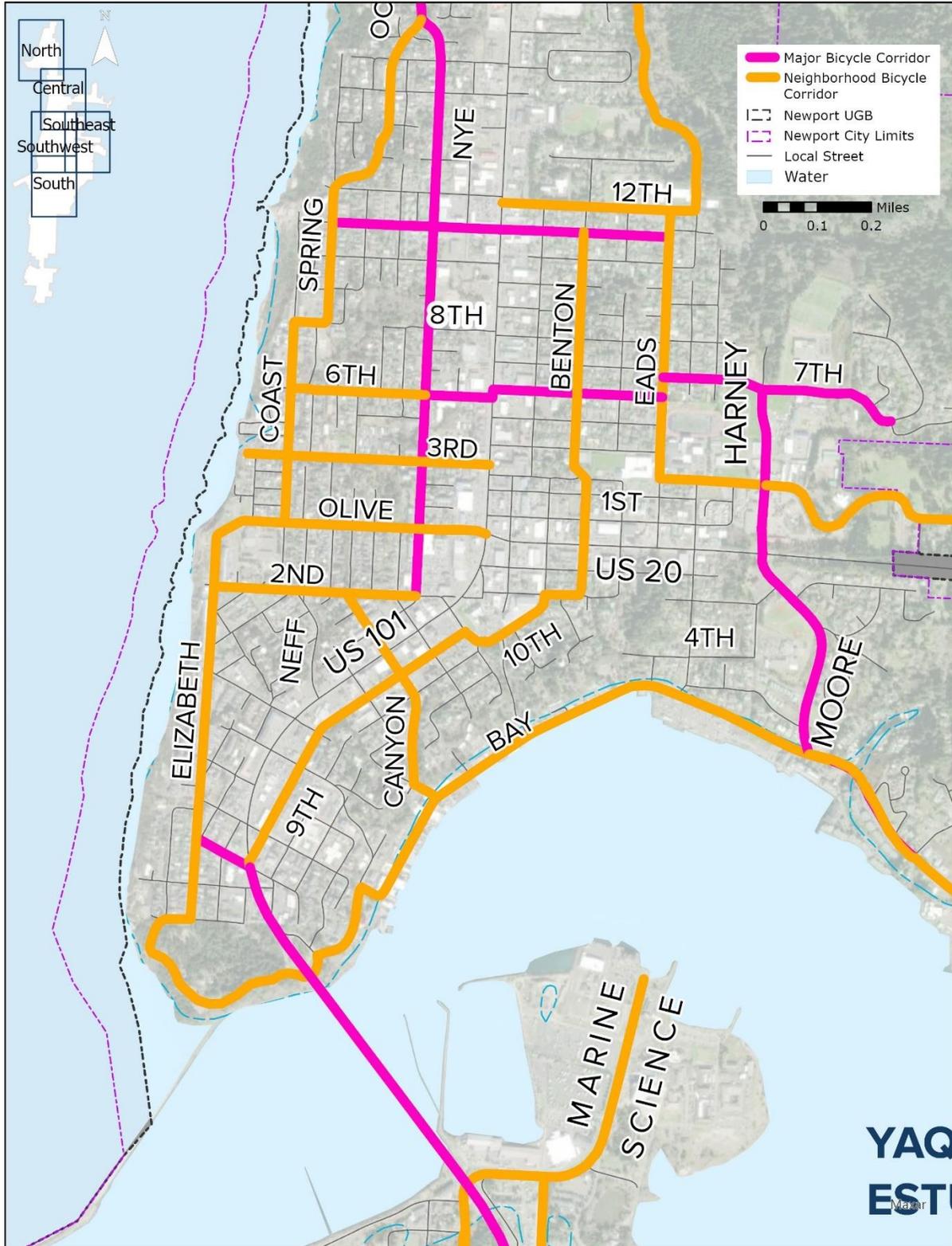


FIGURE 4D: NEWPORT'S PROPOSED BICYCLE CORRIDORS – EAST

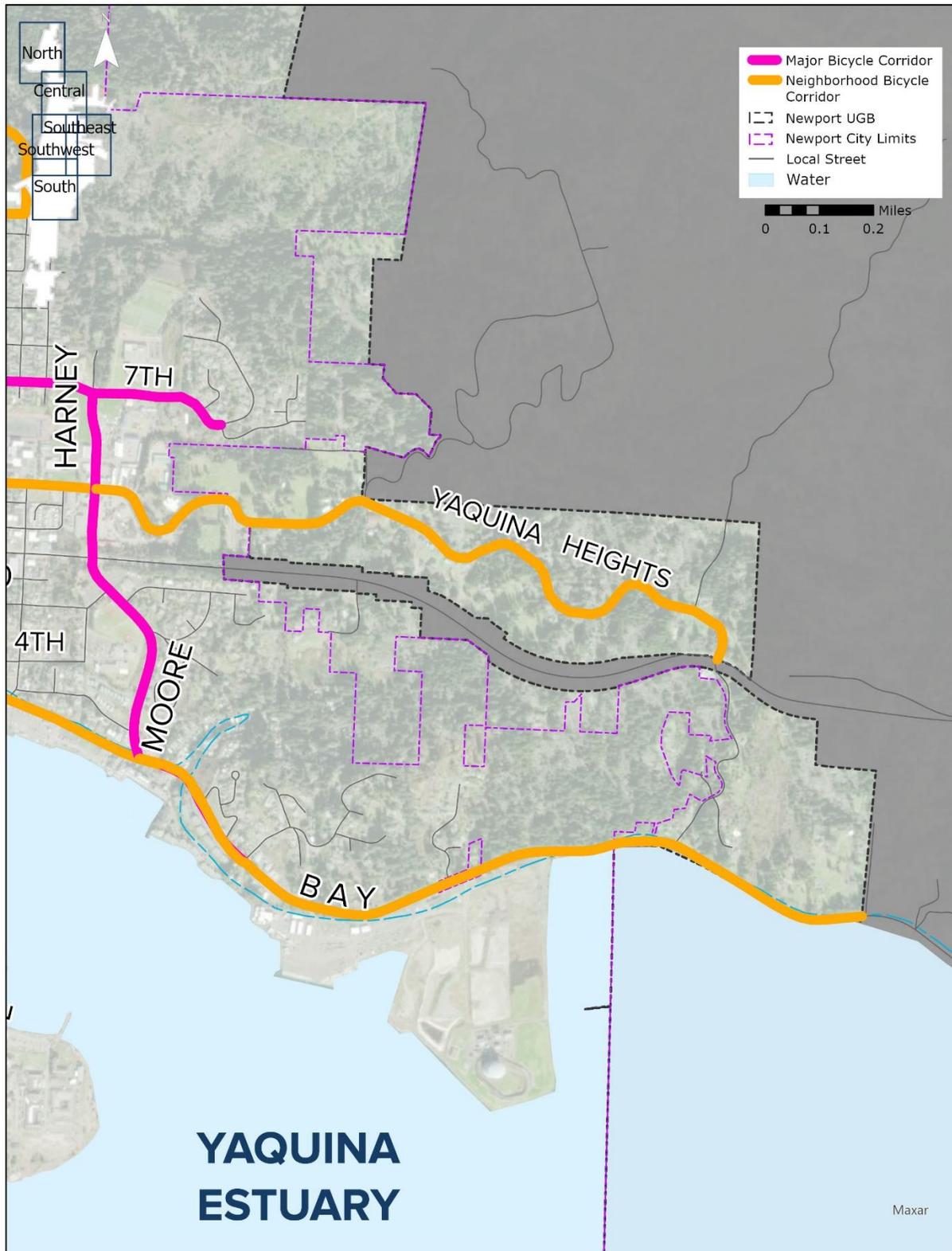
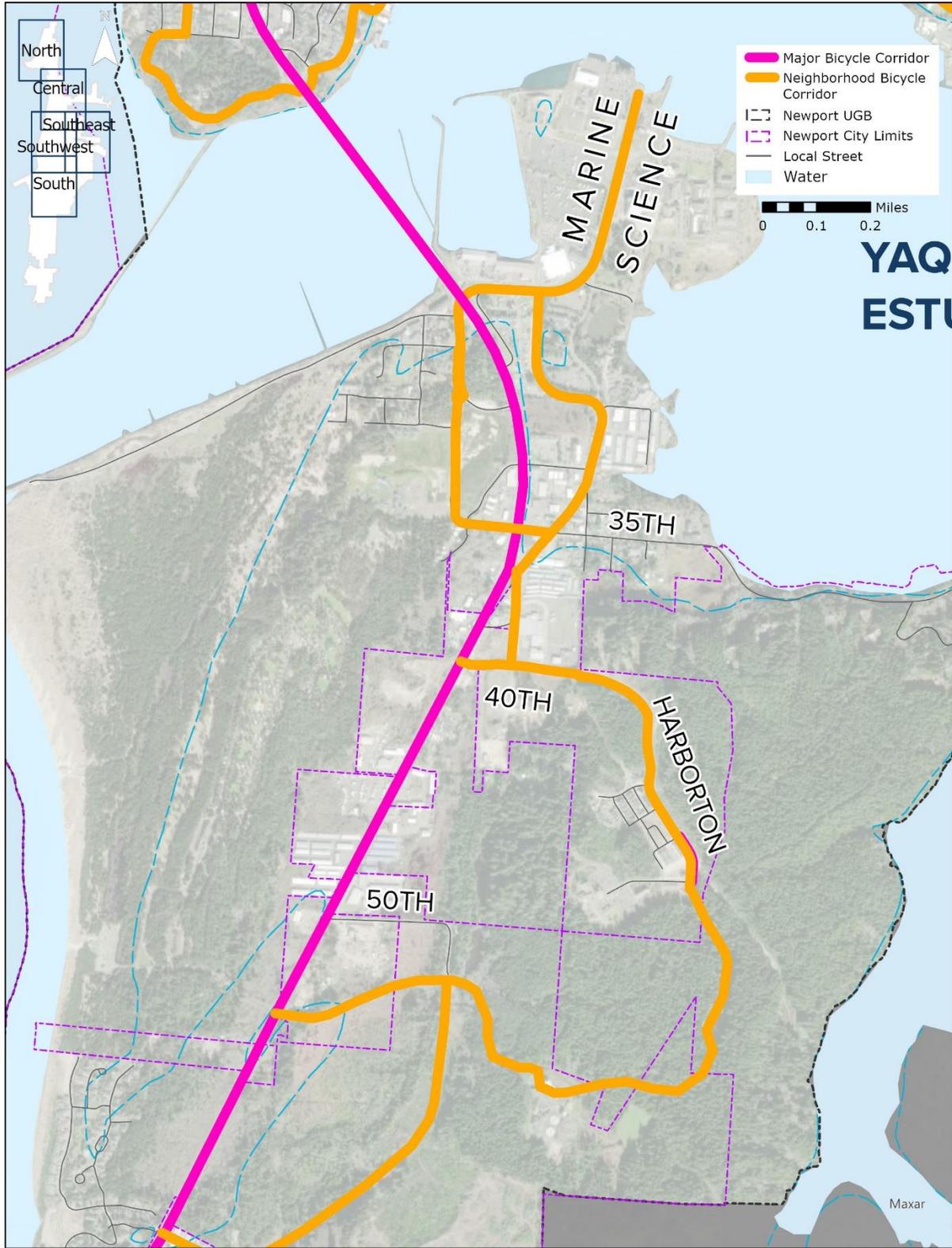


FIGURE 4E: NEWPORT'S PROPOSED BICYCLE CORRIDORS - SOUTH BEACH



MULTIMODAL NETWORK DESIGN

The recommended design of the streets in Newport is based on the functional classifications for motor vehicles. The recommended designs are intended to be implemented in newly developing or redeveloping areas of the city, where constrained conditions do not limit the ability to construct the typical cross-section described in the following sections. The construction or reconstruction of some streets may be constrained by challenging topography or environmentally sensitive, historic, or developed areas, and various minimum design parameters are outlined for these locations. Even unconstrained locations may be candidate locations to apply the minimum design parameters if they function as low-volume local streets (i.e., fewer than 500 vehicles per day).

Roadway cross-section design elements include travel lanes, curbs, planter strips, sidewalks on both sides of the road, and bicycle facilities. The following sections detail both preferred (for application in unconstrained locations) and minimum element widths (for application in constrained locations or for low-volume local streets) for each of Newport's functional classifications along with guidance for identifying an acceptable street cross-section in constrained locations. Acceptable street cross-sections are derived from the preferred cross-section standard based on the street's pedestrian and bicycle corridor classification. Preferred element widths should be implemented in most locations; minimum element widths require a documented constraint (e.g., topography, environmental, existing buildings) and approval by the City Engineer and Planning Director. The minimum element widths were expanded to allow flexibility in the width of specific elements depending on the multimodal corridors detailed above. The existing minimum right-of-way width and roadway width for the City of Newport are outlined in the Municipal Code (13.05.015).

Although this technical memo provides guidance for the preferred facilities on Arterial streets, both US 101 and US 20 are under the state's jurisdiction and are subject to the design criteria in the Highway Design Manual (HDM),⁶ other ODOT manuals, and the companion document, the Blueprint for Urban Design (BUD).⁷ The BUD supplements existing design manuals and provides enhanced design guidance until a full design manual update can be completed. The recommended guidance is consistent with the BUD, and the recommended urban contexts for US 101 and US 20 in Newport are provided in the appendix.

TRAVEL LANES AND PARKING

The vehicle classifications and freight corridors determine the design parameters for travel lanes of each street. This is the throughway for drivers, including cars, buses, and trucks. Table 2 provides the recommended travel lane and on-street parking requirements. The vehicle functional classification of the street is the starting point to determine the number of through lanes, lane

⁶ ODOT. *Highway Design Manual*. <https://www.oregon.gov/odot/Engineering/Pages/Hwy-Design-Manual.aspx>. 2012.

⁷ ODOT. *Blueprint for Urban Design*. https://www.oregon.gov/odot/Engineering/Documents_RoadwayEng/Blueprint-for-Urban-Design_v1.pdf. 2020.

widths, and median and left-turn lane requirements. However, freight corridors takes precedence when determining the appropriate lane width regardless of the functional classification. Streets identified as part of Newport's truck network may include travel lanes up to 12 feet wide although 11 feet travel lanes are also acceptable. Wider lanes (over 12 feet) should only be used for short distances at intersections, where needed. Streets that require a median/ center turn lane should include a minimum 6-foot-wide pedestrian refuge at marked crossings. Otherwise, the median can be reduced to a minimum of 4 feet at midblock locations, before widening at intersections for left-turn lanes (where required or needed).

Select low-volume Local Streets (i.e., fewer than 500 vehicles per day) are also candidates for a Shared Streets treatment where all roadway users share a single, unmarked travel lane that is narrower than a traditional Local Street. Shared Streets require vehicle traffic to yield to pedestrians and bicyclists within the roadway which is reinforced by the narrow pavement width. The design of these streets is similar to many of Newport's existing, low-volume streets. Shared Streets are intended as an alternative to Local Street design where widening is not feasible, and this treatment supersedes the requirements of the Oregon Fire Code by authority granted to the City under ORS 368.039.

TABLE 2: RECOMMENDED TRAVEL LANE AND ON-STREET PARKING REQUIREMENTS

ROADWAY CLASSIFICATION	ARTERIAL STREET¹	MAJOR COLLECTOR STREET	NEIGHBORHOOD COLLECTOR STREET	LOCAL STREET	SHARED STREET²
TYPICAL THROUGH LANES (BOTH DIRECTIONS)	2 to 4	2	2	2	1
MINIMUM LANE WIDTH	11-12 ft. ³	10 ft. ⁴	10 ft. ⁴	10 ft.	16 ft.
MEDIAN/ CENTER TURN LANE⁵	Optional 11-14 ft. median/ center turn lane ⁶	Optional 11 ft. center turn lane ⁷	None	None	None
MINIMUM ON-STREET PARKING WIDTH	Context dependent, 7-8 ft. where applicable	Optional 8 ft. preferred, 7 ft. allowed in residential areas ⁸	Optional 8 ft. preferred, 7 ft. allowed in residential areas ⁸	Optional 8 ft. preferred, 7 ft. allowed in residential areas ⁸	None

Notes:

1. Although guidance is provided for Arterial streets, these are under state jurisdiction. Values presented in this table are consistent with the Blueprint for Urban Design (BUD). For detailed design recommendations on US 101 and US 20, the identified urban contexts for Newport are provided in the appendix and the BUD is publicly available.
2. Shared Street conditions may apply to local streets that carry fewer than 500 vehicles per day.
3. 11 ft. travel lanes are preferred for most urban contexts within Newport. 11 ft. travel lanes are standard for central business district areas in the BUD. Adjustments may be required for freight reduction review routes. Final lane width recommendations are subject to review and approval by ODOT.
4. Travel lanes up to 12 ft. may be permitted for designated local truck routes only.
5. A minimum 6-foot-wide pedestrian refuge should be provided at marked crossings. Otherwise, a median can be reduced to a minimum of 4 feet at midblock locations, before widening at intersections for left-turn lanes (where required or needed).
6. The BUD recommends a 14 ft. lane for speeds above 40 mph. Final lane width recommendations are subject to review and approval by ODOT.
7. Center left-turn lane required at intersections with Arterials; minimum 6-foot-wide median required where refuge is needed for pedestrian/bicycle street crossings.
8. 8 feet width required in commercial areas and 7 feet width allowed in residential areas. Provision of on-street parking (one-side only) should be limited to City streets (not on a designated freight route) with a minimum 28 ft. paved width in commercial areas or a minimum 27 ft. in residential areas. Provision of on-street parking (both sides) should be limited to City streets (not on a designated freight route) with a minimum 36 ft. paved width in commercial areas or a minimum 34 ft. in residential areas. For designated freight routes, on-street parking may only be provided with an additional 4 ft. paved width. On-street parking may be eliminated on one or both sides if adequate parking is provided off-street or to accommodate bicycle/pedestrian facilities.

NEIGHBORHOOD TRAFFIC MANAGEMENT TOOLS

Neighborhood Traffic Management (NTM) describes strategies that can be deployed to slow traffic, and potentially reduce volumes, creating a more inviting environment for pedestrians and bicyclists. NTM strategies are primarily traffic calming techniques for improving neighborhood livability on local streets. These strategies are most appropriate on Local Streets and Neighborhood Collectors, although a limited set of strategies can also be applied to Major Collectors and Arterials in special cases. NTM strategies on Arterial roadways requires review and approval by ODOT. Mitigation measures for neighborhood traffic impacts must balance the need to manage vehicle speeds and volumes with the need to maintain mobility, circulation, and function for service providers, such as emergency responders. Examples of tools are shown in Figure 5.

FIGURE 5: SUMMARY OF NEIGHBORHOOD TRAFFIC MANAGEMENT STRATEGIES

Chicanes



[www.pedbikeimages.org/Dan Burden](http://www.pedbikeimages.org/Dan_Burden)

Chokers



[www.pedbikeimages.org/Dan Burden](http://www.pedbikeimages.org/Dan_Burden)

Curb Extensions



[www.pedbikeimages.org/Carl Sundstrom](http://www.pedbikeimages.org/Carl_Sundstrom)

Diverters



[www.pedbikeimages.org/Adam Fukushima](http://www.pedbikeimages.org/Adam_Fukushima)

Median Islands



[www.pedbikeimages.org/Dan Burden](http://www.pedbikeimages.org/Dan_Burden)

Raised Crosswalks



[www.pedbikeimages.org/Tom Harned](http://www.pedbikeimages.org/Tom_Harned)

Speed Cushions



NACTO Urban Street Design Guide

Speed Hump



[www.pedbikeimages.org/Dan Burden](http://www.pedbikeimages.org/Dan_Burden)

Traffic Circles



[www.pedbikeimages.org/Carl Sundstrom](http://www.pedbikeimages.org/Carl_Sundstrom)

Table 3, below, lists common NTM applications. Any NTM project should include coordination with emergency response staff to ensure that public safety is not compromised. NTM strategies implemented on a state facility would require coordination with ODOT regarding freight mobility considerations.

TABLE 3: APPLICATION OF NTM STRATEGIES						
APPLICATION	USE BY FUNCTIONAL CLASSIFICATION				IMPACT	
	ARTERIALS *	MAJOR COLLECTORS	NEIGHBORHOOD COLLECTORS	LOCAL STREETS	SPEED REDUCTION	TRAFFIC DIVERSION
CHICANES				✓	✓	✓
CHOKERS				✓	✓	✓
CURB EXTENSIONS	✓	✓	✓	✓	✓	
DIVERTERS (WITH EMERGENCY VEHICLE PASS- THROUGH)		✓	✓	✓		✓
MEDIAN ISLANDS	✓	✓	✓	✓	✓	
RAISED CROSSWALKS			✓	✓	✓	✓
SPEED CUSHIONS (WITH EMERGENCY VEHICLE PASS- THROUGH)			✓	✓	✓	✓
SPEED HUMP			✓	✓	✓	✓
TRAFFIC CIRCLES			✓	✓	✓	✓

*Traffic calming strategies on Arterials require review and approval by ODOT

SIDEWALKS

Sidewalks provide for pedestrian movement and access, enhance pedestrian connectivity, and promote walking. The recommended pedestrian facilities in Newport intend to encourage walking by making it more attractive. Vehicle functional classification determine the appropriate pedestrian facilities along streets, including the width of the throughway for pedestrians and the buffer from the vehicle travel way. Sidewalk may be provided on one side of the street only where significant topographical constraints exist as determined by the City Engineer and Planning Director. The sidewalk encompasses four zones, including the frontage, pedestrian throughway, furnishings/landscape, and the buffer (i.e., on-street parking or bike facilities). The recommended configuration for each of these zones is provided in Table 4.

- The **frontage** describes the section where a pedestrian interacts with the adjacent buildings or private property and includes entryways and outdoor seating. This zone is typically between 1 and 3 feet wide for Major Pedestrian streets and ½ foot for other streets. It may include a concrete or natural surface depending on the adjacent land use.

FIGURE 6: SIDEWALK ZONES



- The **pedestrian throughway** is the accessible zone in which pedestrians travel. It includes a minimum eight-foot-wide clear throughway along Major Pedestrian, a minimum six-foot-wide clear throughway for Neighborhood Pedestrian streets, and five-foot wide clear throughway along Local Pedestrian streets.
- The **furnishings/ landscape** zone is the sidewalk section located between the pedestrian throughway and the curb, and includes street furnishings or landscaping (e.g., benches, lighting, bicycle parking, tree wells, and/or plantings). If adjacent to on-street parking, it should also include a clearance distance between any curbside parking and the street furnishing area or landscape strip (i.e., so vehicles parking, or opening doors do not interfere with street furnishings and/or landscaping). Streets located along a transit route should incorporate furnishings to support transit ridership, such as transit shelters and benches, into the furnishings/landscape strip. It should include a minimum width of four feet.
- The **buffer** is the space between the pedestrian throughway and the vehicle travel way, and may consist of bike facilities, on-street parking, curb extensions, or other elements. This is also the location where users will access transit. It should include a minimum width between four

and 12 feet, depending on the pedestrian classification, and encompasses the width of on-street parking, bike facilities, and furnishings/landscape zone.

