The Nelscott Gap Neighborhood Plan

Lincoln City, OR

City of Lincoln City

Oregon Department of Transportation

Adoption

City of Lincoln City
Nelscott Gap Neighborhood Plan

August 28, 2017

ACKNOWLEDGEMENTS

City Council

Don Williams, Mayor

Susan Wahlke, City Councilor Ward 1

Diana Hinton, City Councilor Ward 1

Dennis "Riley" Hoagland, City Councilor Ward 2

Dick Anderson, City Councilor Ward 2

Judy Casper, City Councilor Ward 3

Kip Ward, City Councilor Ward 3

Planning Commission

Gary Cunningham

Doug Bryson

Steve Griffiths

Shawnn A Kehr

Patti Kroen

Bruce W. Robinson

S. Miles Schlesinger

Project Advisory Committee

The Project Advisory Committee ("PAC") formed to review Project deliverables and provide guidance to the City and Consultant on the Project. Key Stakeholders include:

Nonni Augustine, Chamber of Commerce

Don Baker, North Lincoln Fire and Rescue

Pam Barlow-Lind, Confederated Tribes of Siletz Indians

Cynda Bruce, Lincoln County Transit

Judy Casper, Nelscott Neighborhood Association

Bill Gibson, Bay Area Merchants Association

Valerie Grigg Devis, Senior Region Planner

David Helton, Oregon Department of Transportation

Julie Kay, Lincoln County Transit

Roy Kinion, Lincoln County Public Works

Soren Klingsporn, Sustainability Committee

Adam Plummer, Taft High School Student

Dave Price, Oregon Coast Community College

Amy Ramsdell, Oregon Department of Transportation, Region 2

Scotty Scotton, Park Board

Jim Taylor, Nelscott Neighborhood Association

Ron Tierney, Lincoln Community Land Trust

Majalise Tolan, Principal, Taft High School

Patrick Wingard, Department of Land Conservation and Development

Consultants

John Bosket, DKS Associates

Rich Catlin, Reece and Associates

Kevin Chewuk, DKS Associates

Bonnie Gee Yosick, Bonnie Gee Yosick, LLC

Kirstin Greene, AICP, Cogan Owens Greene, LLC

DJ Heffernan, Daniel Heffernan Company

Anais Mathez, Cogan Owens Greene, LLC

Laurence Qamar, Qamar Architecture + Town Planning

James Rojas, Place It!

P. Elise Scolnick, AICP, Cogan Owens Greene, LLC

City Project Management Team

Debra Nicholson, Senior Planner, Project Manager

Richard Townsend Director, Planning & Community Development

Lila Bradley, Public Works Director

Alison Robertson, Associate Director of Urban Renewal

This project was partially funded by a grant from the Transportation and Growth Management (TGM) Program, a joint program of the Oregon Department of Transportation and the Oregon Department of Land Conservation and Development. This TGM grant is financed, in part, by Federal Moving Ahead for Progress in the 21st Century (MAP-21), local government, and the State of Oregon funds. The Contents of this document do not necessarily reflect views or policies of the State of Oregon.

Table of Contents

Chapter 1 - Overview

The Nelscott Gap Neighborhood Plan is the accomplishment of a robust community-driven process that engaged a project advisory committee, property owners, the general public and city officials over a period of two years. The plan provides the City with the vision, goals, and implementation strategies to guide the future development of the Nelscott Gap study area. Appendices include supporting technical data and reports.

The chapters of the Plan describe the background, intent and strategies for implementation. Implementation includes making proposed changes to key documents, such as the City's Comprehensive Plan, Zoning Ordinance, Transportation System Plan and water, sewer and stormwater management plans. The Plan also includes cost and funding information critical to planning, annexation and budget processes.

Project Objectives

The Nelscott Gap Neighborhood Plan has achieved the project objectives of developing:

- A ready-to-adopt neighborhood plan with comprehensive plan amendments and implementing regulations that identifies infrastructure and other public investments needed to support desired development in the study area
- A well-prepared plan designed to produce an attractive, transit-oriented, walkable neighborhood composed of vibrant centers linked by convenient transportation.
- Efficient use of improved highway facilities and the surrounding land area.
- Transportation mode choices for residents and visitors in the study area.
- A mix of uses and well-designed public spaces that make this neighborhood a special place.
- Economic vitality by planning for attractive land uses and the movement of goods and people in the study area.