TABLE 4: PREFERRED SIDEWALK CONFIGURATION				
FUNCTIONAL CLASSIFICATION	ARTERIAL OR MAJOR COLLECTOR		NEIGHBORHOOD COLLECTOR	LOCAL STREET¹
	COMMERCIAL	RESIDENTIAL		
PREFERRED CONFIGURATION				
FRONTAGE	3 ft. (City) 1-4 ft. (ODOT)	1 ft. (City) 1 ft. (ODOT)	0.5 ft.	0.5 ft.
PEDESTRIAN THROUGHWAY	8 ft. (City) 8-10 ft. (ODOT)	8 ft. (City) 8 ft. (ODOT)	6 ft.	5 ft.
FURNISHINGS/ LANDSCAPE (INCLUDES CURB)²	4 ft. (City) 5.5-6.5 ft. (ODOT)	4 ft. (City) 6.5 ft. (ODOT)	4 ft.	4 ft.
DESIRED WALKWAY WIDTH	15 ft. (City) Variable (ODOT) ⁴	13 ft. (City) Variable (ODOT) ⁴	10.5 ft.	9.5 ft.
DESIRED BUFFER (PEDESTRIAN THROUGHWAY TO VEHICLE TRAVEL WAY)³	12 ft. (City) Variable (ODOT) ⁴	12 ft. (City) Variable (ODOT) ⁴	4 ft.	4 ft.

Notes:

1. Shared Streets do not require sidewalk
2. Furnishings/landscape width may be reduced to the “acceptable” standard if bike facilities or on-street parking is included within the buffer zone
3. Includes width of on-street parking, bike facilities, and furnishings/landscape zone, if provided
4. Desired walkway and buffer width for ODOT facilities depends on the urban context and are subject to review and approval by ODOT. Additional detail is provided in the BUD.

The construction or reconstruction of some streets may be constrained by challenging topography or environmentally sensitive, historic, or developed areas. These roadways may require modified designs to allow for reasonable construction costs. Guidance for modifications to the standard sidewalk designs is provided in Table 5. The preferred sidewalk element widths, documented in Table 4, should be implemented in most locations; minimum element widths, summarized in Table 5, require a documented constraint (e.g., topography, environmental, existing buildings) and approval by the City Engineer and Planning Director. Any modification of a standard sidewalk design requires justification of any constraints (e.g., topography, environmental, existing buildings) and approval of an acceptable deviation prior to construction. Sidewalk facilities constructed on state facilities are subject to review and approval by ODOT based on guidance from the BUD.

TABLE 5: ACCEPTABLE SIDEWALK CONFIGURATION

FUNCTIONAL CLASSIFICATION	ARTERIAL OR MAJOR COLLECTOR		NEIGHBORHOOD COLLECTOR	LOCAL STREET ¹
	COMMERCIAL	RESIDENTIAL		
ACCEPTABLE CONFIGURATION				
FRONTAGE	0.5 ft. (City) 1-2 ft. (ODOT)	0.5 ft. (City) 1 ft. ODOT	0.5 ft.	0.5 ft.
PEDESTRIAN THROUGHWAY	8 ft. (City) ³ 5-8 ft. (ODOT)	6 ft. (City) 5 ft. (ODOT)	6 ft.	5 ft.
FURNISHINGS/ LANDSCAPE (INCLUDES CURB)	3 ft. (City) 0.5 ft. (ODOT)	3 ft. (City) 0.5 ft. (ODOT)	0.5 ft.	0.5 ft.
MINIMUM WALKWAY WIDTH	11.5 ft. (City) Variable (ODOT) ⁴	9.5 ft. (City) Variable (ODOT) ⁴	7 ft.	6 ft.
RECOMMENDED MINIMUM BUFFER (PEDESTRIAN THROUGHWAY TO VEHICLE TRAVEL WAY) ²	3 ft. (City) Variable (ODOT) ⁴	3 ft. (City) Variable (ODOT) ⁴	0.5 ft.	0.5 ft.

Notes:

1. Shared Streets do not require sidewalk
2. Includes width of on-street parking, bike facilities, and furnishings/landscape zone
3. In highly constrained locations, the landscape buffer may be eliminated to meet the required 8 ft. pedestrian throughway with approval from the City Engineer and Planning Director
4. Desired walkway and buffer width for ODOT facilities depends on the urban context and are subject to review and approval by ODOT. Additional detail is provided in the BUD.

BICYCLE FACILITIES

Bike facilities help support the movement of people riding bikes. Streets should be safe and comfortable for bicyclists of all ages and abilities to encourage ridership. Building high quality bicycle infrastructure can improve transportation safety, minimize public health risks, reduce

congestion, and provide more equitable access to transportation. The preferred and acceptable bicycle facilities can be seen in Table 6. Vehicle function classification is used to determine the appropriate facilities along streets. The preferred treatments are recommended to include protected or separated facilities from the vehicle travel way along Arterial and Major Collector streets and bicycle lanes along Neighborhood Collector streets. A shared street environment will be provided on Newport’s Local Streets.

The construction or reconstruction of some streets may be constrained by challenging topography or environmentally sensitive, historic, or developed areas. These roadways may require modified designs to allow for reasonable construction costs. Guidance for modifications to the preferred bike facility is provided in Table 6. Any modification of a standard bike facility requires justification of any constraints (e.g., topography, environmental, existing buildings) and approval of an acceptable deviation prior to construction.

TABLE 6: PREFERRED AND ACCEPTABLE BICYCLE FACILITIES

VEHICLE CLASSIFICATION	ARTERIAL OR MAJOR COLLECTOR	NEIGHBORHOOD COLLECTOR	LOCAL STREET
PREFERRED BIKE FACILITY (UNCONSTRAINED CONDITIONS)	Protected or separated facilities from the vehicle travel way (e.g., shared use path, separated bicycle lanes)	Bicycle lanes	Shared streets without shared lane markings
ACCEPTABLE BIKE FACILITY (CONSTRAINED CONDITIONS)¹	Bicycle lanes	Shared streets with shared lane markings	Shared streets without shared lane markings

Notes:

1. Any modification of a standard bike facility requires justification of any constraints (e.g., topography, environmental, existing buildings) and approval of an acceptable deviation prior to construction.

BICYCLE FACILITY OPTIONS

Table 7 shows bicycle facility options and recommended configurations. In general, facilities that are protected or separated from the vehicle travel way include a 10-foot two-way or 6-foot one-way cycle track, 10-foot shared use path, or 8-foot buffered bike lanes. Non-buffered bike lanes should be a minimum of 6-feet wide, while some shared streets should include shared lane markings, with vehicle speed and volume management. The preferred bicycle facility types, documented in Table 6, should be implemented in most locations while implementation of an acceptable bicycle facility requires a documented constraint (e.g., topography, environmental, existing buildings) and approval by the City Engineer and Planning Director. Bicycle facilities constructed on state facilities are subject to review and approval by ODOT based on guidance from the BUD.

TABLE 7: BICYCLE FACILITY OPTIONS AND RECOMMENDED CONFIGURATIONS

BICYCLE FACILITY TYPE	RECOMMENDED CONFIGURATION	RECOMMENDED DESIGN PARAMETERS
TWO-WAY CYCLE TRACK (PROTECTED/SEPARATED FACILITY)¹		<p>Option: At sidewalk grade</p> <hr/> <p>Minimum width: 12 ft.</p> <hr/> <p>Minimum buffer: Up to 6 ft. from vehicle travel way; consider a buffer or other delineation to separate bicycle facility from sidewalk</p>
		<p>Option: At roadway grade</p> <hr/> <p>Minimum width: 12 ft.</p> <hr/> <p>Minimum buffer: Up to 6 ft. from vehicle travel way; 0 ft. from sidewalk</p>
ONE-WAY CYCLE TRACK (PROTECTED/SEPARATED FACILITY)¹		<p>Option: At sidewalk grade</p> <hr/> <p>Minimum width: 8 ft.</p> <hr/> <p>Minimum buffer: Up to 6 ft. from vehicle travel way; consider a buffer or other delineation to separate bicycle facility from sidewalk</p>
		<p>Option: At roadway grade</p> <hr/> <p>Minimum width: 8 ft.</p> <hr/> <p>Minimum buffer: Up to 6 ft. from vehicle travel way; 0 ft. from sidewalk</p>
SHARED USE PATH (PROTECTED/SEPARATED FACILITY)¹		<p>Minimum width: 12 ft.</p> <hr/> <p>Minimum shoulder: 2 ft. on each side</p> <hr/> <p>Minimum buffer: Up to 6 ft. from vehicle travel way</p>
BUFFERED BIKE LANES (PROTECTED FACILITY)¹		<p>Minimum width: 8 ft. (5 ft. bike lane with 3 ft. buffer)</p>

TABLE 7: BICYCLE FACILITY OPTIONS AND RECOMMENDED CONFIGURATIONS

BICYCLE FACILITY TYPE	RECOMMENDED CONFIGURATION	RECOMMENDED DESIGN PARAMETERS
BIKE LANES ¹		Minimum width: 6 ft.
SHARED STREET		Optional treatments: Shared lane markings, vehicle speed and volume management

Notes:

1. Desired bicycle facility and buffer width for ODOT facilities depends on the urban context and are subject to review and approval by ODOT. Additional detail is provided in the BUD.

PREFERRED STREET CROSS-SECTIONS FOR CITY STREETS

To determine the typical cross-section for a street implemented in newly developing or redeveloping areas of the city, the motor vehicle functional classification is used to determine the design requirements for each mode. In unconstrained conditions, the preferred facility design requirements should be met for all modes (see Tables 2, 4, 6, and 7 earlier in this document). The recommended preferred cross-sections for Major Collectors, Neighborhood Collectors, and Local Streets in unconstrained conditions are provided below in Figures 7, 8, and 9/9B, respectively. The preferred Local Street cross-sections include options for parking on one side of the street only and no on-street parking. The provision of parking on one side of the street only should be determined based on the availability of off-street parking as determined by the City Engineer and Planning Director. All typical cross-sections provided below assume that the street is not located on a designated local freight route. Local freight routes may require travel lanes up to 12 ft. although 11 ft. travel lanes are also acceptable.

No typical cross-sections are provided for Arterials in Newport since these streets are subject to review and approval by ODOT. Design guidance from ODOT can be found in the BUD and is summarized in Tables 2, 4, 6, and 7 earlier in this document. ODOT’s design guidance is context dependent which provides flexibility in specific element widths when determining typical cross-sections.

FIGURE 7: PREFERRED MAJOR COLLECTOR TYPICAL CROSS-SECTION (SOURCE: STREETMIX)

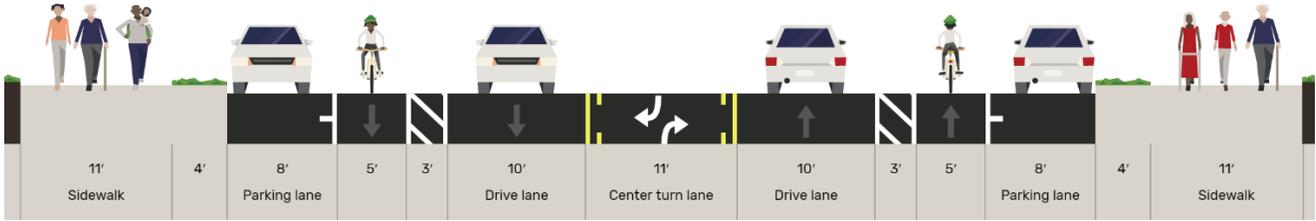


FIGURE 8: PREFERRED NEIGHBORHOOD COLLECTOR TYPICAL CROSS-SECTION (SOURCE: STREETMIX)

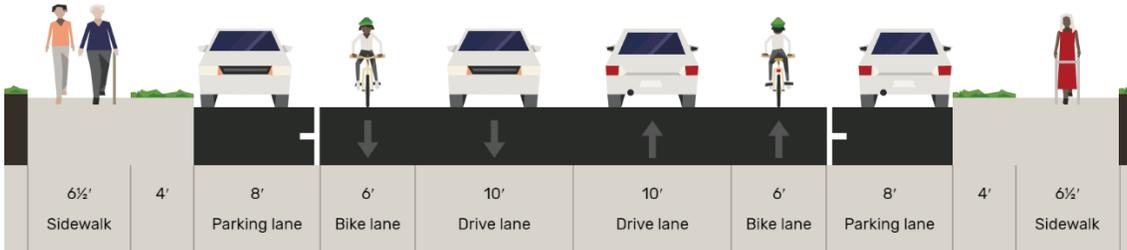


FIGURE 9A: PREFERRED LOCAL STREET TYPICAL CROSS-SECTION – PARKING ONE SIDE ONLY (SOURCE: STREETMIX)

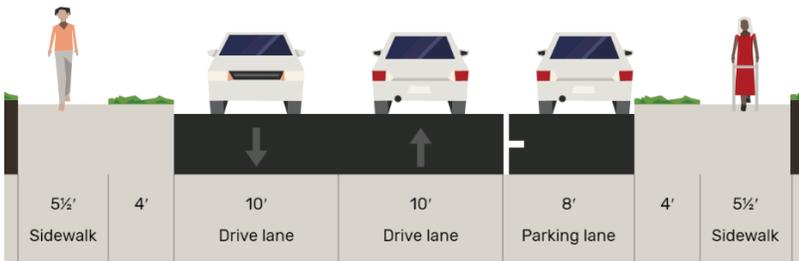


FIGURE 9B: PREFERRED LOCAL STREET TYPICAL CROSS-SECTION – NO PARKING (SOURCE: STREETMIX)



ACCEPTABLE STREET CROSS-SECTIONS FOR CITY STREETS

The preferred designs recommended in the previous section (Preferred Street Cross-Sections for City Streets) are intended to be implemented in newly developing or redeveloping areas of the city (e.g., areas where two or more adjacent parcels redevelop concurrently, subdivisions constructed on existing parcels), where constrained conditions do not limit the ability to construct the typical cross-section. The construction or reconstruction of some streets may be constrained by challenging topography or environmentally sensitive, historic, or developed areas, and various acceptable design parameters are provided for these locations. Constrained conditions may apply when the required width of the street cross-section (i.e., the sum of the recommended widths of travel lanes, on-street parking, pedestrian, and bicycle facilities) exceeds the available right-of-way.

If the required cross-section is wider than the available right-of-way, coordination with the City of Newport is required to determine whether right-of-way acquisition is necessary or design elements can be narrowed or removed. For locations with constrained right-of-way, guidance for determining an acceptable street cross-section is summarized in Table 7 and typical constrained cross-sections are summarized below in Figures 10, 11, and 12A/12B/12C. The steps outlined in Table 8 provide guidance on the order in which cross-section elements should be reduced to acceptable minimum standards based on the designated pedestrian or bicycle corridors. Any modifications to the preferred street cross-section will require findings that the proposal meets defined constraints (e.g., topography, environmental, existing buildings) and approval of an acceptable deviation from the City Engineer and Planning Director prior to construction. Constrained conditions on ODOT facilities will require review and approval by ODOT

TABLE 8: PROCESS FOR DETERMINING STREET CROSS-SECTIONS IN CONSTRAINED CONDITIONS

ANY NON-ARTERIAL ¹ STREET FUNCTIONAL CLASSIFICATION WITH:	STEPS TO REDUCE LOWER PRIORITY STREET COMPONENTS ⁵			
	STEP 1	STEP 2	STEP 3	STEP 4
EQUAL PEDESTRIAN AND BICYCLE CORRIDORS²		Reduce sidewalk frontage zone to acceptable width	Choose acceptable bike facility	Reduce the furnishings/landscape zone or pedestrian thoroughway to acceptable width
HIGHER PEDESTRIAN VS. BICYCLE CORRIDORS³	Eliminate on-street parking on one or both sides	Implement acceptable bike facility	Reduce sidewalk frontage zone to acceptable width	
HIGHER BICYCLE VS. PEDESTRIAN CORRIDORS⁴		Reduce sidewalk frontage zone to acceptable width	Reduce the furnishings/landscape zone or pedestrian thoroughway to acceptable width	Implement acceptable bike facility

Notes:

1. The street cross-section for ODOT facilities depends on the urban context and are subject to review and approval by ODOT. Additional detail is provided in the BUD.
2. Includes Major Pedestrian vs. Major Bicycle corridor, Neighborhood Pedestrian vs. Neighborhood Bicycle corridor, or Local Pedestrian vs. Local Bicycle corridor.
3. Includes Major Pedestrian vs. Neighborhood or Local Bicycle corridor, or Neighborhood Pedestrian vs. Local Bicycle corridor.
4. Includes Major Bicycle vs. Neighborhood or Local Pedestrian corridor, or Neighborhood Bicycle vs. Local Pedestrian corridor
5. Local Streets that carry less than 500 vehicles per day are candidates for shared street treatments in lieu of this process

FIGURE 10: ACCEPTABLE MAJOR COLLECTOR TYPICAL CROSS-SECTION (SOURCE: STREETMIX)

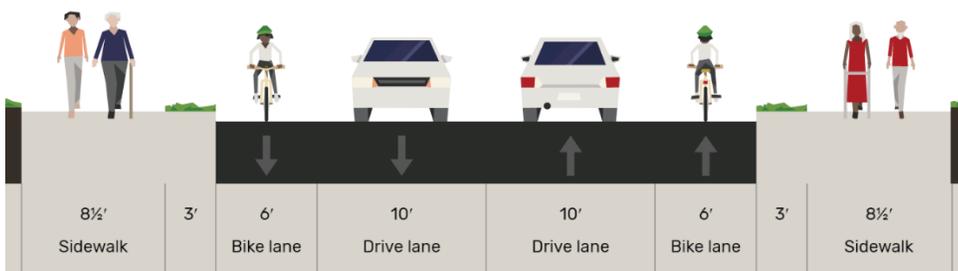


FIGURE 11: ACCEPTABLE NEIGHBORHOOD COLLECTOR TYPICAL CROSS-SECTION (SOURCE: STREETMIX)



FIGURE 12A: ACCEPTABLE LOCAL STREET TYPICAL CROSS-SECTION – PARKING ONE SIDE ONLY (SOURCE: STREETMIX)

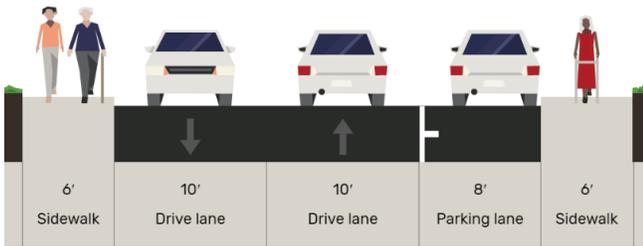


FIGURE 12B: ACCEPTABLE LOCAL STREET TYPICAL CROSS-SECTION – NO PARKING (SOURCE: STREETMIX)

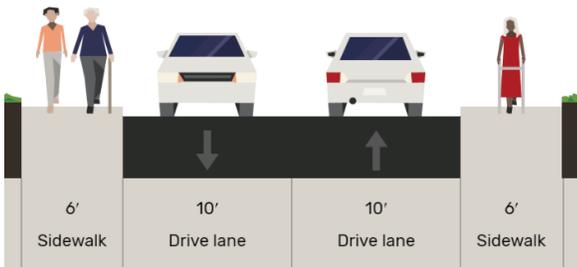
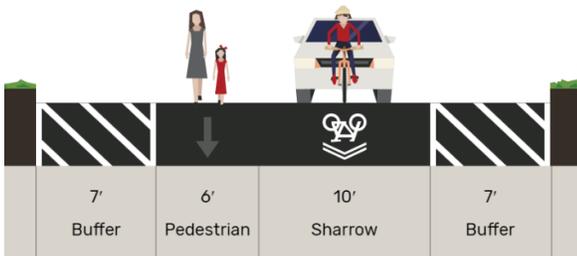


FIGURE 12C: ACCEPTABLE LOCAL STREET TYPICAL CROSS-SECTION – SHARED STREET (SOURCE: STREETMIX)



SEPARATED PEDESTRIAN AND BICYCLE FACILITIES

Some pedestrian and bicycle facilities may be separated from the right-of-way of a street. These facilities include pedestrian trails, pedestrian and bicycle accessways, and shared use paths. These facilities serve a variety of recreation and transportation needs for pedestrians and bicyclists.

PEDESTRIAN TRAIL

Pedestrian trails are typically located in parks or natural areas and provide opportunities for both pedestrian circulation and recreation. They are recommended to include a minimum width of 5 feet (see Table 9) and may include a hard or soft surface.

ACCESSWAY

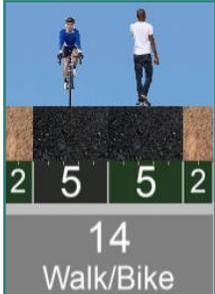
Accessways provide short path segments between disconnected streets or localized recreational walking and biking opportunities. Accessways must be on public easements or rights-of-way and have minimum paved surface of 8 feet, with a 2-foot shoulder on each side, and 12 feet of right-of-way. Accessways should be provided in any locations where the length between existing pedestrian and bicycle connections exceeds the maximum allowable length identified in Table 10.

SHARED USE PATH

Shared use paths provide off-roadway facilities for walking and biking travel. Depending on their location, they can serve both recreational and citywide circulation needs. Shared use path designs vary in surface types and widths. Hard surfaces are generally better for bicycle travel. Widths need to provide ample space for both walking and biking and should be able to accommodate maintenance vehicles.

A shared use path is recommended to be at least 10 feet wide, with a 2-foot shoulder on each side, and 14 feet of right-of-way (see Table 9). In areas with significant walking or biking demand (e.g., Nye Beach Area, Oregon Coast Bike Route) or on ODOT facilities, that path is recommended to be 12 feet wide, with a 2-foot shoulder on each side and a total right-of-way of 16 feet (see Table 9). A shared use path may be narrowed to 8 feet over short distances to address environmental or right-of-way constraints.

TABLE 9: SEPARATED PEDESTRIAN AND BICYCLE FACILITIES RECOMMENDED DESIGNS

FACILITY OPTIONS	PEDESTRIAN TRAIL DESIGN	ACCESSWAY DESIGN	TYPICAL SHARED USE PATH DESIGN	HIGH-DEMAND SHARED USE PATH DESIGN ¹
RECOMMENDED CONFIGURATION	 <p>2 5 2 9 Walk</p>	 <p>2 4 4 2 12 Walk/Bike</p>	 <p>2 5 5 2 14 Walk/Bike</p>	 <p>2 6 6 2 16 Walk/Bike</p>

Notes:

- HIGH-DEMAND SHARED USE PATH IS REQUIRED PARALLEL TO ODOT FACILITIES AND IN OTHER AREAS WITH SIGNIFICANT WALKING OR BIKING DEMAND (E.G., NYE BEACH AREA, OREGON COAST BIKE ROUTE)**

STREET CROSSINGS

Streets with high traffic volumes and/or speeds in areas with trail crossings, or nearby transit stops, residential uses, schools, parks, shopping and employment destinations generally require enhanced street crossings with treatments, such as marked crosswalks, high visibility crossings, and curb extensions to improve the safety and convenience for pedestrians. Crossings should be consistent with the recommended transportation facility spacing standards shown in Table 10. Street crossings along US 101 or US 20 should be provided between every 250 to 1,500 feet, depending on the urban context, as summarized in Table 3-9 of the BUD. Exceptions include where the connection is impractical due to topography, inadequate sight distance, high vehicle travel speeds, lack of supporting land use or other factors that may prevent safe crossing. All crossings on state facilities require review and approval by ODOT.

Enhanced pedestrian crossing treatments should be considered on high speed or high volume roads (e.g. US 101, US 20) at transit stops, trail crossings, and at Major Pedestrian street highway crossings that connect major destinations (e.g. parks, grocery stores, schools) to residential areas. The recommended enhanced pedestrian crossing treatment should be determined using the National Cooperative Highway Research Program (NCHRP) Report 562, Improving Pedestrian Safety at Unsignalized Intersections. These guidelines for pedestrian crossing treatments are based on vehicle speed on the major street, pedestrian crossing distance, peak hour pedestrian volume, peak hour vehicle volume, and local parameters such as motorist compliance, pedestrian walking speed, and pedestrian start-up and clearance time. NCHRP Report 562 includes worksheets for inputting the variables above and identifying the appropriate treatment type. It is recommended

that these guidelines be reviewed with all traffic studies for any potential street crossing associated with new development in the city.

NEIGHBORHOOD TRAFFIC MANAGEMENT PROGRAM

It is recommended that neighborhood traffic impacts be reviewed with all traffic studies associated with new development in the city. Any development that would be expected to increase through-trips on existing residential-adjacent Neighborhood Collector or Local Streets by 40 or more vehicles during the evening peak hour or 400 vehicles per day will require assessment and mitigation of residential street impacts. Through-trips are defined as those to and from a proposed development that have neither an origin nor a destination in the neighborhood. The study shall include all of the following:

- Existing number of through-trips per day on adjacent residential Local Streets or Neighborhood Collector streets.
- Projected number of through-trips per day on adjacent residential Local Streets or Neighborhood Collector streets that will be added by the proposed development.

A Neighborhood Collector or Local Street is considered impacted if volumes are increased above 1,500 average daily trips on Neighborhood Collector streets or 1,200 average daily trips on Local Streets. Volume and speed management tools must be provided to mitigate for the impacts of projected through-trips consistent with Table 3.

In addition, a formal neighborhood traffic management program is recommended to respond to neighborhood concerns outside of the development review process. The process should be initiated by a citizen filed request that includes petition signatures of impacted neighbors or business owners and include a preliminary evaluation on vehicle travel speeds or volumes along the petitioned street. If a problem were found to exist, solutions would be identified and the process continued with neighborhood meetings, feedback from service and maintenance providers, cost evaluation, and traffic calming device implementation. Six to twelve months after implementation, the device should be reevaluated for effectiveness.

PERFORMANCE STANDARDS

Performance standards are applied to the operation and design of transportation facilities to ensure that the network functions as intended. In Newport, this includes performance standards for vehicles and overall system connectivity.

TRANSPORTATION FACILITY AND ACCESS SPACING STANDARDS

Transportation facility and access spacing standards include a broad set of techniques that balance the need to provide for efficient, safe, and timely multimodal travel with the ability to allow access to individual destinations. These standards help create a system of direct, continuous, and connected transportation facilities to minimize out-of-direction travel and decrease travel times for all users, while enhancing safety for people walking, biking and driving by reducing conflict points.

Currently, the city restricts driveways onto Arterial streets to spacing of 500 feet where practical,⁸ and limits blocks to 1,000 feet in length between corners.⁹ Table 10 identifies recommended maximum and minimum public roadway intersection, minimum private access, and maximum pedestrian and bicycle connection spacing standards for streets in Newport. New streets or redeveloping properties must comply with these standards to the extent practical, as determined by the city engineer. As the opportunity arises through redevelopment, streets or driveways not complying with these standards could improve with strategies such as shared access points, access restrictions (through the use of a median or channelization islands), or closure of unnecessary access points, as feasible.

All Arterial streets in Newport are under ODOT jurisdiction. See the Oregon Highway Plan and Blueprint for Urban Design for spacing standards along US 101 and US 20.

TABLE 10: TRANSPORTATION FACILITY AND ACCESS SPACING STANDARDS¹				
	ARTERIALS⁴	MAJOR COLLECTORS	NEIGHBORHOOD COLLECTORS	LOCAL STREETS
MAXIMUM BLOCK LENGTH (PUBLIC STREET TO PUBLIC STREET)		1,000 feet	1,000 feet	1,000 feet
MINIMUM BLOCK LENGTH (PUBLIC STREET TO PUBLIC STREET)		200 feet	150 feet	125 feet
MAXIMUM LENGTH BETWEEN PEDESTRIAN/BICYCLE CONNECTIONS (PUBLIC STREET TO PUBLIC STREET, PUBLIC STREET TO CONNECTION OR CONNECTION TO CONNECTION)²		300 feet	300 feet	300 feet
MINIMUM DRIVEWAY SPACING (DRIVEWAY TO DRIVEWAY)	350-1,320 feet	100 feet	75 feet	N/A
MINIMUM INTERSECTION SET BACK (FULL ACCESS DRIVEWAYS ONLY) ³	350-1,320 feet	150 feet	75 feet	25 feet

⁸ City of Newport Municipal Code 14.14.120

⁹ City of Newport Municipal Code 13.05.020

TABLE 10: TRANSPORTATION FACILITY AND ACCESS SPACING STANDARDS¹

	ARTERIALS ⁴	MAJOR COLLECTORS	NEIGHBORHOOD COLLECTORS	LOCAL STREETS
MINIMUM INTERSECTION SET BACK (RIGHT-IN/RIGHT-OUT DRIVEWAYS ONLY) ³	350-1,320 feet	75 feet	50 feet	25 feet

NOTES:

- 1. ALL DISTANCES MEASURED FROM THE EDGE OF ADJACENT APPROACHES.**
- 2. MID-BLOCK PEDESTRIAN AND BICYCLE CONNECTIONS MUST BE PROVIDED WHEN THE BLOCK LENGTH EXCEEDS 300 FEET TO ENSURE CONVENIENT ACCESS FOR ALL USERS. MID-BLOCK PEDESTRIAN AND BICYCLE CONNECTIONS MUST BE PROVIDED ON A PUBLIC EASEMENT OR RIGHT-OF-WAY EVERY 300 FEET, UNLESS THE CONNECTION IS IMPRACTICAL DUE TO TOPOGRAPHY, INADEQUATE SIGHT DISTANCE, HIGH VEHICLE TRAVEL SPEEDS, LACK OF SUPPORTING LAND USE OR OTHER FACTORS THAT MAY PREVENT SAFE CROSSING. WHEN THE BLOCK LENGTH IS LESS THAN 300 FEET, MID-BLOCK PEDESTRIAN AND BICYCLE CONNECTIONS ARE NOT REQUIRED.**
- 3. A PROPERTY MUST CONSTRUCT ACCESS TO A LOWER CLASSIFIED ROADWAY, WHERE POSSIBLE**
- 4. ALL ARTERIAL STREETS IN NEWPORT ARE UNDER ODOT JURISDICTION. ODOT FACILITIES ARE SUBJECT TO ACCESS SPACING GUIDELINES IN THE OREGON HIGHWAY PLAN (SEE TABLE 14 OF APPENDIX C) AND THE BLUEPRINT FOR URBAN DESIGN WHICH VARY BASED ON POSTED SPEED AND URBAN CONTEXT**

VEHICLE MOBILITY STANDARDS

Mobility standards for streets and intersections in Newport provide a metric for assessing the impacts of new development on the existing transportation system and for identifying where capacity improvements may be needed. They are the basis for requiring improvements needed to sustain the transportation system as growth and development occur. Two common methods currently used in Oregon to gauge traffic operations for motor vehicles are volume to capacity (v/c) ratios and level of service (LOS), described below. Vehicle miles travelled (VMT) is a new mobility standard that is currently being considered by Oregon, but there is currently no guidance or legislation for its implementation. VMT provides a more comprehensive look at transportation impacts by encouraging compact development that supports active transportation and transit over traditional vehicle mobility standards which can encourage developments on the periphery of urban areas. As part of the next TSP update, Newport should consider implementing a VMT mobility standard if additional guidance for implementation is provided by ODOT at that time.

- **Volume-to-capacity (v/c) ratio:** A v/c ratio is a decimal representation (between 0.00 and 1.00) of the proportion of capacity that is being used at a turn movement, approach leg, or intersection. The ratio is the peak hour traffic volume divided by the hourly capacity of a given intersection or movement. A lower ratio indicates smooth operations and minimal delays. A ratio approaching 1.00 indicates increased congestion and reduced performance.

- Level of service (LOS): LOS is a “report card” rating (A through F) based on the average delay experienced by vehicles at the intersection. LOS A, B, and C indicate conditions where traffic moves without significant delays over periods of peak hour travel demand. LOS D and E are progressively worse operating conditions. LOS F represents conditions where average vehicle delay is excessive, and demand exceeds capacity, typically resulting in long queues and delays.

The City of Newport does not currently have adopted mobility standards for motor vehicles. It is recommended that the City of Newport consider adopting mobility standards to include both a v/c ratio and LOS standard. Having both a LOS (delay-based) and v/c (congestion-based) standard can be helpful in situations where one metric may not be enough, such as an all-way stop where one approach is over capacity but the overall intersection delay meets standards. The City of Newport should also introduce mobility standards that depend on the intersection control which can better capture acceptable levels of performance across different intersection control types. Table 11, below, summarizes recommended mobility targets.

TABLE 11: RECOMMENDED VEHICLE MOBILITY STANDARDS FOR LOCAL STREETS		
INTERSECTION TYPE	PROPOSED MOBILITY STANDARD	REPORTING MEASURE
SIGNALIZED	LOS D and v/c ≤0.90	Intersection
ALL-WAY STOP OR ROUNDABOUTS	LOS D and v/c ≤0.90	Worst Approach
TWO-WAY STOP ¹	LOS E and v/c ≤0.95	Worst Major Approach/Worst Minor Approach

NOTES:

- 1. APPLIES TO APPROACHES THAT SERVE MORE THAN 20 VEHICLES; THERE IS NO STANDARD FOR APPROACHES SERVING LOWER VOLUMES.**

For State facilities, mobility targets are v/c ratio based and listed in the OHP. Alternative mobility targets have previously been adopted on US 101 in South Beach. Table 12 lists the existing mobility targets for state facilities in Newport. Note that the need for alternative mobility targets will be evaluated and discussed in Technical Memorandum #11: Alternative Mobility Targets.

TABLE 12: EXISTING MOBILITY TARGETS FOR US 20 AND US 101

ROADWAY	EXTENTS	ADOPTED V/C MOBILITY TARGET	
		SIGNALIZED	UNSIGNALIZED ¹
US 101	North Urban Growth Boundary to NE 20 th Street	≤ 0.80	≤ 0.80/0.90
US 101	NE 20 th Street to SE 40 th Street ²	≤ 0.90 except US 101/SE 32 nd St: ≤0.99 US 101/SE 35 th St: ≤0.99	≤ 0.90/0.95
US 101	SE 40 th Street to south Urban Growth Boundary ²	≤ 0.80 except US 101/SE 40 th St: ≤0.99 US 101/SE 50 th St: ≤0.85 US 101/South Beach State Park Entrance: ≤0.85	≤ 0.80/0.90
US 20	Urban Growth Boundary to Moore Drive	≤ 0.80	≤ 0.80/0.90
US 20	Moore Drive to US 101	≤ 0.85	≤ 0.85/0.95

NOTES:

- 1. FOR UNSIGNALIZED INTERSECTIONS, THE MOBILITY TARGET IS LISTED FOR MAJOR APPROACH/MINOR APPROACH.**
- 2. ALTERNATIVE MOBILITY TARGETS HAVE BEEN ADOPTED IN SOUTH BEACH.**

^A For unsignalized intersections, the mobility target is listed for major approach/minor approach.

^B Alternative mobility targets have been adopted in South Beach.

LIFELINE ROUTES

Newport’s location on the Oregon Coast makes it vulnerable to both earthquakes and tsunamis. Statewide planning efforts have previously identified seismic lifeline routes and tsunami evacuation routes within Newport. No additional emergency routes are recommended in the 2021 TSP.

The Oregon Seismic Lifeline Routes are a set of streets designated to facilitate emergency response and rapid economic recovery following a disaster. These routes include three tiers of streets, and

higher tier routes are prioritized for seismic retrofits on the existing state-owned facilities.¹⁰ Within Newport, US 101 (north of US 20) is a designated Tier 1 lifeline route. Both US 101 (south of US 20) and US 20 are designated Tier 3 lifeline routes.¹¹ These routes are identified below in Figure 13.

While much of Newport is outside of the tsunami hazard area, the beach front, creek drainages, and the south beach area will need to evacuate in the event of a tsunami. The tsunami hazard areas and identified evacuation assembly areas are also identified below in Figure 13. Specific evacuation routes for each low-lying area are also available online.¹²

Ensuring the lifeline and evacuation routes serve their intended purpose both during and following a disaster will be critical to ensure public safety and facilitate recovery. Transportation projects which promote seismic resilience on lifeline routes, pedestrian or bicycle facilities on evacuation routes, or other wayfinding projects should be prioritized in the 2021 TSP.

¹⁰ CH2MHill. *Seismic Lifelines Evaluation, Vulnerability Synthesis, and Identification*, 2012. <https://www.oregon.gov/ODOT/Planning/Documents/Seismic-Lifelines-Evaluation-Vulnerability-Synthese-Identification.pdf>

¹¹ Figure 6-1. *Seismic Lifelines Evaluation, Vulnerability Synthesis, and Identification*, 2012. <https://www.oregon.gov/ODOT/Planning/Documents/Seismic-Lifelines-Evaluation-Vulnerability-Synthese-Identification.pdf>

¹² *Detailed, Neighborhood-Specific Tsunami Evacuation Routes*. https://www.oregongeology.org/tsuclearinghouse/pubs-evacbro_neighborhoods.htm