Community Engagement

The extensive community outreach and engagement process for the Nelscott Gap Neighborhood Plan included a broad, diverse group of the public. Appendix B has a description of the public processes and summaries of activities to inform, exchange ideas, and gather feedback. This plan is a result of the input of many residents, property owners, business people, and community leaders, as well as professional staff and consultants. Drafting a vision statement and goals was one of the first steps in the process.

Nelscott Neighborhood Plan Vision

In 2045, Nelscott is developing both east and west of the highway in a neighborhood that is well connected, economically vibrant and attractive. It is a welcoming tourist environment and a pleasant home for year-round residents. Development honors the natural assets of the area, and builds off them to create value for property owners and tenants. Residents enjoy opportunities for lifelong learning at the Oregon Coast Community College and Lincoln County public schools. Students are able to walk, bike and take transit or drive safely to the campuses.

Photo 1. Oblique view of Nelscott Area of Lincoln City

Nelscott Neighborhood Plan Goals

Livability and Housing

Families and people of all ages are able to find attractive, affordable housing in Nelscott. Proximate to both the forest and the sea, Nelscott communities are walkable, interesting, well-planned and maintained.

Recreation and Health

Residents of the Nelscott area live within walking distance to parks, trails and recreations that enhance quality of life for all ages, and contribute to a healthy community lifestyle. Art, theater, community gardens and recreational programs provide a range of options for visitors and residents.

Heritage and Inclusion

Native American Siletz Tribal history is a valued part of the Nelscott community fabric. Residents from all backgrounds make Nelscott an inviting and vibrant community.

Economy

Employment opportunities in Nelscott represent a diversified economy and provide jobs for area residents. Nelscott residents enjoy a range of opportunities – from working from home to engaging in entrepreneurship and employment opportunities nearby. The tourism economy continues to sustain the local economic vitality, for which the natural environment is the prime asset.

Transportation Choice

Residents and visitors walk, bike, drive and ride transit through Nelscott, connected to Taft, Delake, and other Lincoln City districts. Safe transportation routes connect the neighborhoods physically, economically, and socially. As walking is a distinct priority, all streets are safe, convenient and attractive as ways for residents and visitors to walk to their daily destinations. Parking options are appropriate and well designed.

Photo 2. Community works on land use designs

Lifelong Learning

Mid-coast residents travel to Nelscott to take advantage of the educational opportunities at the Oregon Coast Community College (OCCC) campus. OCCC, elementary and high school students and activities are central to the Nelscott identity and community life.

Ecology and Natural Resources

Development optimizes property and community values by mitigating natural hazards, protecting streams, wetlands, view corridors and forest canopies, while providing connectionsto the Pacific Ocean visually and physically.