FIGURE 13A: LIFELINE ROUTES – AGATE BEACH

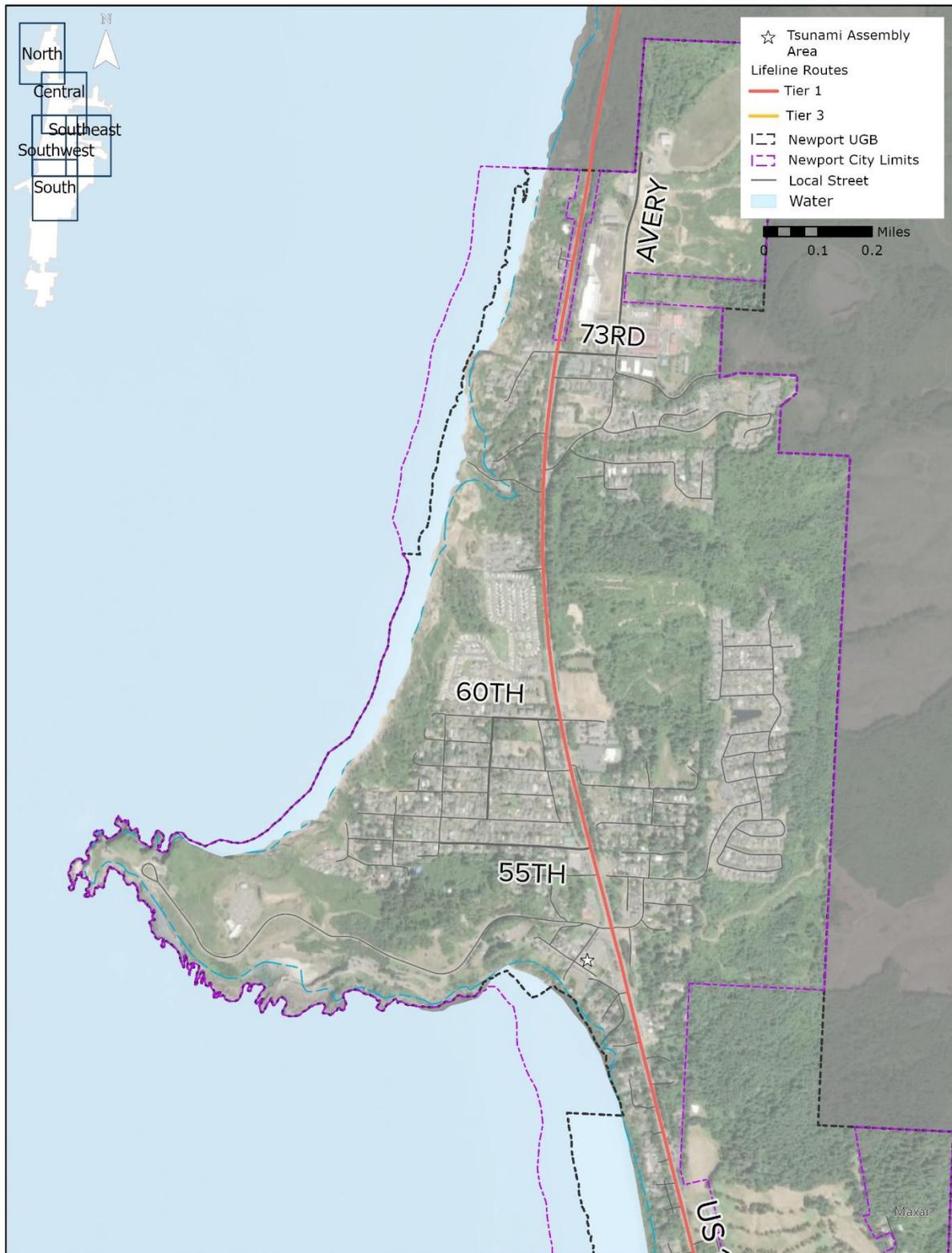


FIGURE 13B: LIFELINE ROUTES - NYE BEACH

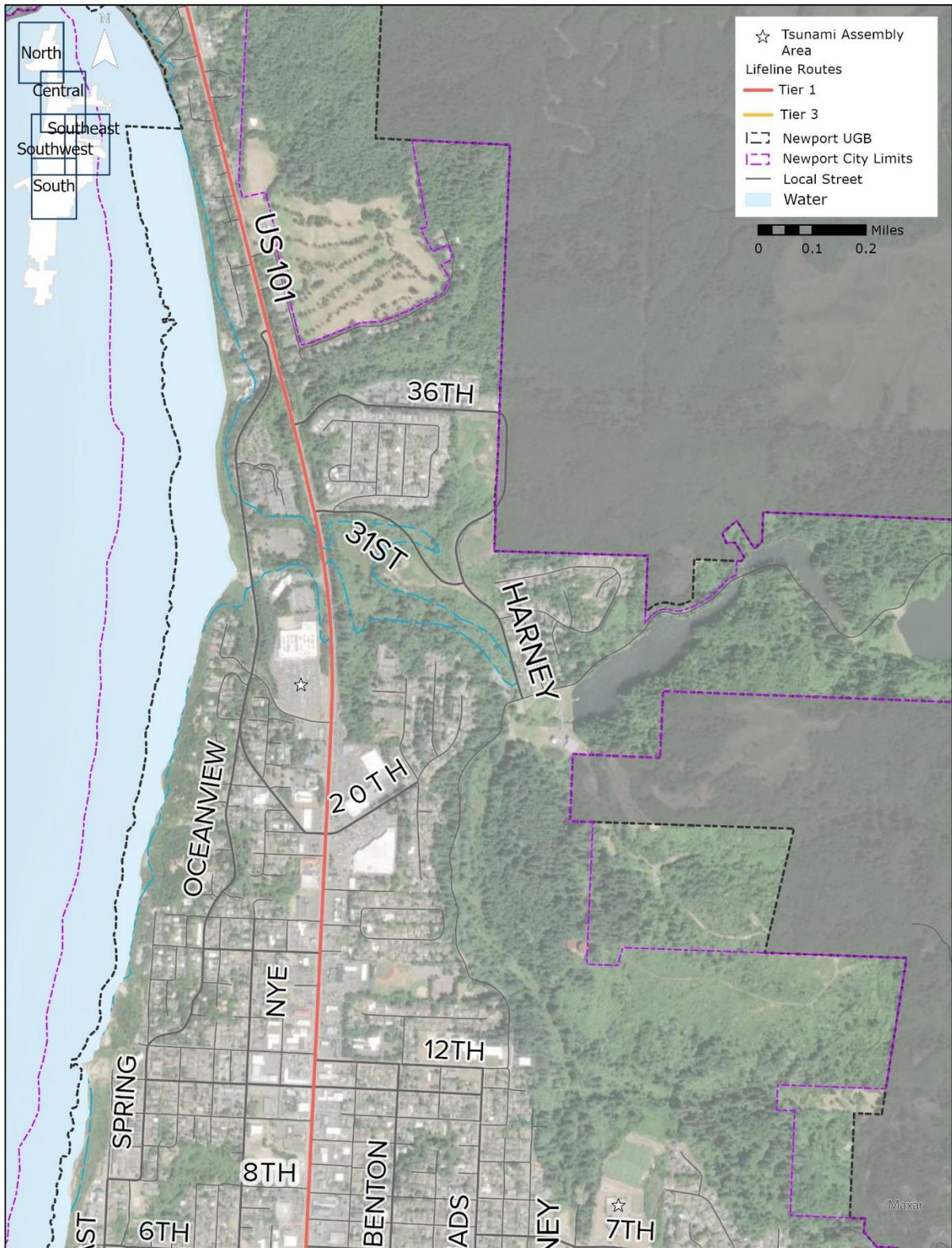


FIGURE 13C: LIFELINE ROUTES - DOWNTOWN



FIGURE 13D: LIFELINE ROUTES – EAST NEWPORT

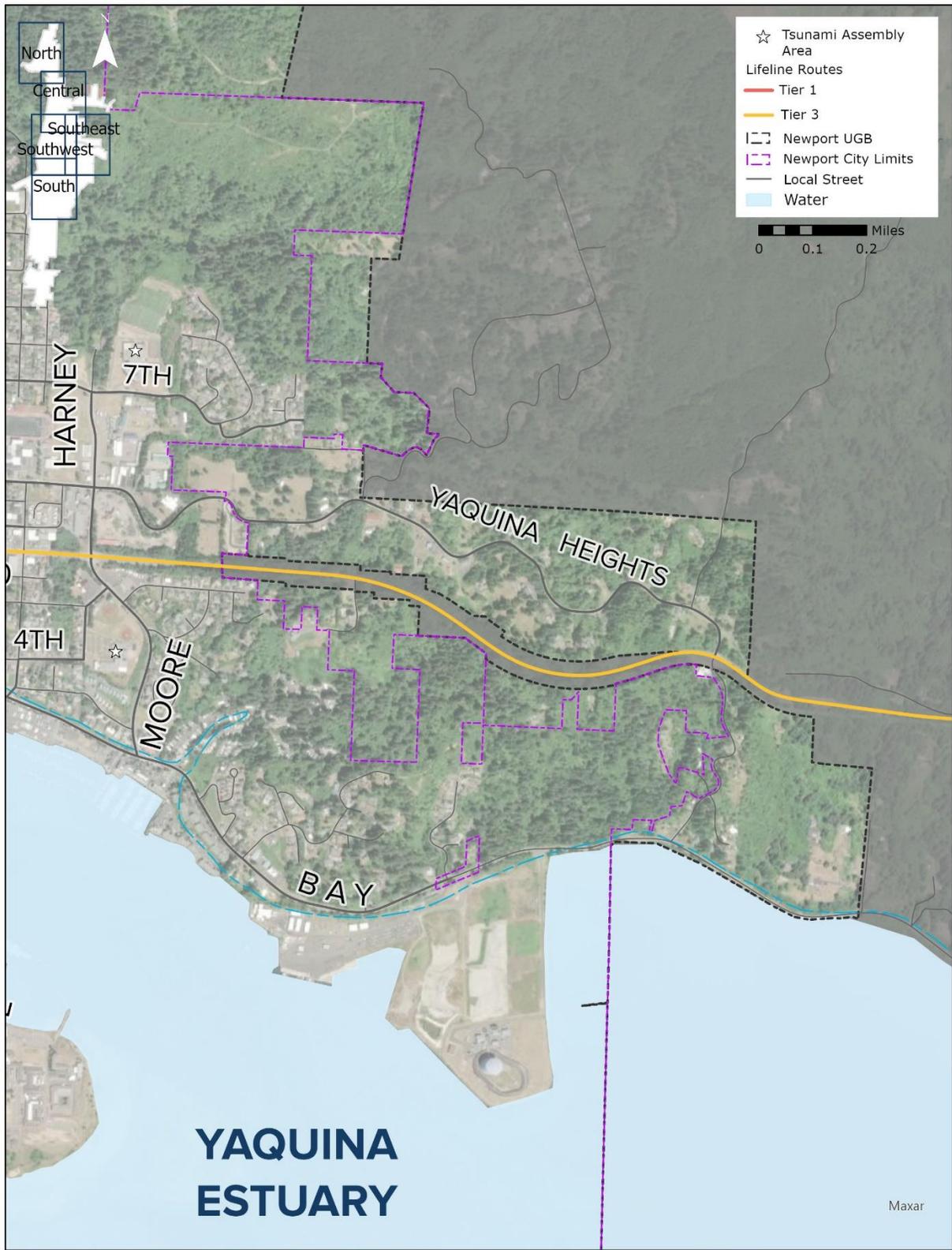
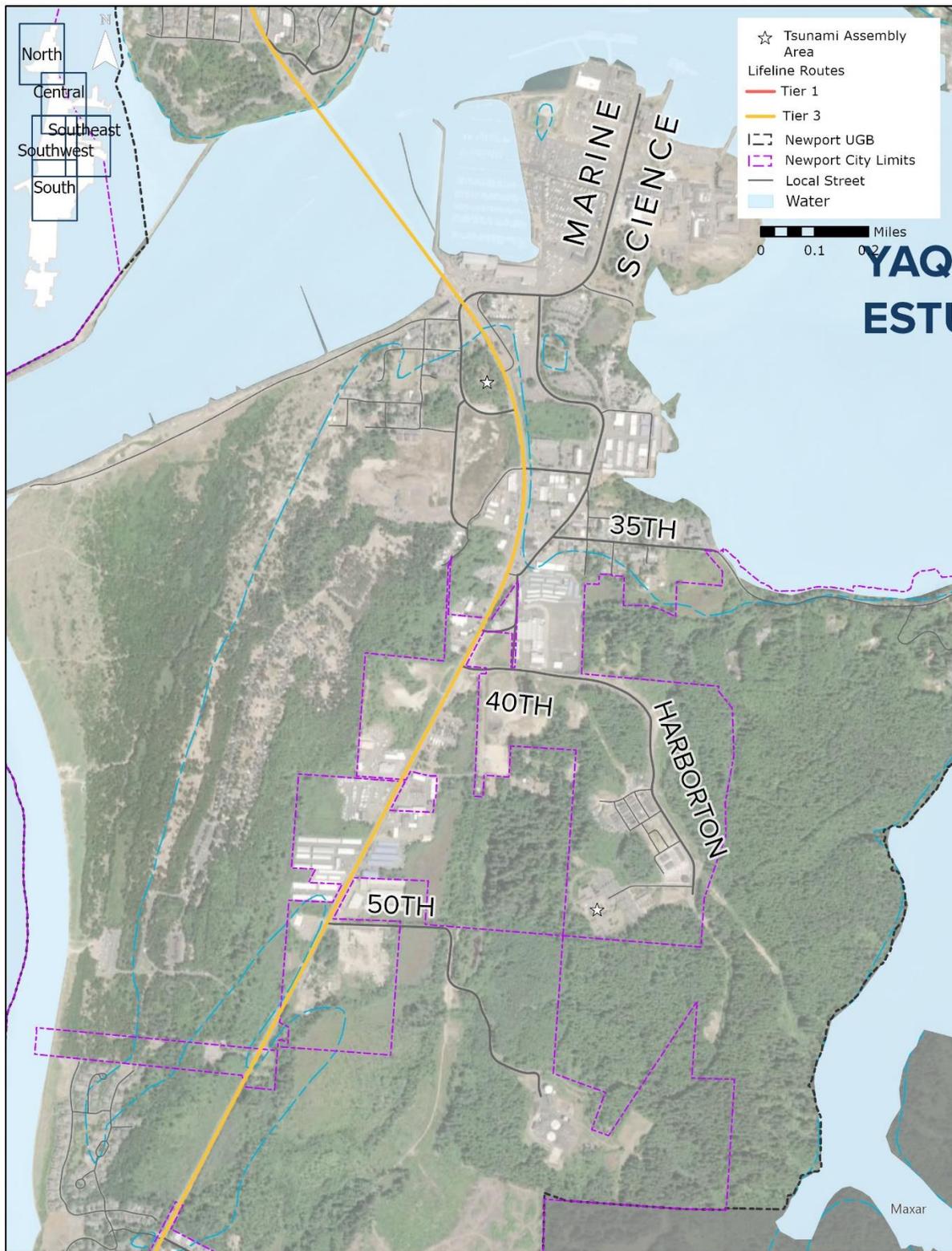


FIGURE 13E: LIFELINE ROUTES – SOUTH BEACH



STREET STORMWATER DRAINAGE MANAGEMENT

The City of Newport Municipal Code states that drainage facilities should be designed to consider the capacity and grade necessary to maintain unrestricted flow from areas draining from a new land division and to allow extension of the system to serve such areas.

Newport has neighborhoods with significant stormwater constraints, including Agate Beach, where landslide hazards and coastal erosion are common on the western edge of the neighborhood. As transportation improvements are constructed in Agate Beach, stormwater management will be critical to ensure that runoff from roadway improvements do not contribute to these existing hazards which could result in significant property damage. Potential management strategies could include requiring permeable pavement or bioswales which would hold stormwater prior to infiltration. These solutions could mitigate runoff which could impact the coastal bluffs in this neighborhood.

In addition to the coastal hazards, previous grading practices within the Agate Beach neighborhood could lead to excessive settlement for roadways and pathways due to the nature of the underlying soil. These settlement considerations could require flexible pavement or unimproved roadway/natural surface pathway standards which are more resilient to ground settlement.

Prior to construction of any transportation improvements within the Agate Beach neighborhood, a geotechnical and stormwater investigation will need to be completed to further detail any potential challenges or stormwater concerns for this area. A summary of the specific hazards facing Agate Beach is provided in the appendix.

[PLACE HOLDER FOR ADDITIONAL TEXT FROM THE CIVIL ENGINEERING SUB CONSULTANT]

ITS COORDINATION GUIDELINES

WHY ITS?

Intelligent Transportation Systems (ITS) involve the application of advanced technologies and proven management techniques to relieve congestion, enhance safety, provide services to travelers, and assist transportation system operators in implementing suitable traffic management strategies. ITS focuses on increasing the efficiency of the existing transportation infrastructure, which enhances the overall system performance and reduces the need to add capacity (e.g., travel lanes). Efficiency is achieved by providing services and information to travelers so that they can make better travel decisions and to transportation system operators so they can better manage the system. Quantifiable benefits from ITS include:

- Reduced vehicle delays
- Reduced crashes
- Improved air quality
- Reduced fuel consumption
- Improved travel times

This technology is supported by communications systems, which include wireless radio Bluetooth and Wi-Fi, microwave systems, and fiber optics. ITS and the supporting communication systems allow agencies to monitor and manage the transportation system remotely.



WHEN TO CONSIDER INTELLIGENT TRANSPORTATION SYSTEMS?

ITS solutions should be considered for a variety of reasons, but often depend on the context of a specific problem. The following list of situations are times to consider implementing ITS:

- To maximize the use of existing infrastructure and improve the efficient movement of vehicles before building more lanes
- To mitigate the impact of work zones, seasonal congestion, high crash locations, or adverse weather conditions
- To increase traveler information for road users to make informed decisions about their travel options including mode choice, travel time, and/or travel routing
- To increase the ability for agencies to monitor traffic conditions and make data-driven decisions remotely

General ITS strategies are summarized below in Table 13 while individual ITS components are summarized in Table 14.

TABLE 13: GENERAL ITS STRATEGIES

CATEGORY	TOOL	POTENTIAL APPLICATIONS TO CONSIDER FOR NEWPORT
REGIONAL TRANSPORTATION MANAGEMENT	<ul style="list-style-type: none"> • Traffic Surveillance • Regional Traffic Management • Transportation Demand Management <ul style="list-style-type: none"> • Roadside Lighting • Railroad Grade Crossings 	<ul style="list-style-type: none"> • Monitor traffic on US 101 and US 20 to respond to incidents
ARTERIAL MANAGEMENT	<ul style="list-style-type: none"> • Enhanced Traffic Signal Operations • Pedestrian and Bicycle Operations and Safety 	<ul style="list-style-type: none"> • Implement enhanced signal operations to facilitate travel on US 101 during peak summer travel
INCIDENT AND EMERGENCY MANAGEMENT	<ul style="list-style-type: none"> • Regional Incident and Emergency Management • Emergency Vehicle Routing and Signal Preemption <ul style="list-style-type: none"> • Regional Alert System 	<ul style="list-style-type: none"> • Implement signal preemption to facilitate travel to and from the hospital
TRAVELER INFORMATION	<ul style="list-style-type: none"> • Roadside Traveler Information Dissemination • Regional Traveler Information <ul style="list-style-type: none"> • Trip Planning and Routing • Parking Availability Information and Guidance 	<ul style="list-style-type: none"> • Monitor and notify public of parking availability
REGIONAL OPERATIONS COORDINATION AND PLANNING	<ul style="list-style-type: none"> • Multi-Agency Operations Coordination and Planning 	<ul style="list-style-type: none"> • Coordinate with ODOT for Yaquina Bay Bridge planning • Coordinate with Lincoln County Transit
PUBLIC TRANSPORTATION MANAGEMENT	<ul style="list-style-type: none"> • Advanced Transit Operations Management • Regional Transit Fare Integration • Transit Surveillance and Security • Multi-Modal Travel Coordination • Real-time Transit Information <ul style="list-style-type: none"> • Transit Signal Priority 	<ul style="list-style-type: none"> • Coordinate with coastal transit agencies to support an integrated transit fare for travel on US 101
ROAD WEATHER OPERATIONS	<ul style="list-style-type: none"> • Road Weather Information Systems • Weather-Adaptive Traffic Management <ul style="list-style-type: none"> • Winter Roadway Maintenance 	<ul style="list-style-type: none"> • Distribute information on US 20 conditions for regional travel

TABLE 13: GENERAL ITS STRATEGIES

CATEGORY	TOOL	POTENTIAL APPLICATIONS TO CONSIDER FOR NEWPORT
MAINTENANCE AND CONSTRUCTION	<ul style="list-style-type: none"> Maintenance and Construction Management Work Zone Management 	<ul style="list-style-type: none"> Provide real time work zone management for major projects on US 101 and US 20
REGIONAL DATA ARCHIVING	<ul style="list-style-type: none"> Regional Transportation Data Archive 	<ul style="list-style-type: none"> Establish a local traffic count data archive
REGIONAL COMMUNICATIONS INFRASTRUCTURE MANAGEMENT	<ul style="list-style-type: none"> Communications Infrastructure Coordination 	<ul style="list-style-type: none"> Install communications infrastructure at signals on US 101 and US 20

TABLE 14: EXAMPLES OF ITS ELEMENTS

ITS ELEMENT	DESCRIPTION
TRAFFIC CAMERAS (CCTV)	Closed-circuit television that help agency operators detect and quickly respond to congestion, incidents, and other problems on the road. The camera images can be broadcasted to the public, to the media, and to other emergency responders and public agencies.
ROAD/WEATHER INFORMATION SYSTEMS (RWIS)	<p>RWIS stations are installed along the roadway with instruments and equipment, which provide weather and road surface condition observations. This information is used to help with decisions on maintenance strategies and to provide information to drivers. These stations may measure:</p> <ul style="list-style-type: none"> Air and road surface temperature <ul style="list-style-type: none"> Barometric pressure <ul style="list-style-type: none"> Humidity Wind speed and direction <ul style="list-style-type: none"> Precipitation Visibility Road surface condition (dry, wet, freezing, etc)

ELECTRIC VEHICLES

Electric Vehicles (EVs) have been on the road for decades, but are becoming more economically feasible as the production costs of batteries decline, the potential range increases, and vehicle fuel prices increase. EVs rely on an electric engine to travel, eliminating tailpipe emissions, and can be

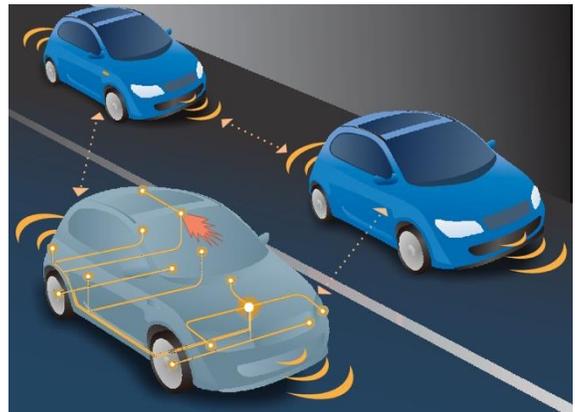
more sustainable depending on the source used to generate electricity. Although increases in vehicle range have increased, EVs still require charging infrastructure for longer-distance trips or for local residents who lack charging infrastructure at their homes.

To accommodate a future where electric vehicles are the majority of the vehicle fleet, additional charging infrastructure will be required. Cities, electric utilities, regions, and states will need to work together to create enough reliable electricity supply to fulfill the increased electrical demand. Oregon HB 2180 allows city planning directors to require EV charging facilities as part of commercial, multifamily residential, or mixed-use buildings with five or more dwelling units¹³. Currently, Newport has also budgeted funds to install EV charging at the Oregon Coast Aquarium, City Hall, and the Earnest Bloch Memorial Wayside.

CONNECTED, AUTONOMOUS, AND SHARED VEHICLES

Emerging transportation technologies will shape streets, communities, and daily lives for generations. Vehicles are becoming more connected, automated, and shared. While the timing of when these advances will occur is uncertain, they will have significant impacts on how a community plans, designs, builds, and uses the transportation system. Below are some important emerging transportation technology terms and definitions that provide the basis for the impacts, policies and action items discussed in the following sections.

- **Connected vehicles (CVs)** will enable communications between vehicles, infrastructure, and other road users. This means that vehicles will be able to assist human drivers and prevent crashes while making the system operate more smoothly.
- **Automated vehicles (AVs)** will, to varying degrees, take over driving functions and allow travelers to focus their attention on other matters. Vehicles with combined automated functions like lane keeping and adaptive cruise control exist today. In the future, more sophisticated sensing and programming technology will allow vehicles to operate with little to no operator oversight.
- **Shared vehicles (SVs)** allow ride-hailing companies to offer customers access to vehicles through cell phone applications. Ride-hailing applications give on-demand transportation with comparable convenience to car ownership without the hassle of maintenance and parking. Examples of shared vehicles include companies like Uber and Lyft.



Many of these technologies will not be exclusive of the others and it is important to think of the host of implications that arise from the combination of them. These vehicles are referred to as

¹³ House Bill 2180. <https://olis.oregonlegislature.gov/liz/2021R1/Downloads/MeasureDocument/HB2180/Enrolled>

connected, automated, and shared (CAS) vehicles. These technologies can also be implemented in coordination with existing EV technology.

IMPACTS OF CAS VEHICLES

CONGESTION AND ROAD CAPACITY

There are several competing forces that will unfold as connected, automated, and shared vehicles are deployed. It is difficult to predict how these vehicles will influence congestion and road capacity.

- AVs will provide a more relaxing or productive ride experience and people may have less resistance to longer commutes.
- Shared AVs are projected to have lower fuel and operating costs, making them less expensive on a per mile basis than private vehicle ownership. This may increase demand for auto-based travel in the future.
- CV technology will allow vehicles to operate safely with closer following distance, less unnecessary braking, and better coordinated traffic control. This will increase road capacity in the long run when CVs and AVs comprise most of the public and private fleet of vehicles.
- In the near term, since AVs make up a fraction of the fleet of vehicles, road capacity could decrease as AVs will operate more slowly and cautiously than regular vehicles.
- A new class of traffic – zero-occupant vehicles – will increase traffic congestion. These could include AVs making deliveries or shared AVs circulating around the city and traveling to their next rider.
- Roadways may need to be redesigned or better maintained to accommodate the needs of automated driving systems. For instance, striping may need to be wider and more consistently maintained to ensure the vehicle’s sensors can recognize it.

These points raise questions about the degree to which CAS vehicles will impact road capacity and congestion. The development and use of the technologies should be monitored closely.

TRANSIT

AVs could become cost competitive with transit and reduce transit ridership as riders prefer a more convenient alternative. However, transit will remain the most efficient way to move high volumes of people through constricted urban environments. AVs will not eliminate congestion and as discussed above, could exacerbate it – especially in the early phases of AV adoption. In addition, shared AVs may not serve all sectors of a community so many will still require access to transit to meet their daily needs.

PARKING

Because AVs will be able to park themselves, travelers will elect to get dropped off at their destination while their vehicle finds parking or its next passenger. Shared AVs will have an even

greater impact on parking because parking next to the destination will no longer be a priority for the traveling public. This means that parking may be over-supplied in some areas and new opportunities to reconfigure land use will emerge. Outstanding questions related to parking include:

- How does vehicle ownership impact parking behavior?
- What portion of the AV fleet will be shared?
- How far out of the downtown area will AVs be able to park while remaining convenient and readily available?

CURB SPACE

In addition to parking impacts, the ability to be dropped off at the destination will create more potential for conflicts in the right-of-way between vehicles that are dropping passengers off or picking them up, vehicles moving through traffic, and vehicles parked on the street. This issue is already occurring in many urban areas with ride-hailing companies, where popular destinations are experiencing significant double-parking issues.

AVs will also be used to deliver packages and food. This may mean that delivery vehicles need to be accommodated in new portions of the right-of-way. For instance, if the AV parks at the curb in a neighborhood and smaller robots are used to deliver packages from door to door, new conflicts will arise between vehicles, pedestrians, robots, and bicyclists.

APPENDIX

CONTENTS

SECTION 1. BLUEPRINT FOR URBAN DESIGN: URBAN CONTEXT DESIGNATIONS

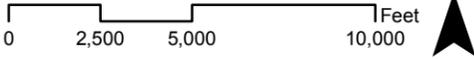
SECTION 2. GEOTECHNICAL GUIDANCE FOR AGATE BEACH

**SECTION 1. BLUEPRINT FOR URBAN DESIGN: URBAN
CONTEXT DESIGNATIONS**

2015 City of Newport Comprehensive Plan Map

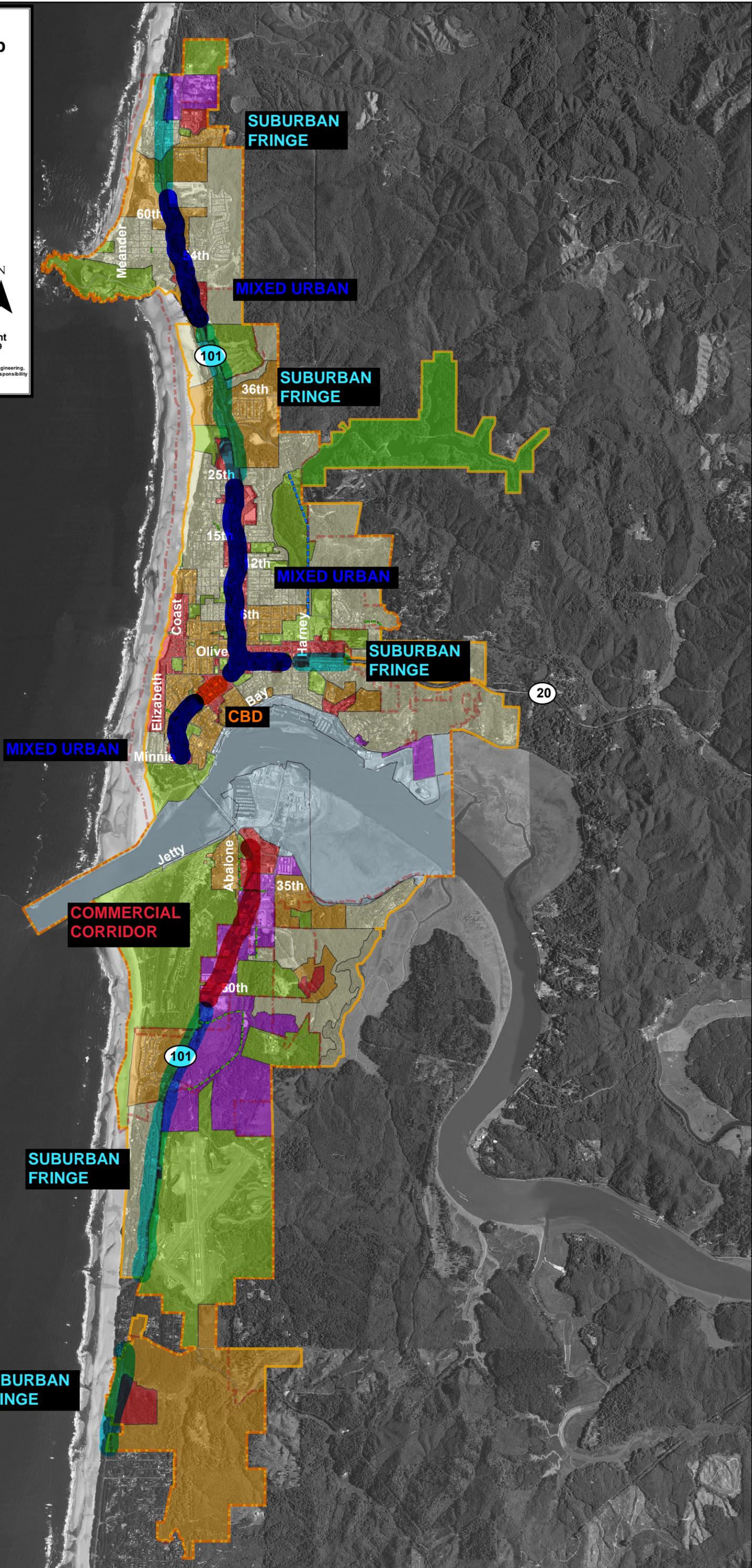
Legend

-  City Limits
-  Urban Growth Boundary
- Comprehensive Plan Designation**
-  Commercial
-  Industrial
-  Public
-  Low Density Residential
-  High Density Residential
-  Shoreland
-  Open Space



NEWPORT City of Newport
Community Development Department
169 SW Coast Highway Phone: 541.574.0629
Newport, OR 97365 Fax: 541.574.0644

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SECTION 2. GEOTECHNICAL GUIDANCE FOR AGATE BEACH

Date: October 11, 2020
To: Carl Springer, P.E., P.T.P.
DKS Associates, Inc.
From: David Running, P.E., G.E.
Subject: Geotechnical Consultation for Agate Beach
Project: Newport Transportation System Plan Update
Project No.: 2191027-103

This memorandum provides a brief summary of the geotechnical challenges and constraints related to siting and developing new transportation improvement projects in Agate Beach.

BACKGROUND

The City of Newport and the Oregon Department of Transportation are currently updating the City's Transportation System Plan (TSP) to enhance safety, improve access and mobility, and address future transportation needs. DKS Associates, Inc. (DKS) is the design lead for the project. DKS retained Foundation Engineering to provide geotechnical consultation. The current work is focused on evaluating transportation improvement options for the Agate Beach neighborhood.

DISCUSSION

The geotechnical challenges in Agate Beach include mapped landslide and coastal erosional hazards that will prohibit development of new transportation projects adjacent to the ocean bluff along the west margin of the neighborhood. Figure 1 (attached) shows the current landslide hazard map for Agate Beach obtained from the DOGAMI SLIDO 4.1 website (DOGAMI, 2020a). Figure 2 (attached) shows the current coastal erosion hazard map for Agate Beach obtained from the DOGAMI HAZVU website (DOGAMI, 2020b). Transportation improvements will need to be setback from existing bluffs or areas of mapped landslide topography and focus on the relatively flat terrain in the neighborhood to the east. The setback from the bluff may be assumed to coincide with the eastern extent of the landslide terrain shown on Figure 1, which also approximately corresponds to eastern boundary of the high coastal erosion hazard area.

The potential presence of undocumented fill in the flat terrain within the Agate Beach neighborhood is another geotechnical consideration. The flat terrain was formerly rolling hills and ravines similar to the terrain in the undeveloped areas to the east of Hwy. 101. The contrast between the developed and undeveloped terrain can be seen in the LiDAR imaging shown on Figure 3 (attached). Like much of the developed coastal areas in and around Newport, the current flat terrain in Agate

Beach is the result of extensive site grading. Much of the historic site grading in the coastal communities was not conducted in accordance with current engineering standards. Poorly-placed fill and buried organics are common in former ravines and low-lying areas. Therefore, even in the current flat terrain, potential geologic hazards may exist that can result in settlement of roadways and pathways. Once preferred alignments for the proposed transportation improvement projects are identified, the subsurface conditions will need to be evaluated and geologic hazards will need to be addressed, where they are encountered.

We trust this information satisfies your current needs. Please feel free to contact us if you have questions or require additional information.

REFERENCES

DOGAMI, 2020a, *SLIDO (Statewide Landslide Information Database for Oregon) Viewer, SLIDO-4.1*: Oregon Department of Geology and Mineral Industries (DOGAMI), website: <https://gis.dogami.oregon.gov/maps/slido/>, accessed October 11, 2020.

DOGAMI, 2020b, *Oregon HazVu: Statewide Geohazards Viewer*: Oregon Department of Geology and Mineral Industries (DOGAMI), website: <https://gis.dogami.oregon.gov/maps/hazvu/>, accessed October 11, 2020.

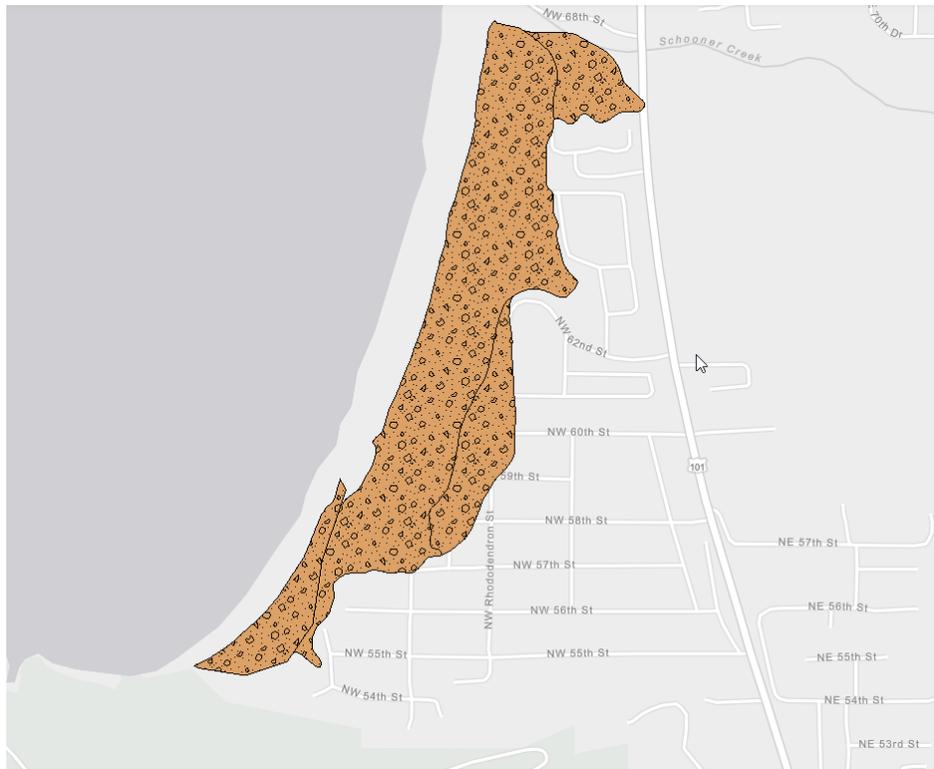


Figure 1. Landslide Hazard Map for Agate Beach (DOGAMI, 2020a).

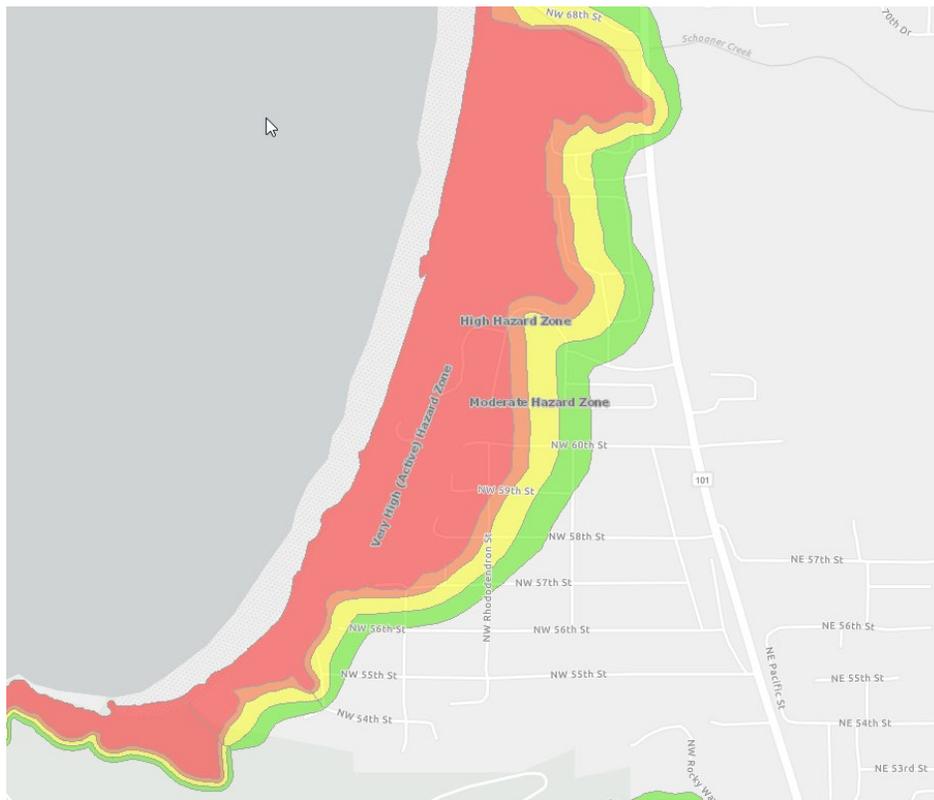


Figure 2. Coastal Erosion Hazard Map for Agate Beach (DOGAMI, 2020b).

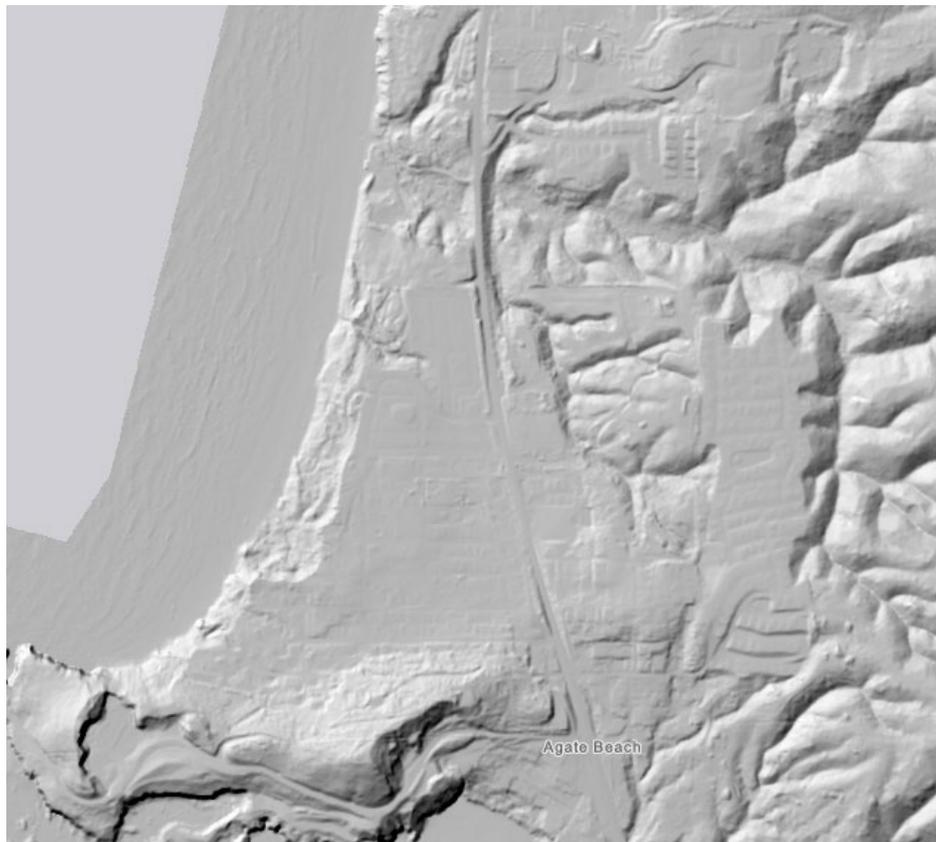


Figure 3. LiDAR Image for Agate Beach (DOGAMI, 2020a).

NEWPORT TSP

OUTREACH / EVENT PLAN

EVENT #2 – SHARE DRAFT SOLUTIONS

Prepared for

City of Newport



Prepared by

JLA Public Involvement, Inc.
921 SW Washington St., Suite 570
Portland, OR 97205

Date

June 30, 2021

This draft documents the high-level outline for the Online Open House and accompanying Virtual Workshop.

OVERVIEW

PURPOSE OF OUTREACH + HOUSEKEEPING ITEMS	
Project Scope/ Description*	<p>The City of Newport and the Oregon Department of Transportation are updating the Transportation System Plan (TSP). The TSP is a long-range plan that will guide future investments in the city's transportation system.</p> <p>The plan will guide how we develop and invest in streets, sidewalks, bike lanes, and transit to meet the current and future needs of Newport and surrounding areas. It helps determine which projects, policies and programs are important to protecting and enhancing the quality of life in the City of Newport.</p> <p>What will the Newport TSP do?</p> <ul style="list-style-type: none"> • Review community, business, visitor and stakeholder input to identify and prioritize future transportation projects and investments. • Provide a strategic investment plan that enhances safety, access and economic opportunities for the community. • Align and implement strategies within the Greater Newport Vision 2040 and Northside Urban Renewal Plan. • Consider issues such as increased traffic volumes on Highway 101 and Highway 20, citywide pedestrian and bicyclist activity, opportunities for enhanced connectivity, funding opportunities, and consideration of updated and flexible street design standards to adapt to unique development conditions in the city. • With community input, identify strategies to improve mobility through the city center, along US 101 and US 20, and throughout Newport, considering bike and pedestrian needs, connectivity, increased traffic volumes, funding opportunities, street design, development conditions, and user preferences.
What is this event/outreach activity?	<p>Online open house – public self-directed experience Virtual work session – Facilitated by JLA and DKS</p>
When and where will the event take place?	<p><i>July 26 to August 23, 2021 (online open house)</i> <i>Thursday, August 5, 2021 from 5:30-7:30 pm (virtual work session)</i></p>
Who is the audience?	<ul style="list-style-type: none"> • Residents: Residents of Newport, key stakeholders interviewed • Government Officials/Stakeholders: County Commissioners, City Officials, • Project Partners: PAC members, Community groups
Goals for this event/outreach activity	<p><i>Include:</i></p> <ul style="list-style-type: none"> • Provide project background information/previous efforts and input collected through stakeholder interviews. • Continue project awareness and community engagement. • Prioritize the community's needs by reviewing the draft solutions and soliciting input on tradeoffs. • Provide an overview of all projects through a fiscally constrained list.

Non-Discrimination Policy Statement	<p><i>The following text should be included in all advertising materials for the event, as well as posted at the event.</i></p> <p><i>Consistent with the policy of the City of Newport is committed to compliance with all state and federal non-discrimination directives, including Title VI of the Civil Rights Act of 1964 and the Americans with Disabilities Act Title II.</i></p>
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Online Open House Outline

Date: Monday, July 26 to Monday, August 23

Goal: Remind people about the project, review the information collected previously, and confirm/understand the public’s preference in the case when tradeoffs need to be made. We will also share draft solutions based on what we heard from the community before. Completing all questions should take 30 minutes or less (1-2 open ended questions). The website will be in English, additional Spanish-language outreach will be done through a mailing.

PAGE	TEASER HEADER	QUESTIONS, COLLECTION TOOL, CONTENT
Landing/Welcome page	<i>Welcome to this project page</i>	<i>None; list of pages, goals of the project/event</i>
What we heard	<i>We’ve heard many comments. Here is a summary of the information.</i>	<i>None; summary of comments collected and how that influenced the draft solutions/designs.</i>
Draft solutions	<i>There are many other solutions that we’ve developed based on community feedback.</i>	<i>Likely none, possibly an open-ended question.</i>
Community Input	<i>Some of what we heard was conflicting, so we need additional community input.</i>	<p><i>Graphics explaining areas</i></p> <p><i>Input on priorities/values</i></p> <p><i>Input on tradeoffs/elements</i></p> <p><i>[Ex. Do you have small concerns, med, or large concerns about this solution? Which solution do you prefer? What elements/values/factors influenced your selection (include “Other”)?)</i></p>
Next steps	<i>Thanks so much for getting involved. We’ll use your input to refine the draft Transportation System Plan.</i>	<p><i>Demographic questions; add to mailing list thank you and share options on social media, email, printed flyer, etc.</i></p> <p><i>Remind people that the draft TSP will be presented to City Council and posted to the website, but we won’t be coming out again for feedback.</i></p> <p><i>One open-ended question “Is there anything else you want to tell us?”</i></p>

Virtual Work Session

Date: Tuesday, August 3, 2021, ZOOM Meeting

Goal: Remind the group of the comments we collected previously; collect more open-ended responses in this format than the online open house and discuss more of the tradeoffs. Ensure that people understand the ideas presented at the Online Open House, but encourage them to respond directly on the OOH. Opportunity to speak with project team members about more specific questions or concerns.



Newport TSP Update

PROJECT ADVISORY COMMITTEE MEETING #5

8 JUL 21

**Roadway Standards &
Updated System Solutions**

Today's Agenda

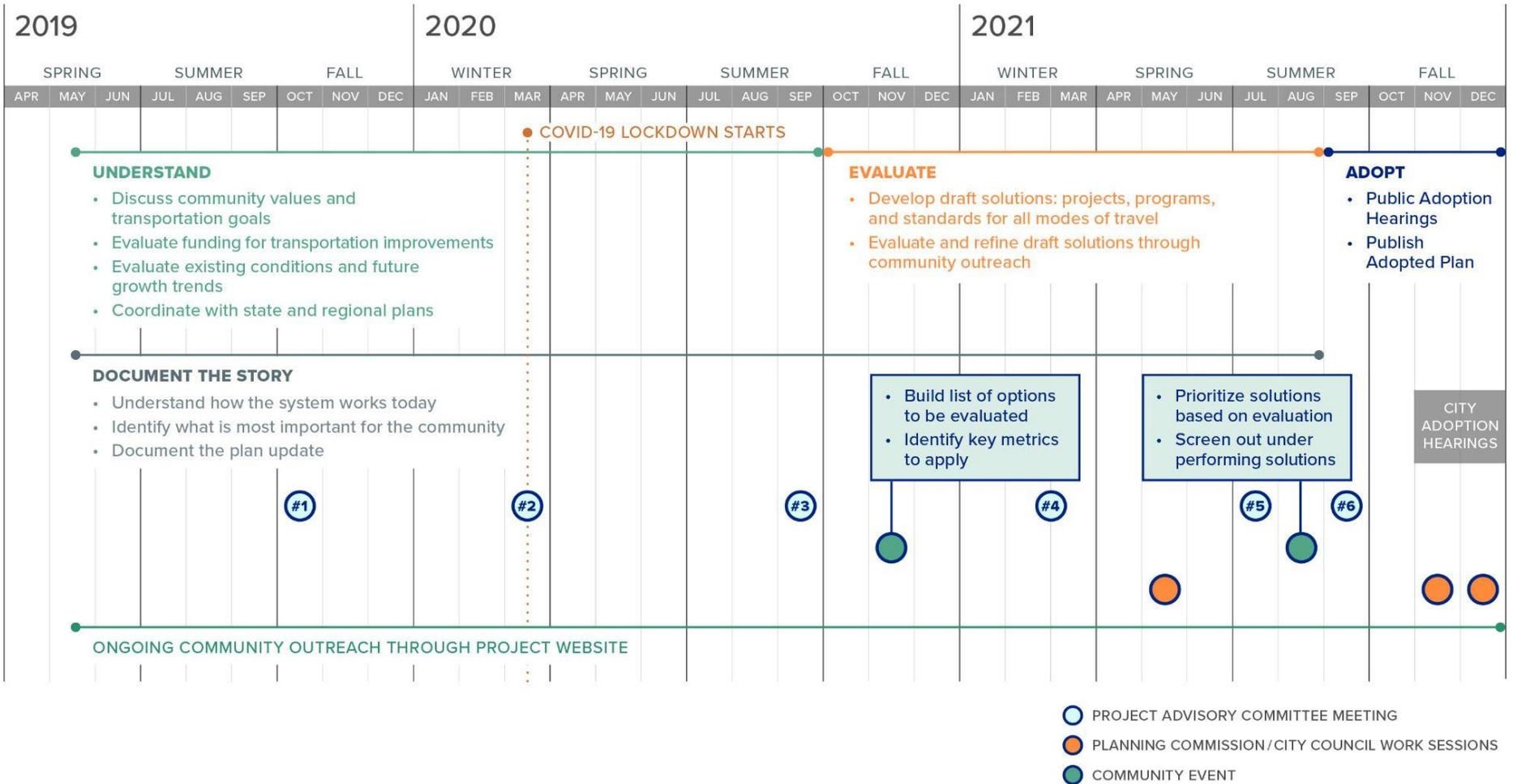
- TSP Decision-Making Process Ahead
- Roadway Standards
- Solutions Update
- Open House Event Outline
- Public Comment



DECISION MAKING PROCESS AHEAD

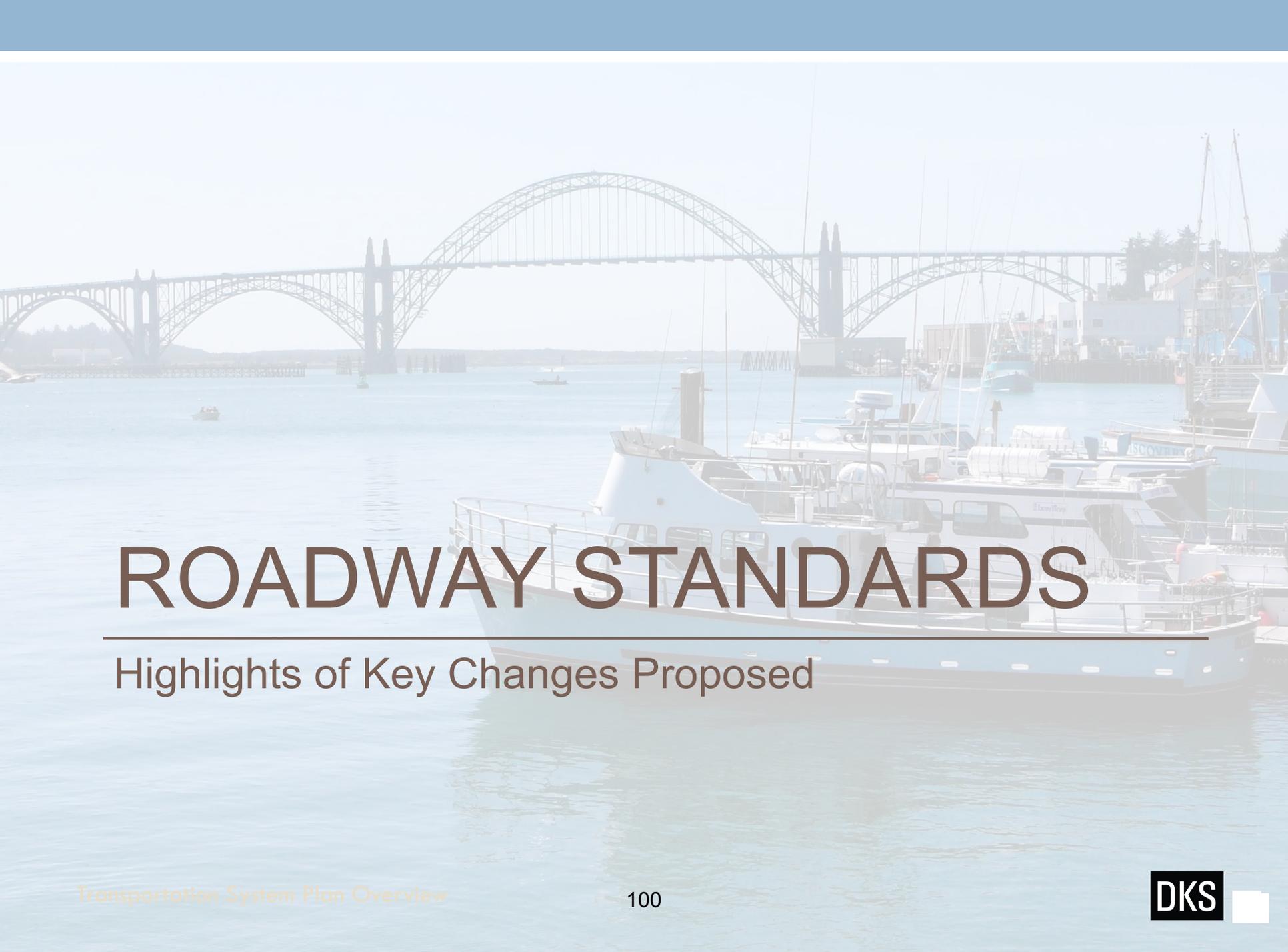
Key Milestones Ahead for the PAC, PC & CC

Project Schedule



Milestones Ahead for TSP Adoption

- **2nd Open House Events**
- **PAC Meeting #6** - Review Draft TSP Document
- **Planning Commission Hearings**
- **City Council Hearings**



ROADWAY STANDARDS

Highlights of Key Changes Proposed

Street Functional Classification of Roadways / 1

CURRENT SYSTEM

- Principal Arterial
- Minor Arterial
- Collector
- Local

NEW SYSTEM

- Arterial
- Major Collector
- Neighborhood Collector
- Local
 - Typical
 - Shared
 - Low Volume

See changes listed in Table 1, Transportation Standards Memo, June 30, 2011, pages 4-12