Chapter 2 - Land Use

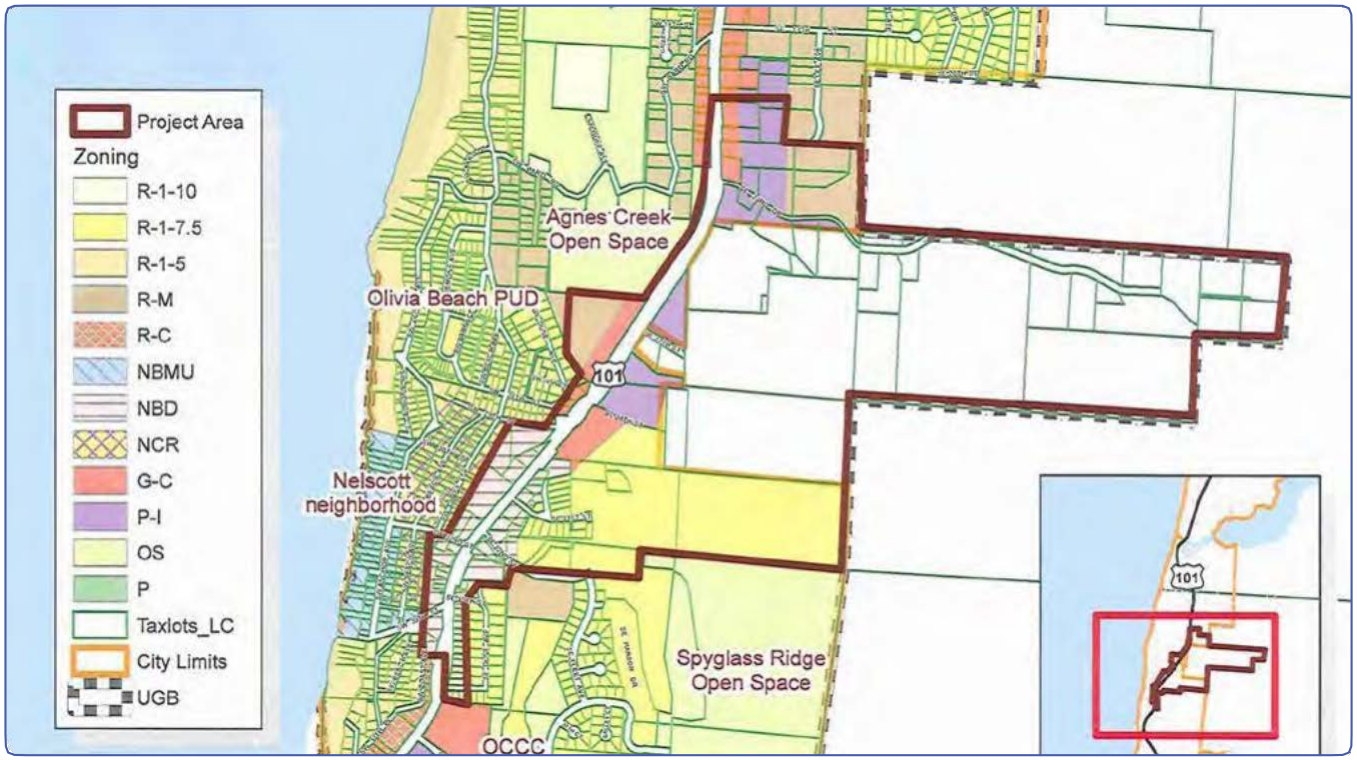


Figure 1. Existing zoning and the project study area

The project study area is in the Nelscott neighborhood of Lincoln City. It includes land within the Lincoln City Urban Growth Boundary (UGB). The study area total is 240 acres, with about 90 acres within the city limits; and 150 acres outside the city limits in Lincoln County.

The project area surrounds a recently completed improvement on Highway 101 that added a third lane for turns, bike and pedestrian facilities, and realignment and a traffic control light at 32nd Street. Much of the property, especially east of the highway, is vacant or under-developed and without city utilities. SE 23rd Drive is the only street that extends more than a few hundred feet east of the highway; the area currently contains no north-south connection. The Nelscott Plan demonstrates how to meet those needs with a walkable, pleasant, vibrant neighborhood, consistent with city objectives.

The project area has many advantages for a new neighborhood. Land adjacent to SE 23rd Drive contains the best potential for development of new industry. The area is within a short walk of the Taft Elementary School, Taft High School, and the Oregon Coast Community College. Large city-owned open spaces flank the area on the south and the north, and the Pacific Ocean and beaches are within a half mile.

Lincoln City needs affordable and workforce housing, and more jobs and industry.

A market study for this project shows that the Nelscott Gap has competitive and comparative advantages for providing land for the needed mix of residential and business development. A summary is included in the Appendix.

A walkable neighborhood provides places to live, work, shop, learn, play and gather together within a safe, convenient and attractive community. In the 1920s, Nelscott, most of Lincoln City's other neighborhoods, and other towns on the central Oregon Coast grew up as highway developments, following construction of a gravel road that later became Highway 101. This project reflects a desire for Nelscott to continue development as a walkable neighborhood.

Land use and design standards detailed in the plan ensure that development projects in the Nelscott Gap plan area support the following objectives:

- Integration and functionality of land uses
- Connection to the ocean
- Respect for neighborhood transitions
- Design appropriate for the climate
- Aesthetics and context-sensitive design
- A balance of durability and affordability

Design standards place special emphasis on continuing the pattern of eclectic design elements that characterize the existing Nelscott strip along US 101. The City intends for the standards to implement the community's vision of a cohesive streetscape with a safe and comfortable pedestrian environment. The standards codify a preference for compact, mixed-use projects over single-use development. The code encourages corner properties, particularly those in gateway locations along US 101, to incorporate signature architectural features.

Policies to Implement Vision Statement

Organized to correspond to the project goals, following are suggested new Comprehensive Plan policies specific to the Nelscott Gap Area. These may be adopted immediately.

Livability and Housing (LH)

LH1: Create walkable, mixed-use districts that offer a range of housing types for Nelscott residents and visitors.