Street Functional Classification of Roadways / 2

DISTINCTIVE ELEMENTS OF THE NEW SYSTEM

- *State highways are arterials roads* - US 20 & US 101
- *Two tiers of collector streets* - Stratifies the street elements and dimensions for lane widths, on-street parking, bike lanes, sidewalks and NTM applications
- *Shared Street* - Local street with major constraints making them narrower than usual
- *Local Freight Routes* - Designates non-state freight routes where larger design standards are recommended

Neighborhood Traffic Management

Chicanes



[www.pedbikeimages.org/Dan Burden](http://www.pedbikeimages.org/Dan_Burden)

Chokers



[www.pedbikeimages.org/Dan Burden](http://www.pedbikeimages.org/Dan_Burden)

Curb Extensions



[www.pedbikeimages.org/Carl Sundstrom](http://www.pedbikeimages.org/Carl_Sundstrom)

See Table 3,
Application of NTM
Streets by Street
Functional
Classification

Diverter



[www.pedbikeimages.org/Adam Fukushima](http://www.pedbikeimages.org/Adam_Fukushima)

Median Islands



[www.pedbikeimages.org/Dan Burden](http://www.pedbikeimages.org/Dan_Burden)

Raised Crosswalks



[www.pedbikeimages.org/Tom Harned](http://www.pedbikeimages.org/Tom_Harned)

Speed Cushions



NACTO Urban Street Design Guide

Speed Hump



[www.pedbikeimages.org/Dan Burden](http://www.pedbikeimages.org/Dan_Burden)

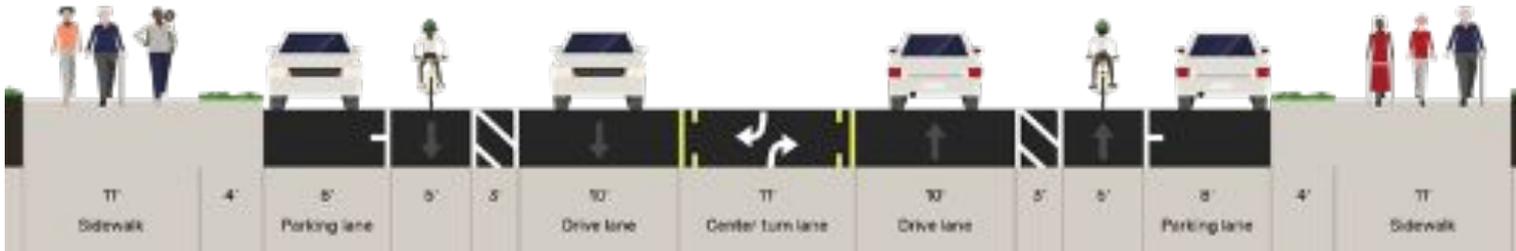
Traffic Circles



[www.pedbikeimages.org/Carl Sundstrom](http://www.pedbikeimages.org/Carl_Sundstrom)

EXAMPLE STREET X-SECTIONS /1

MAJOR COLLECTOR (PREFERRED)



MAJOR COLLECTOR (ACCEPTABLE)



EXAMPLE STREET X-SECTIONS /2

NEIGHBORHOOD COLLECTOR (PREFERRED)

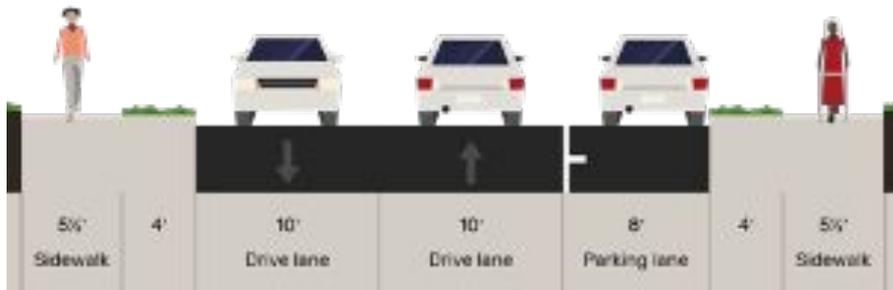


NEIGHBORHOOD COLLECTOR (ACCEPTABLE)



EXAMPLE STREET X-SECTIONS /3

LOCAL STREET - PARKING ONE SIDE (PREFERRED)



SHARED STREET (ACCEPTABLE) -- BELOW 500 ADT



PROPOSED CITY MOBILITY STANDARDS (NEW)

INTERSECTION TYPE	PROPOSED MOBILITY STANDARD	REPORTING MEASURE
SIGNALIZED	Level of Service D and $v/c \leq 0.90$	Intersection
ALL-WAY STOP OR ROUNDBABOUTS	Level of Service D and $v/c \leq 0.90$	Worst Approach
TWO-WAY STOP	Level of Service E and $v/c \leq 0.95$	Worst Major Approach/Worst Minor Approach

NOTES:

TWO-WAY STOP APPLIES ONLY TO APPROACHES THAT SERVE MORE THAN 20 VEHICLES.

OTHER INFORMATION

- **GUIDELINES FOR BLOCK SPACING AND ACCESS MANAGEMENT**
- **ELECTRIC VEHICLE CHARGING STATIONS**
 - HB 2180 mandates that EV charging facilities are included in larger multi-family and commercial new development
 - City plans to install charging stations in major attraction sites, such as the Aquarium



SYSTEM SOLUTIONS

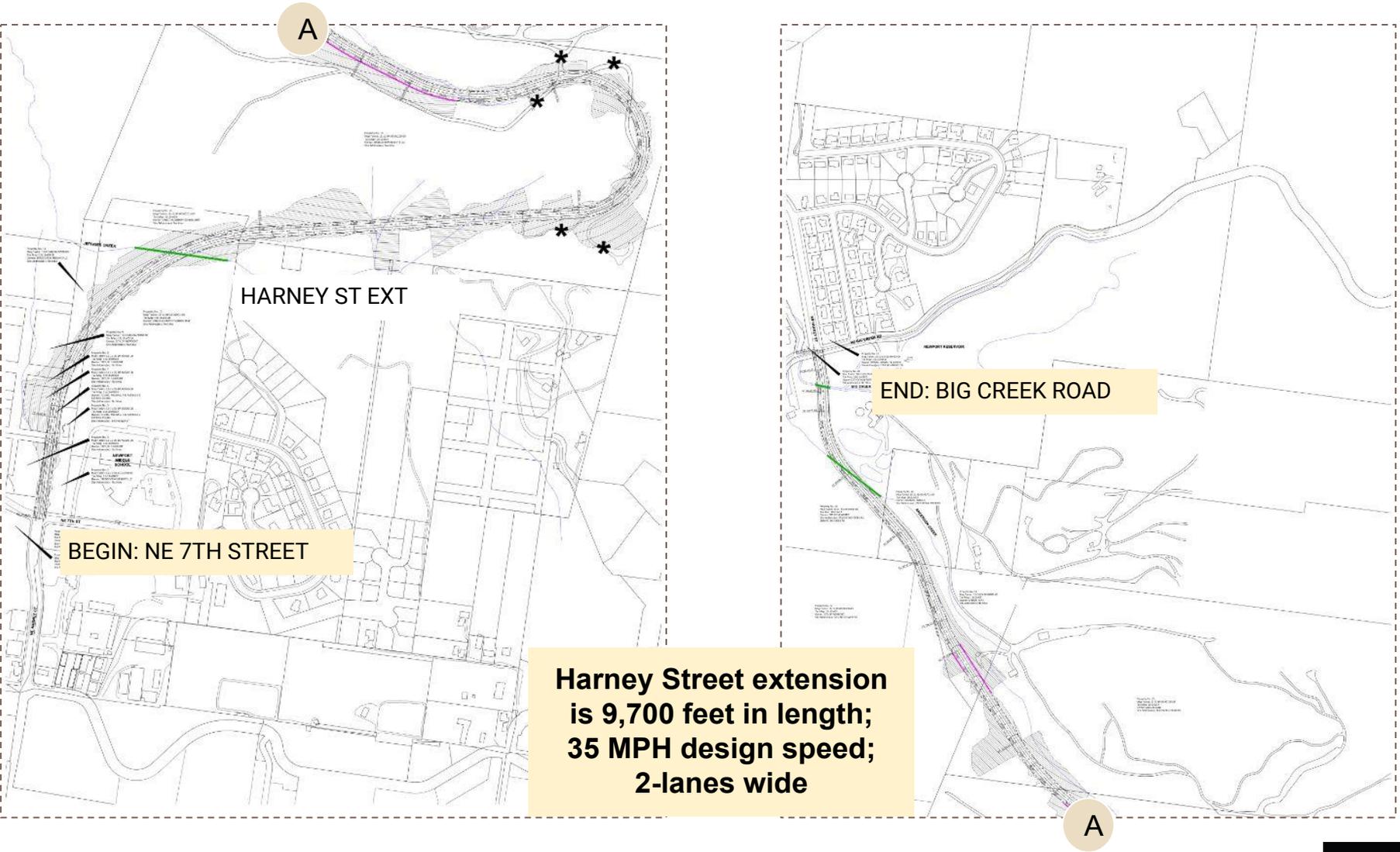
Updates and Recommendations

MAJOR PROJECTS

- HARNEY STREET EXTENSION
- OCEANVIEW CONNECTION TO NYE STREET
- US 101 COUPLET (SHORT OR LONG)
- US 20 COUPLET
- MAJOR INTERSECTIONS

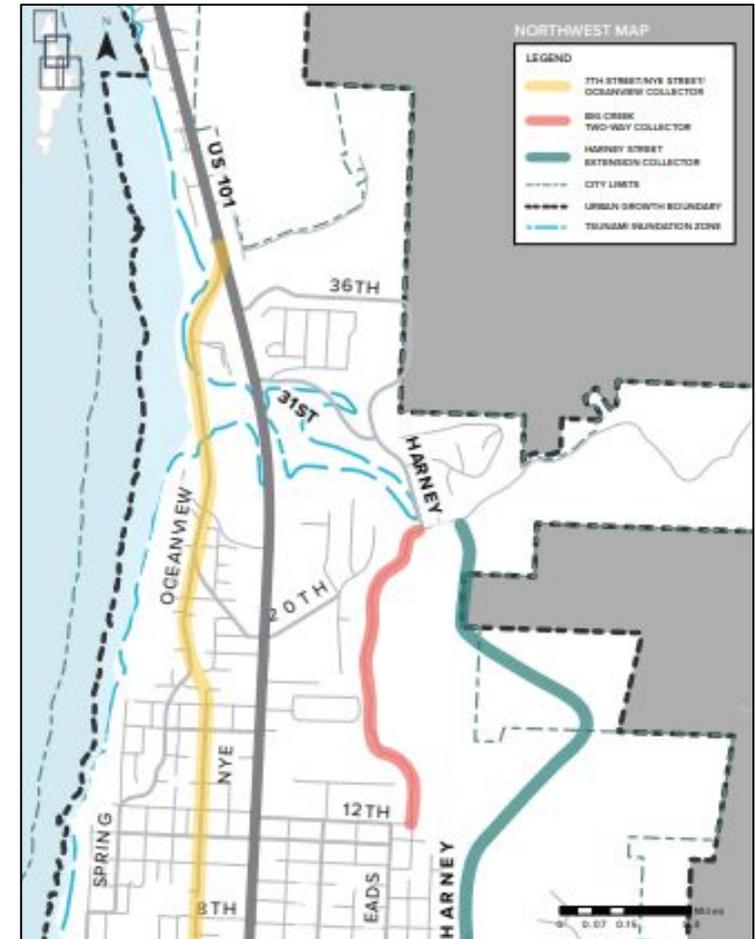
FUNDING AVAILABLE: Roughly \$50M from North Side Urban Renewal District & ODOT Discretionary Sources

#1 Harney Street Extension Alignment



Harney Street Extension Findings

- Largely serves regional traffic
- About 5,000 vehicles per day
- Limited access
- 2-lane collector with limited walking and bicycle facilities
- Would help relieve traffic at US 101 / US 20
- About 2 miles in length
- **Conceptual 10% Design cost estimate: \$55 to \$60M**



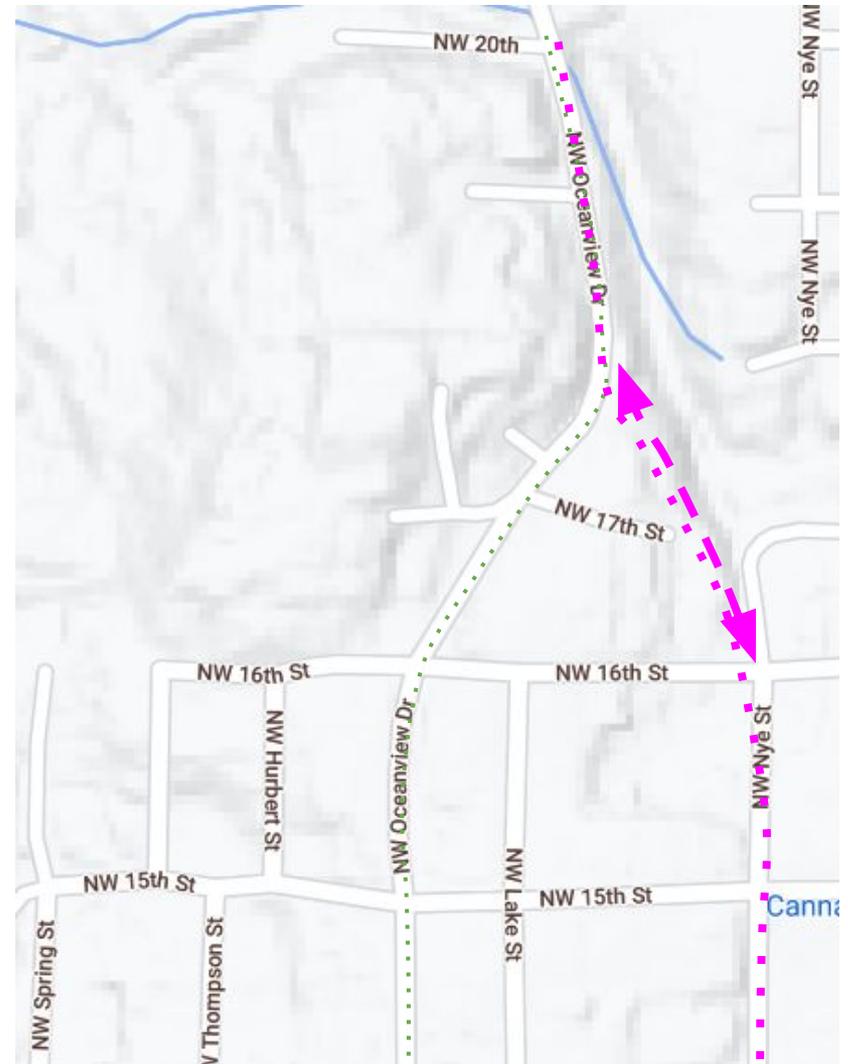
Harney St - 10% Conceptual Design

Major Cost Elements

Description	Total Cost (Millions)
Full roadway construction - two lanes, 24 feet wide edge-to-edge (including earthwork, retaining walls, culverts, storm drains)	\$27.2
Contingency & Incidentals	\$13.5
Professional Services (Design & Construction)	\$11.4
Right-of-Way (60 foot)	\$6.3
Total Project Cost	\$58.4 Million

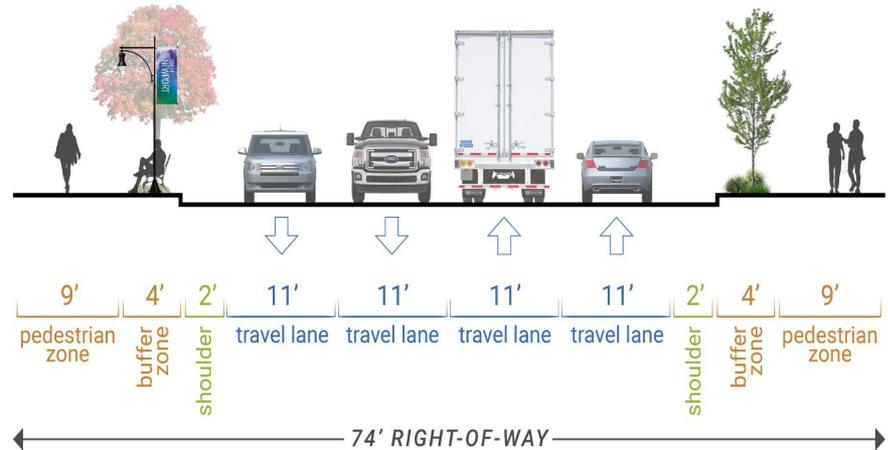
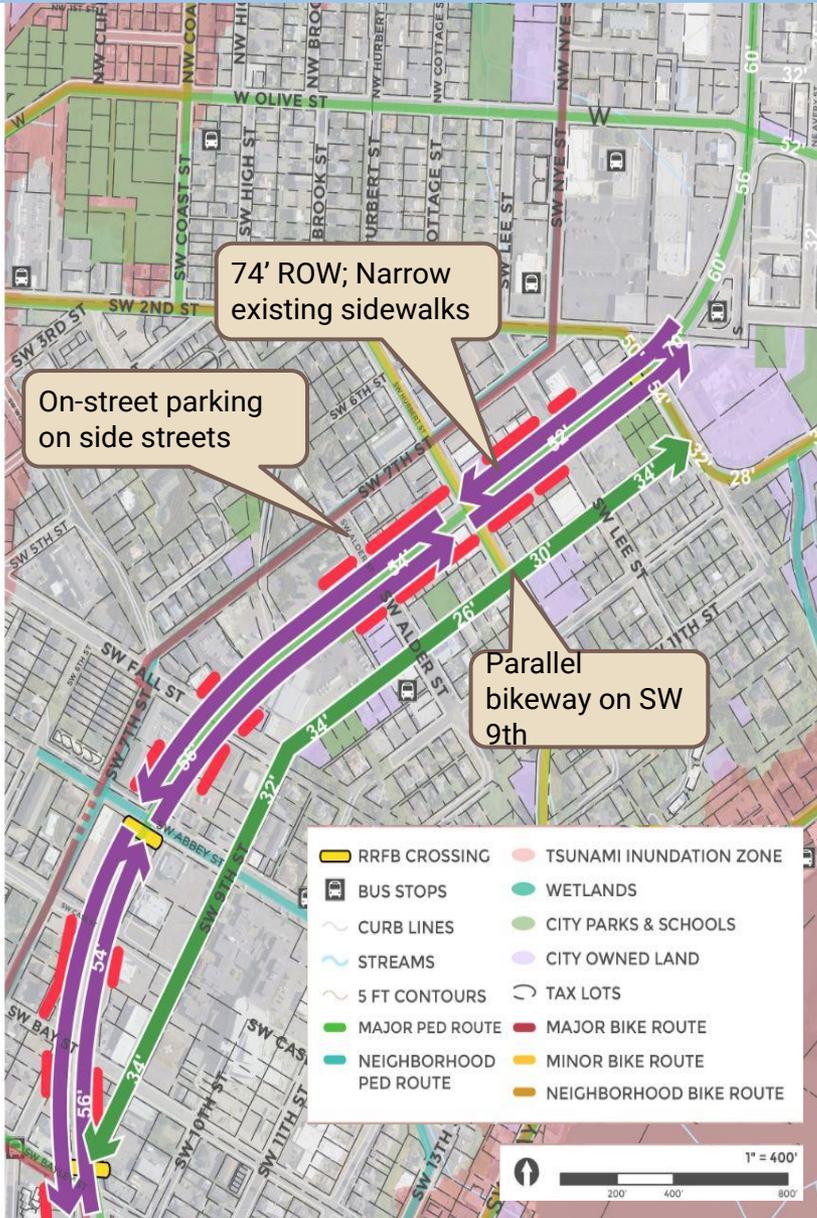
#2 Oceanview / Nye Street Area

- Re-assign bike route onto NW Nye Street at 16th Street
- Nye Street Extension (EXT2)
 - Full street option
 - Ped/bike facility only option
- Possible roundabout at new Nye/Oceanview junction



US 101 Downtown

One-Way Couplets and Two-Way Upgrade
Options



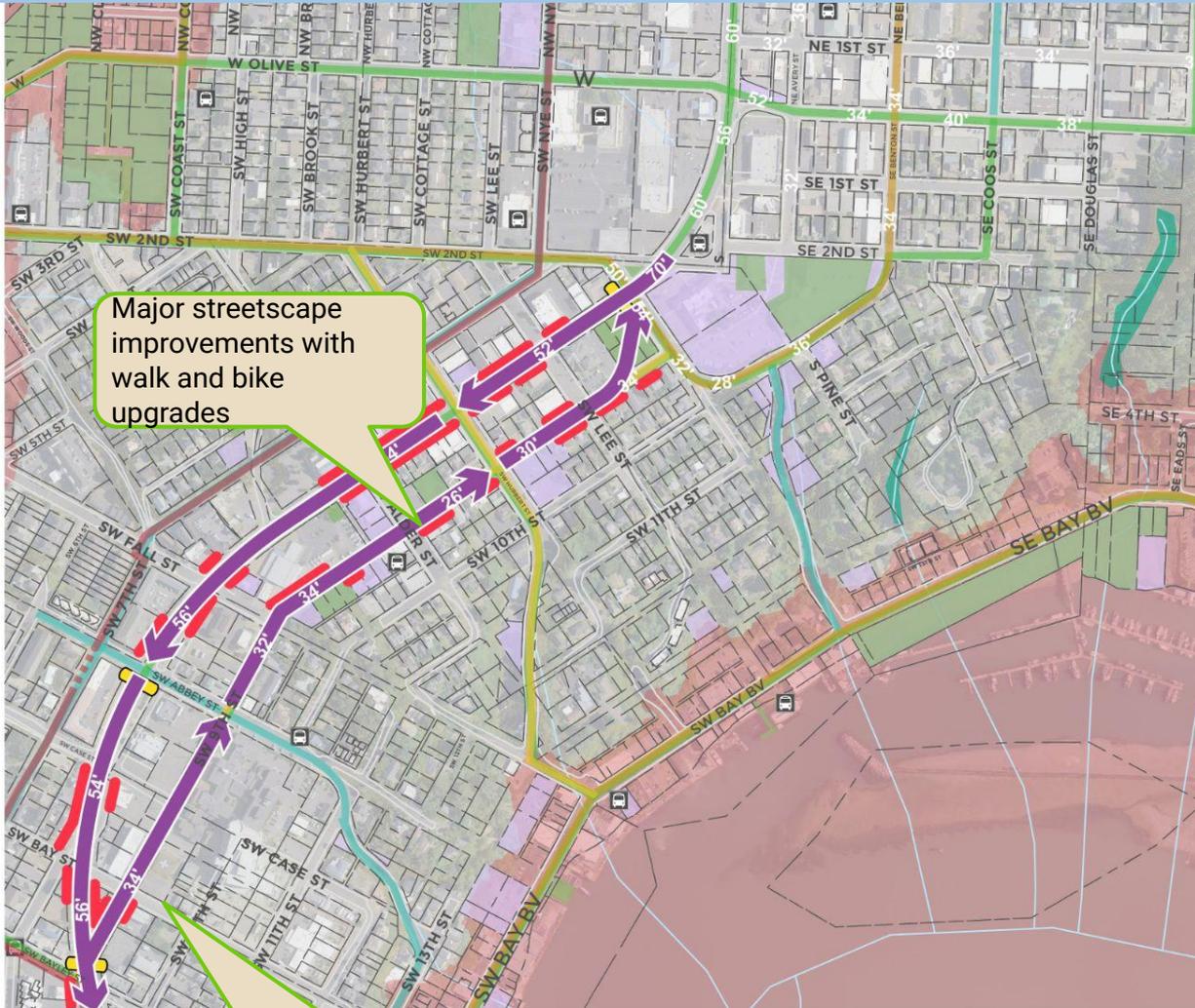
FOUR LANE: WIDER SIDEWALK OPTION

- Update to 11' lanes
- Wider sidewalk area with landscape
- Corridor parking on side streets and lots

SW 9th BIKEWAY

- Option 1: Shared bike and vehicle lanes (2 lanes)
- Option 2: Remove parking, add bike lanes

CONCEPT B. HWY 101 LONG COUPLER \ OVERALL CONCEPT

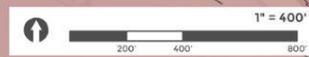


Major streetscape improvements with walk and bike upgrades

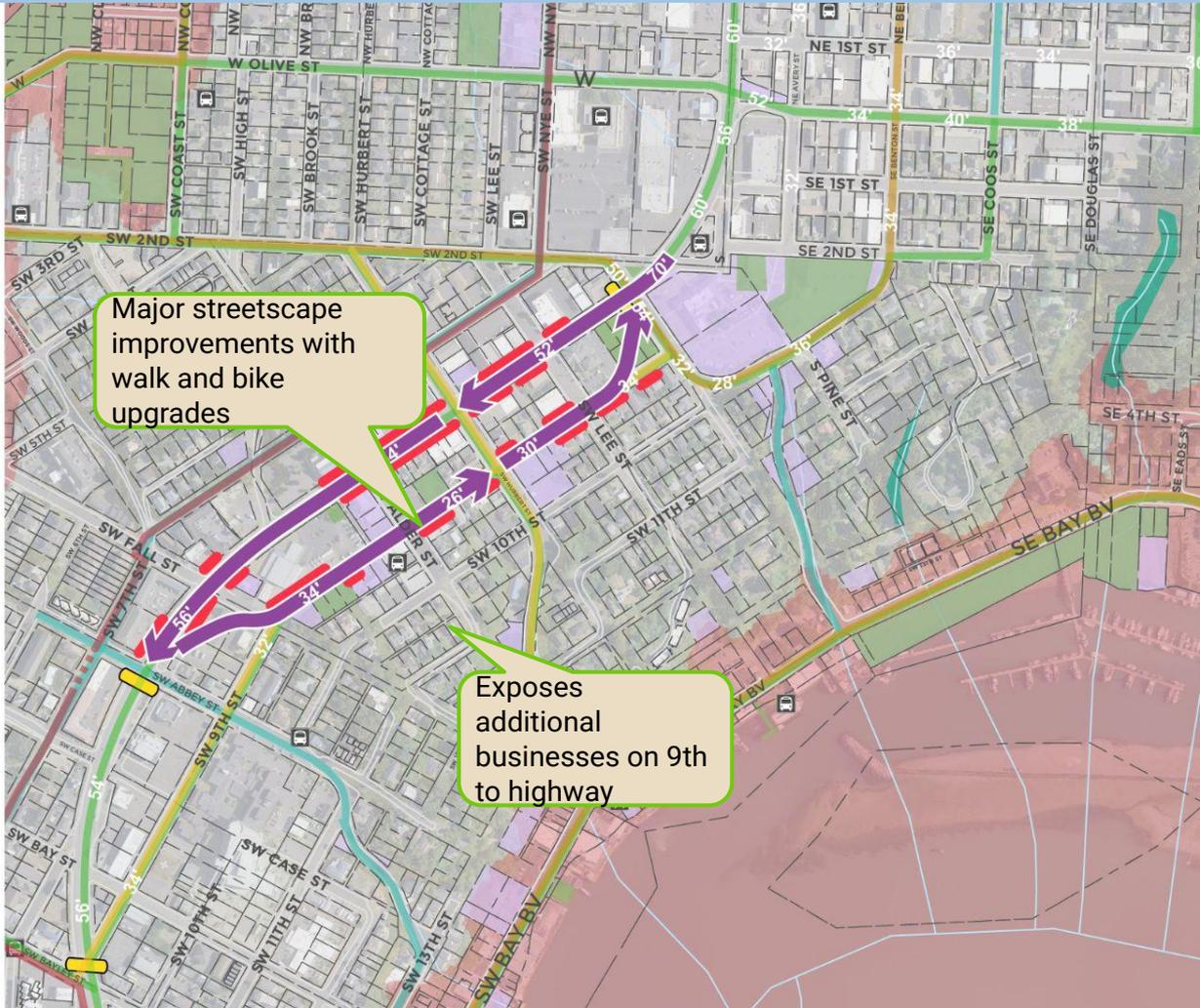
Helps create new access to redevelopment sites in southern Hwy 101 segment

- ### OBJECTIVES
- Traffic improvements through major redesign
 - Seeks to extend area of impact southward to SW Bayley
 - Provide new highway access to many businesses and sites
 - Improve and add walking and biking routes on highway
- ### DESIGN
- Northbound shifts to SW 9th
 - Retains parking, improves sidewalks, add bikeway

	RRFB CROSSING		TSUNAMI INUNDATION ZONE
	BUS STOPS		WETLANDS
	CURB LINES		CITY PARKS & SCHOOLS
	STREAMS		CITY OWNED LAND
	5 FT CONTOURS		TAX LOTS
	MAJOR PED ROUTE		MAJOR BIKE ROUTE
	NEIGHBORHOOD PED ROUTE		MINOR BIKE ROUTE
			NEIGHBORHOOD BIKE ROUTE



CONCEPT C. HWY 101 SHORT COUPLER \ OVERALL CONCEPT



Major streetscape improvements with walk and bike upgrades

Exposes additional businesses on 9th to highway

OBJECTIVES

- Traffic improvements through major redesign
- Concentrate impact in downtown core area (Fall St - Angle St)
- Provide new highway access to core businesses and sites
- Improve and add walking and biking routes on highway

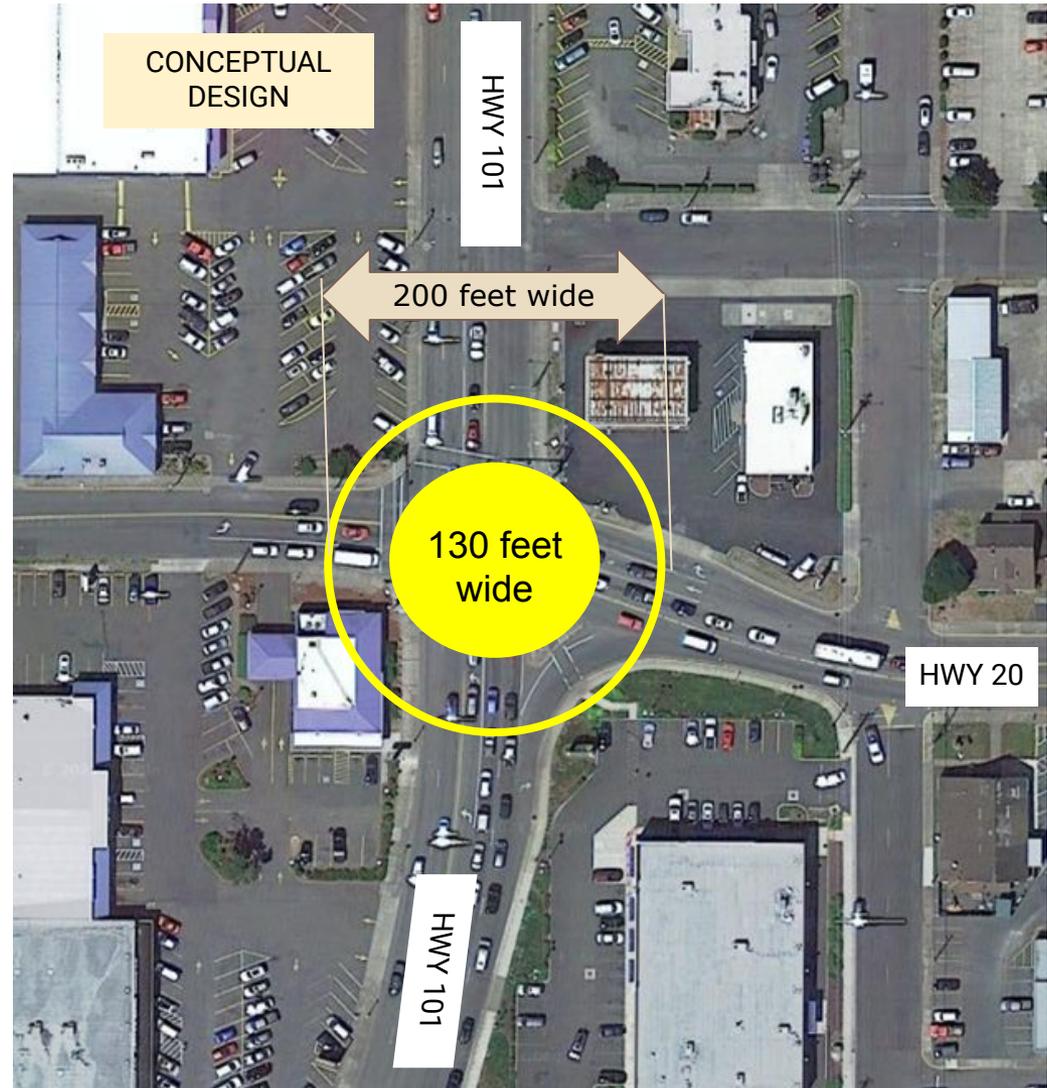
DESIGN

- Northbound shifts to SW 9th
- Retains parking, improves sidewalks, add bikeway

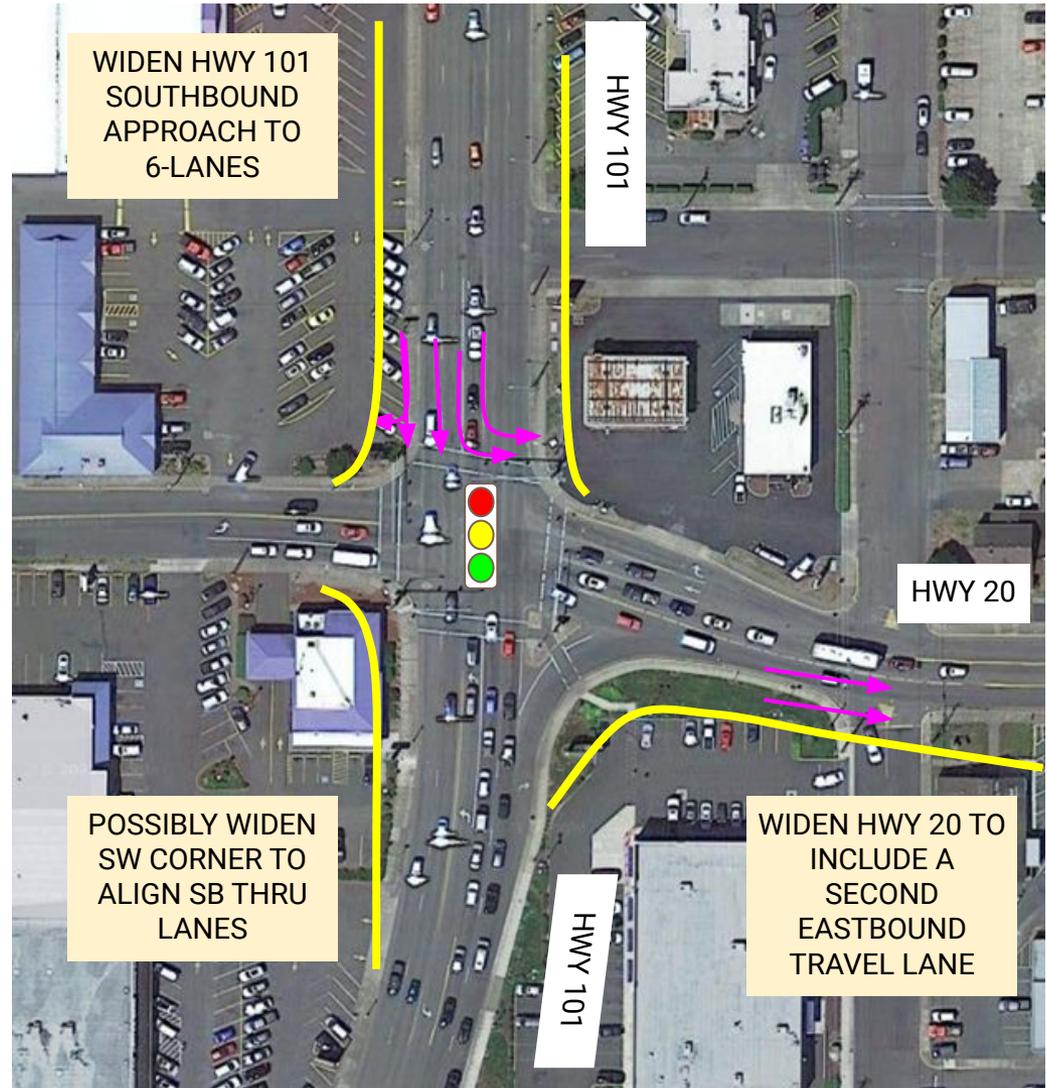
	RRFB CROSSING		TSUNAMI INUNDATION ZONE
	BUS STOPS		WETLANDS
	CURB LINES		CITY PARKS & SCHOOLS
	STREAMS		CITY OWNED LAND
	5 FT CONTOURS		TAX LOTS
	MAJOR PED ROUTE		MAJOR BIKE ROUTE
	NEIGHBORHOOD PED ROUTE		MINOR BIKE ROUTE
			NEIGHBORHOOD BIKE ROUTE

EVALUATION CRITERIA	HWY 101 TWO-WAY	HWY 101 LONG COUPLET	HWY 101 SHORT COUPLET
Promotes mixed-uses and activity centers	<p style="text-align: center;">+ +</p> <p>Improvements focused on 101 existing “main street”; 101/Hurbert as major active corner</p>	<p style="text-align: center;">+ + +</p> <p>Several key gateway, plaza, and site redev. Locations along 101</p>	<p style="text-align: center;">+ + +</p> <p>Concentrates investment in existing most active 101 area</p>
Distributes transportation investment to the widest range of opportunity streets and sites	<p style="text-align: center;">+ +</p> <p>More so with 3-lane and bikeways; Improves 101 and key side streets</p>	<p style="text-align: center;">+ + + +</p> <p>Exposes most blocks and sites to street upgrades and improved business visibility</p>	<p style="text-align: center;">+ + +</p> <p>Better site access, visibility, and circulation improvements in Fall-Angle corridor</p>
Improves overall mobility	<p style="text-align: center;">+ +</p> <p>Basic traffic calming and intersection cleanup; more so with 3-lane on 101</p>	<p style="text-align: center;">+ + +</p> <p>Longest stretch of new traffic pattern, bikeways, sidewalk upgrades, parking</p>	<p style="text-align: center;">+ + +</p> <p>New traffic pattern, bikeways, sidewalk upgrades, parking</p>
Improves walking and biking network	<p style="text-align: center;">+ + +</p> <p>Overall improvements and sidewalk widening; option for bikeways is a plus</p>	<p style="text-align: center;">+ + + +</p> <p>Overall improvements provide benefits; new facilities on longest stretch of highway</p>	<p style="text-align: center;">+ + +</p> <p>Overall improvements provide benefits; new facilities on highways</p>
Increases streetscape improvement opportunities	<p style="text-align: center;">+ +</p> <p>Overall improvements; better with 3-lane option on 101</p>	<p style="text-align: center;">+ + + +</p> <p>Allows most length space for streetscape upgrades</p>	<p style="text-align: center;">+ + +</p> <p>Allows much space to streetscape upgrades</p>
Improves the street grid and urban pattern	<p style="text-align: center;">+</p> <p>Overall circulation improvements; related side-street impacts</p>	<p style="text-align: center;">+ + + +</p> <p>Most extensive upgrades to highway segments and interconnected side streets</p>	<p style="text-align: center;">+ + +</p> <p>Major upgrades to highway segments and interconnected side streets</p>

- Reconstruct as a two-lane roundabout
- All corners would be impacted
- Major change driveway access
- Large size required to serve trucks
- Cost: \$\$\$\$



- Add 2nd Southbound left turn lane
- Requires widening on both sides of Hwy 101 approach (SB) and south side of Hwy 20
- Could impact SW corner to align SB thru traffic
- Cost: \$\$\$



- Close Olive Street leg US 101/US 20
- Restrict turns on other legs leading to EB Olive
- Install a traffic signal at Hwy 101/3rd Street
- Meets ODOT Mobility Target (V/C 0.85)
- Cost: \$\$



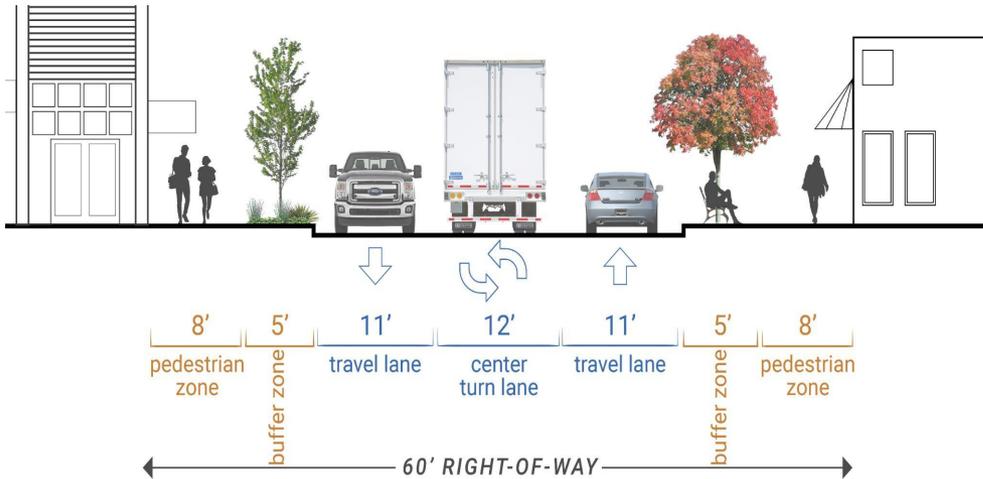
- Modify Hwy 101/Hwy 20 signal to remove eastbound phase
- Install a raised median at Hwy 101/Hwy 20 to restrict eastbound traffic
- Cost: \$



EVALUATION CRITERIA	TWO-LANE ROUNDABOUT	ADD SB LEFT-TURN LANES & EXPAND INTERSECTION	CLOSE ALL VEHICLE ACCESS TO OLIVE STREET	RESTRICT OLIVE STREET TO WESTBOUND TRAFFIC ONLY
Able to Maintain ODOT Mobility Targets	<p style="text-align: center;">++++</p> <p>Improvements would be designed to satisfy mobility requirements</p>	<p style="text-align: center;">++++</p> <p>Improvements would be designed to satisfy mobility requirements</p>	<p style="text-align: center;">+++</p> <p>Requires lower mobility threshold</p>	<p style="text-align: center;">+++</p> <p>Requires lower mobility threshold</p>
Minimizes Impacts to Local Business Access	<p style="text-align: center;">-----</p> <p>Highest impacts to existing driveways and property access</p>	<p style="text-align: center;">---</p> <p>Impacts on at least three approaches</p>	<p style="text-align: center;">++</p> <p>Moderate impacts for existing businesses</p>	<p style="text-align: center;">+++</p> <p>Relatively limited impacts for existing businesses</p>
Minimizes Impacts to Property/Business	<p style="text-align: center;">-----</p> <p>Highest impacts to properties. Gas station in NE quadrant may require closure.</p>	<p style="text-align: center;">---</p> <p>Impacts on at least three approaches</p>	<p style="text-align: center;">++++</p> <p>Minimal impacts to property</p>	<p style="text-align: center;">++++</p> <p>Minimal impacts to property</p>
Order of Magnitude Cost	<p style="text-align: center;">\$\$\$\$</p> <p>Highest investment. Over \$10 million</p>	<p style="text-align: center;">\$\$\$</p> <p>Major investment, \$5 to \$10 million</p>	<p style="text-align: center;">\$</p> <p>Minor investment, under \$1 million</p>	<p style="text-align: center;">\$</p> <p>Minor investment, under \$1 million</p>

US 20 Downtown

One-Way Couplets and Two-Way Upgrade
Options

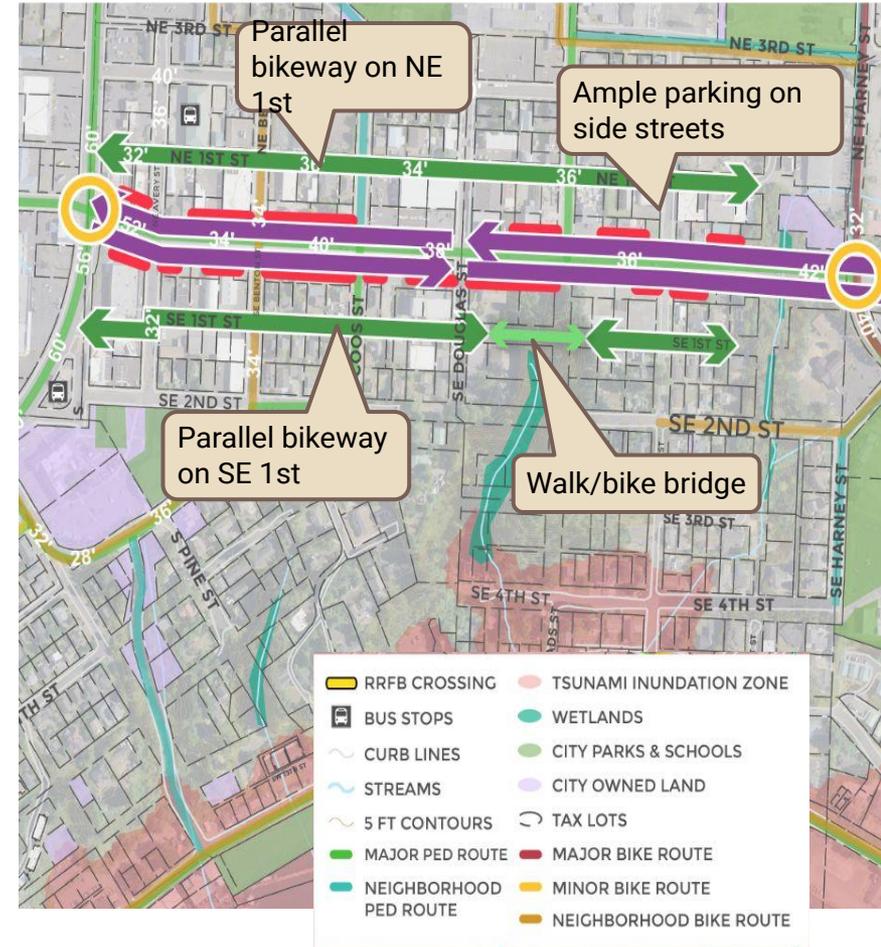


HWY 20 TWO-WAY: WIDER SIDEWALKS

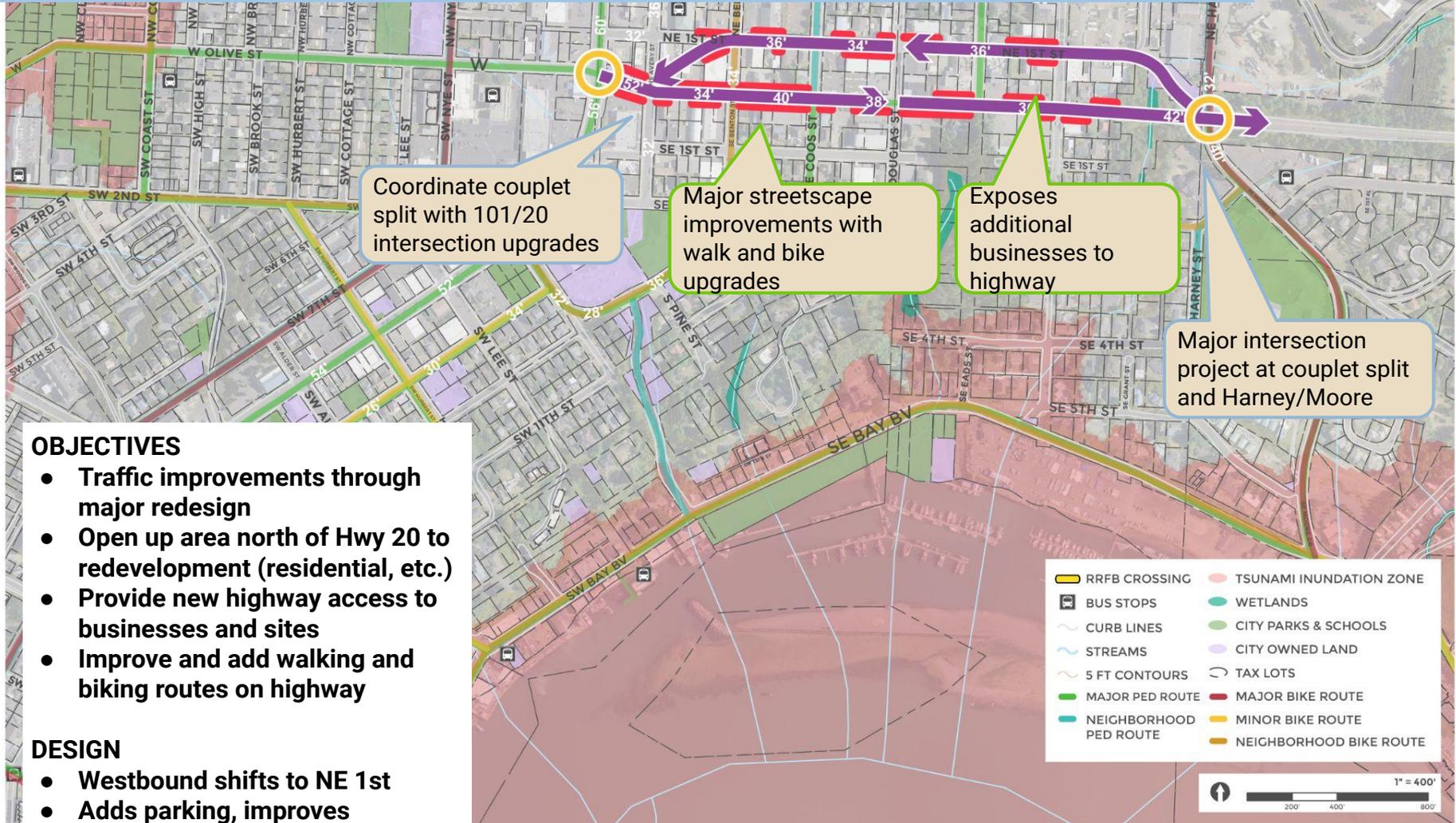
- Reduced lanes width from excessively wide today
- Widens sidewalk and provides landscaping
- Requires parallel route bikeway (potential on NE 1st with bikelanes or shared street)

NE 1st and SE 1st BIKEWAY

- Option 1: Shared bike and vehicle lanes (2 lanes)
- Option 2: Remove parking, add bike lanes

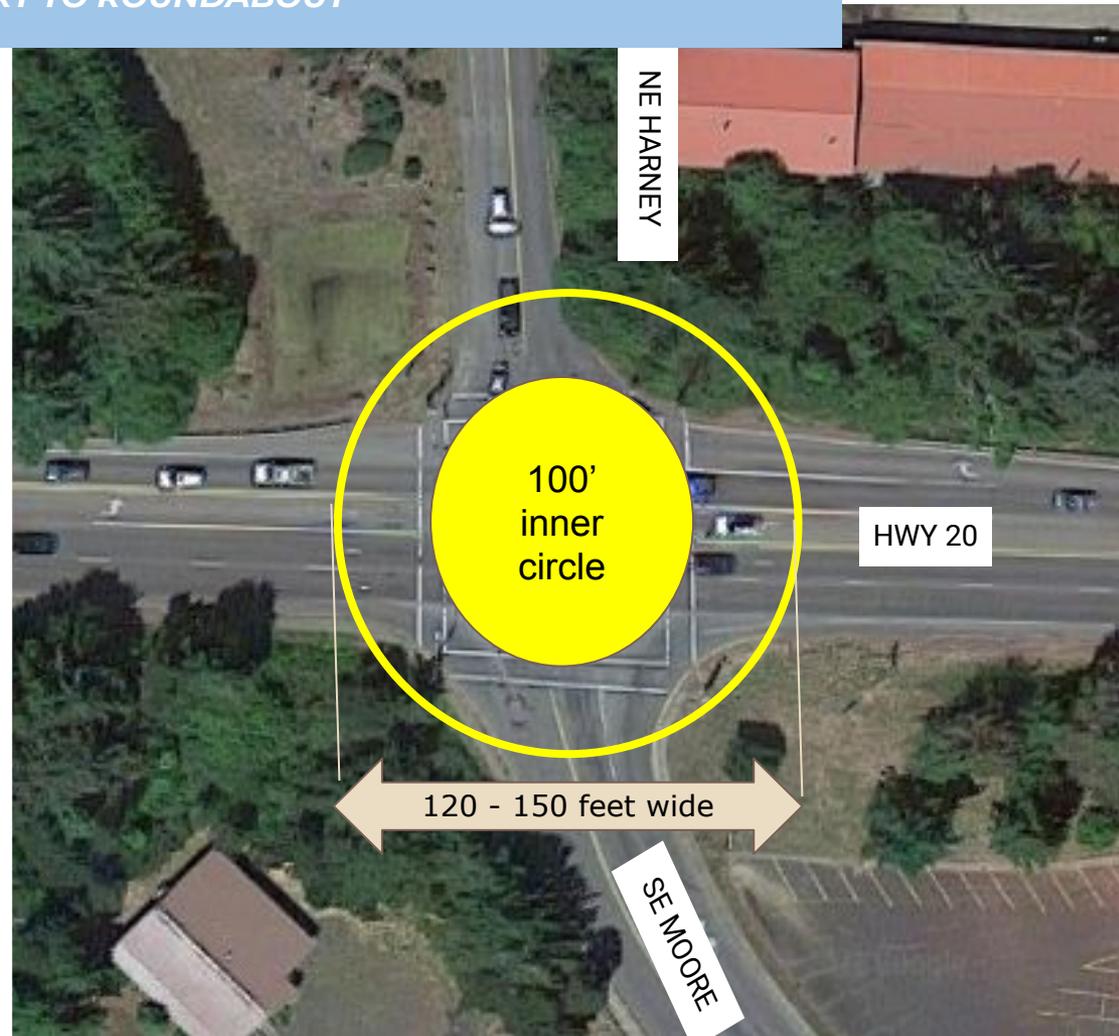


CONCEPT E. HWY 20 COUPLET \ OVERALL CONCEPT

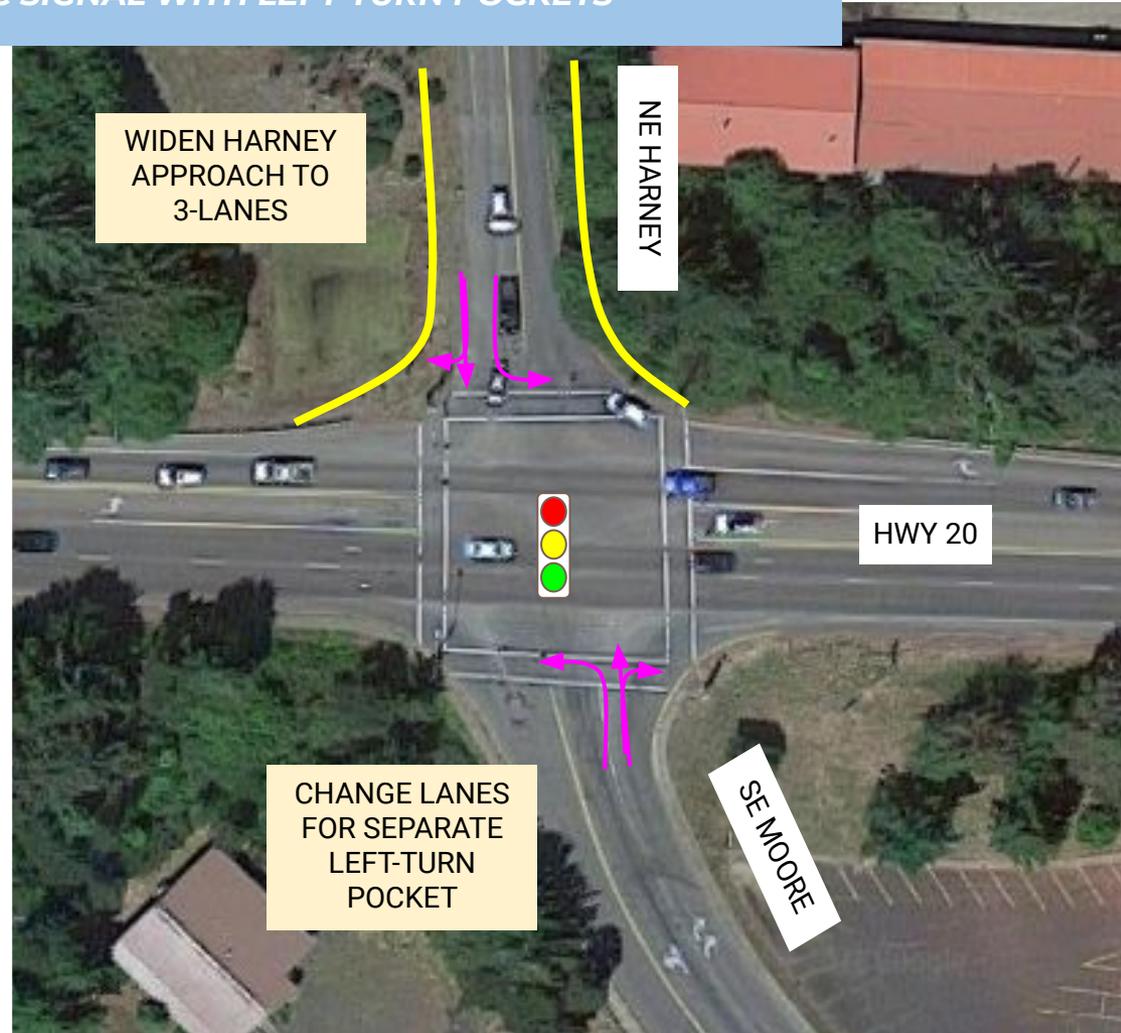


EVALUATION CRITERIA	HWY 20 TWO-WAY	HWY 20 COUPLET
Promotes mixed-uses and activity centers	<p style="text-align: center;">++</p> <p>Character improvements; opportunity for active corner redevelopment (at Benton, Fogarty)</p>	<p style="text-align: center;">+</p> <p>Desired land use character around NE 1st (local residential) not well supported by couplet</p>
Distributes transportation investment to the widest range of opportunity streets and sites	<p style="text-align: center;">++</p> <p>Overall streetscape improvements (on 20 and side streets) bolster business environment</p>	<p style="text-align: center;">+</p> <p>Accesses new sites; limited opps; diffuses commercial potential</p>
Improves overall mobility	<p style="text-align: center;">+</p> <p>Basic traffic calming and intersection cleanup; clarify turns and side-street access</p>	<p style="text-align: center;">++</p> <p>New traffic pattern, bikeways, sidewalk upgrades, parking</p>
Improves walking and biking network	<p style="text-align: center;">+++</p> <p>Overall improvements; sidewalk upgrades; bikeway option on 20 and parallel streets</p>	<p style="text-align: center;">+++</p> <p>Overall improvements; sidewalk upgrades; bikeways on 20</p>
Increases streetscape improvement opportunities	<p style="text-align: center;">++</p> <p>Overall improvements; better with 3-lane option on 101</p>	<p style="text-align: center;">+++</p> <p>Allows much space to streetscape upgrades</p>
Improves the street grid and urban pattern	<p style="text-align: center;">+</p> <p>Overall circulation improvements; related side-street impacts; link to 101/20 intersection work</p>	<p style="text-align: center;">+++</p> <p>Major upgrades to highway segments and side streets; potential for northward connections</p>

- Slower vehicle speeds
- Less side street delays
- Major property impacts
- Pedestrian crossings not controlled by signals
- Cost: \$\$\$



- Modify existing signal to add side street left-turn pockets
- Requires widening of Harney Street approach (SB)
- Minor change on Moore approach
- Cost: \$\$



EVALUATION CRITERIA	ROUNDBOUT	WIDEN HARNEY STREET APPROACH AND ADD LEFT-TURN POCKETS ON SIDE STREETS
Able to Maintain ODOT Mobility Targets	<p style="text-align: center;">++++</p> <p style="text-align: center;">Improvements would be designed to satisfy mobility requirements</p>	<p style="text-align: center;">++++</p> <p style="text-align: center;">Improvements would be designed to satisfy mobility requirements</p>
Minimizes Impacts to Local Business Access	<p style="text-align: center;">-----</p> <p style="text-align: center;">Highest impacts to existing driveways and property access</p>	<p style="text-align: center;">++++</p> <p style="text-align: center;">Minimal impacts to local business access. Less side street delays should improve operations and reduce driveway blockage</p>
Minimizes Impacts to Property/Business	<p style="text-align: center;">-----</p> <p style="text-align: center;">Highest impacts to properties. Gas station in NE quadrant may require closure.</p>	<p style="text-align: center;">++++</p> <p style="text-align: center;">No property impacts expected. ROW for Harney Street improvement available.</p>
Order of Magnitude Cost	<p style="text-align: center;">\$\$\$</p> <p style="text-align: center;">Major investment. \$5 to \$10 million</p>	<p style="text-align: center;">\$</p> <p style="text-align: center;">Minor investment, under \$1 million for signal modification</p>

INPUT NEEDED /1

- Preference for the Harney Street Extension?
 - Keep it in the plan but show cannot be funded
 - Drop it from the plan
- Preference for Nye Street Connection to Oceanview?
 - No connection (remain as is)
 - Full street connection
 - Multi-Use Path Only connection

INPUT NEEDED /2

US 101 Corridor / Which do you prefer

- Two-Way Project on Existing Highway?
- Short Couplet with US 101 & 9th Street?
- Long Couplet with US 101 & 9th Street?

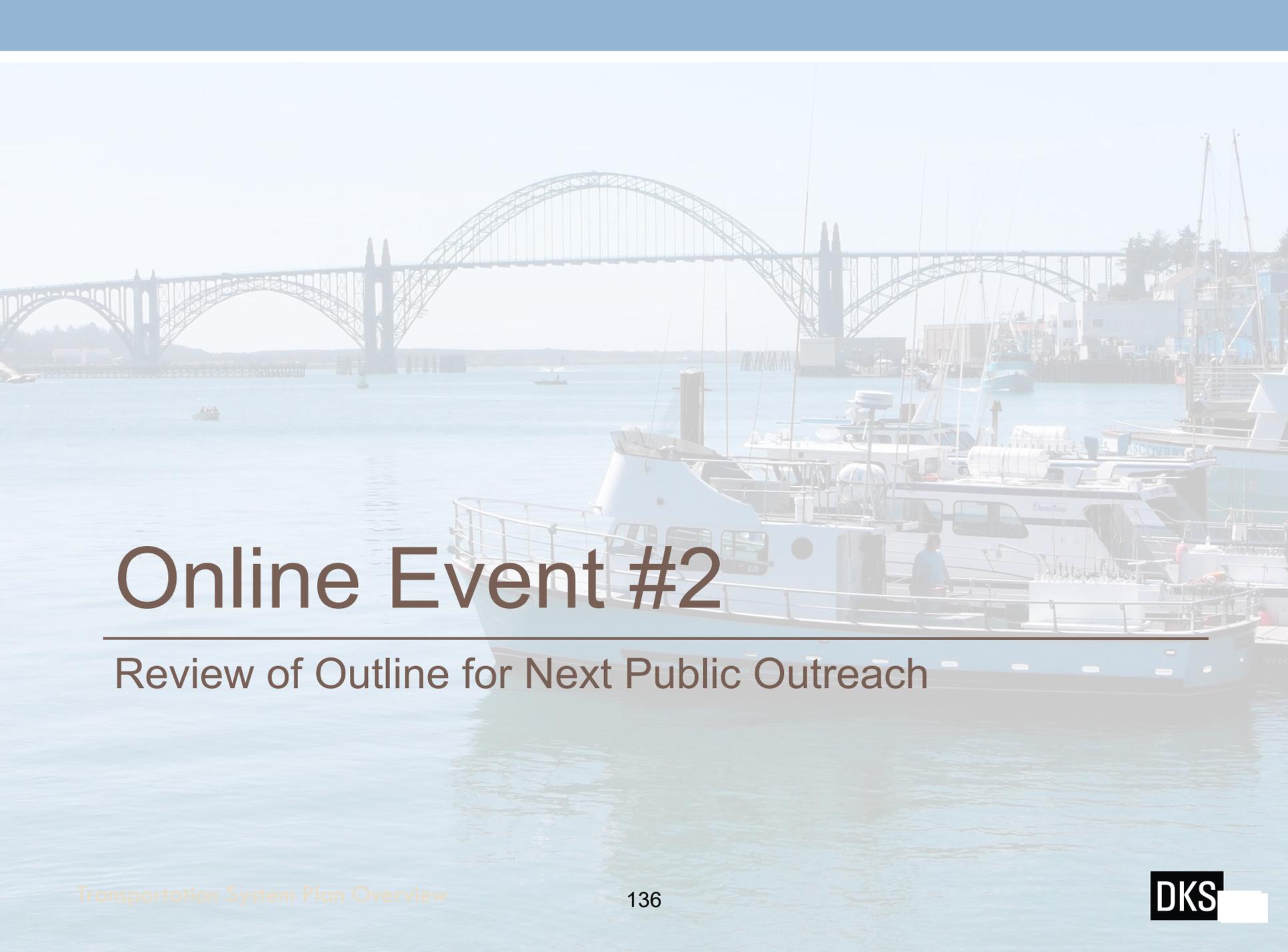
INPUT NEEDED /3

US 20 Corridor / Which do you prefer

- Two-Way Project on Existing Highway?
- Couplet with US 20 & NE 1st Street?

INPUT NEEDED /4

- Preferred solution at US 20/Moore-Harney
 - Roundabout
 - Add side street left-turn pockets at signal
- Preferred solution at US 101/US 20
 - Major Two-Lane Roundabout
 - Add SB Left-Turn Lane and Expand Intersection
 - Close vehicle access for Olive Street leg
 - Restrict Olive Street to Westbound traffic only



Online Event #2

Review of Outline for Next Public Outreach

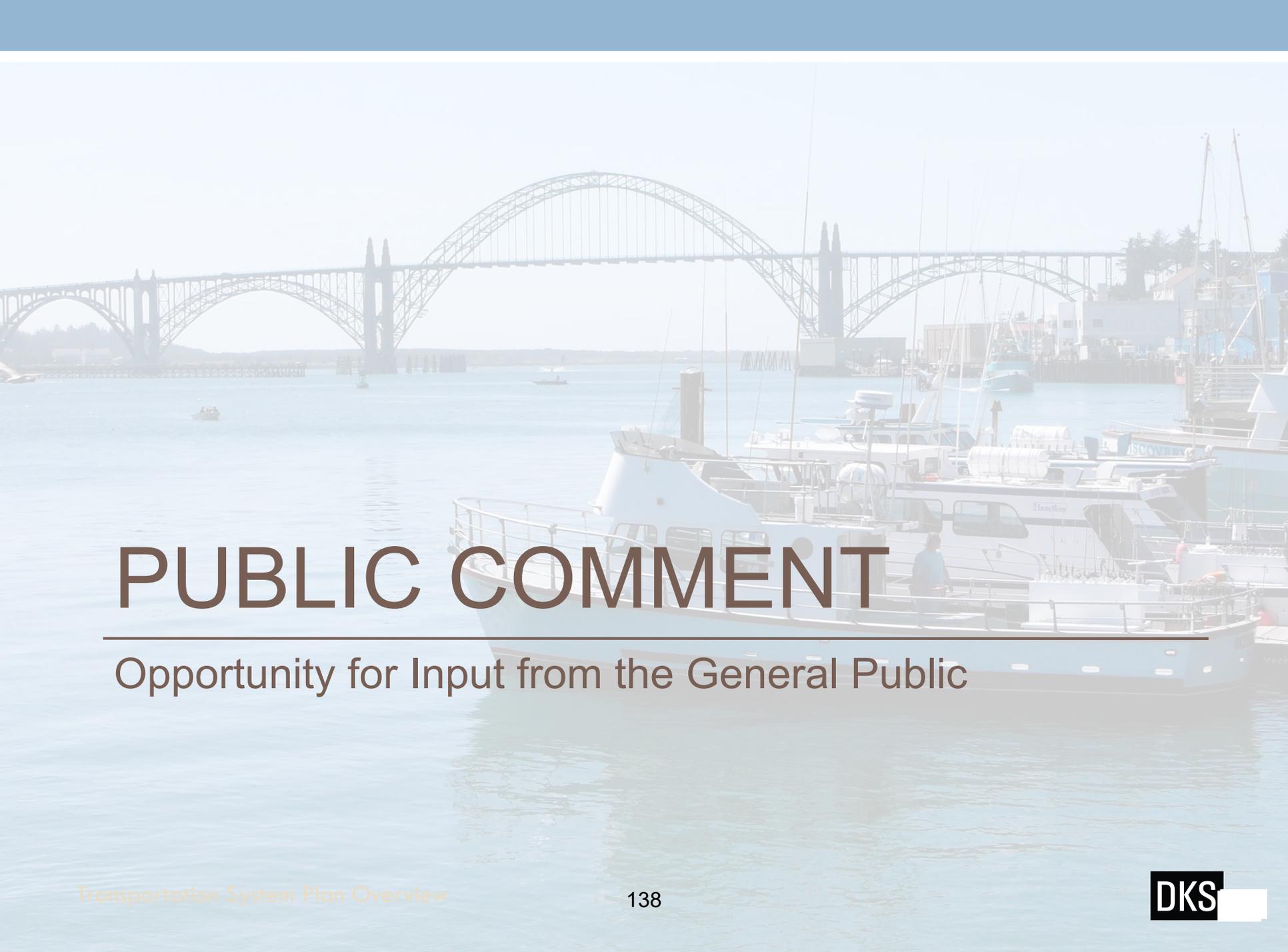
THEME: SHARE DRAFT SOLUTIONS

- **GOALS**

- Provide background and summary of previous community input
- Review and prioritize draft solutions
- Move toward a financially constrained list

- **EVENT DATES**

- Online Open House / 26 July to 23 Aug
- In-Person Work Session / mid-August



PUBLIC COMMENT

Opportunity for Input from the General Public

Next & Final PAC Meeting

- **PAC MEETING #6 – FALL 2021**
 - Prioritized solutions to address system needs
 - Draft TSP Document