LH2: Create architectural and design standards that reflect and build upon the Nelscott Plan (NP) District zoning.

LH3: Encourage traditional Nelscott character architectural design elements from the Nelscott Community Vision Plan for roofs, facades, chimneys, textures, landscape materials, design elements and commercial buildings.

LH4: Prioritize and incentivize construction of workforce housing for individuals and families.

Note: these build upon the City's existing Housing Policies to:

- Increase the amount of decent and affordable housing, especially rentals available to lower income households.
- Increase the amount of lower cost rental housing available to the elderly.
- Decrease the proportion of income which the elderly spend on housing.

LH5: East of US 101, prohibit vacation rentals or limit them to owner-occupied or to units near where the owner lives, and limit to accessory use.

LH6: Allocate land uses and development densities based on an urban to rural (highway to hills) transect-based pattern.

Recreation and Health (RH)

RH1: Create and maintain open spaces, parks and paths throughout the plan area for residents and visitors.

RH2: Develop and implement standards for streets that accommodate automobile traffic and parking, as well as safe routes to schools, parks and other amenities for pedestrians and bicyclists of all ages and abilities.

RH3: Through shared use paths, sidewalks, bicycle lanes, and north-south routes off US 101, connect Nelscott Gap neighborhoods with safe transportation routes to Taft Elementary and High School and the Oregon Coast Community College campus.

RH4: Provide clear demarcation for Tsunami evacuation routes, Seismic Lifeline Routes and emergency gathering places.

Heritage (HE)

HE1: Extend and build upon unique Nelscott historic, cultural and artistic assets.

HE2: Create formal and informal places in the project area for learning and discovery of, for example, Siletz and Lincoln County history.

HE3: Celebrate Lincoln City's growing diversity, and specifically Latino community with culturally relevant arts and culture.

Economy (EC)

EC1: Create opportunities for limited, but essential basic goods within ¼ mile and ½ mile distance of most residences.

EC2: Create a specific area, implementation strategies and spaces to promote innovation, light manufacturing and employment in Nelscott.

EC3: Provide "makers spaces" for residents and tourists to engage in creative work.

Transportation Choice (TC)

TC1: Design streets for people as well as for automobiles. Pay particular attention to design for vulnerable populations, including seniors and people with disabilities.

TC2: Design streets with the minimum lanes, and lane widths necessary to minimize costs and to encourage slower speeds.

TC3: Disperse auto traffic by creating more connections through local streets, rather than concentrating traffic onto collectors and arterials.

TC4: Implement dedicated on-street parking on all streets as a means of both slowing driving speeds and reducing on-site parking demand.

TC5: Improve automobile, bicycling and walking connections north and south parallel to US 101, reducing reliance on US 101 for local trips.

TC6: Require clear wayfinding signage for pedestrians and bicyclists, connecting them to bus stops, the historic Nelscott Business District, "Innovation and Employment District" and the local schools and housing, other neighborhoods, parks and open spaces, and the ocean.

TC7: Create street design standards for the neighborhood connector, queuing streets and the Baldy Creek multi-use path.

TC8: Improve pedestrian safety and comfort by separating all sidewalks from driving and parking lanes with tree wells or planting strips.

TC9: Support further development and expansion of transit service to address unmet needs.

Lifelong Learning (LL)

LL1: Support opportunities for passive and active learning in the Nelscott District as a whole.

LL2: Connect residents to artistic and theater assets in historic Nelscott and Lincoln City.

Ecology and Natural Resources (ENR)

ENR1: Protect and restore ecological assets including but not limited to natural creeks and drainageways, viewsheds, steep slopes, and wetlands.

ENR2: Incorporate drainage corridors, viewpoints, and scenic vistas in a network of publicly-accessible open spaces as the dominant development pattern.

ENR3: Restore and daylight Baldy Creek during development and redevelopment.

ENR4: Improve the ecological condition of Baldy Creek and associated wetlands during development and redevelopment over time.

ENR5: Design houses with coastal ecology in mind: topography, street frontage, wind, sun, solar access and rain.

ENR6: Require development to accommodate all storm water on site with green infrastructure design.

ENR7: Orient building fronts to face natural amenities such as stream corridors, wetlands and the ocean across streets and pathways in order to make those amenities publicly visible and accessible.

ENR8: Recognize and enhance the natural progression, or transect, from more urban to forest inherent in the coastal ecology from the beach to the hills and highlands.

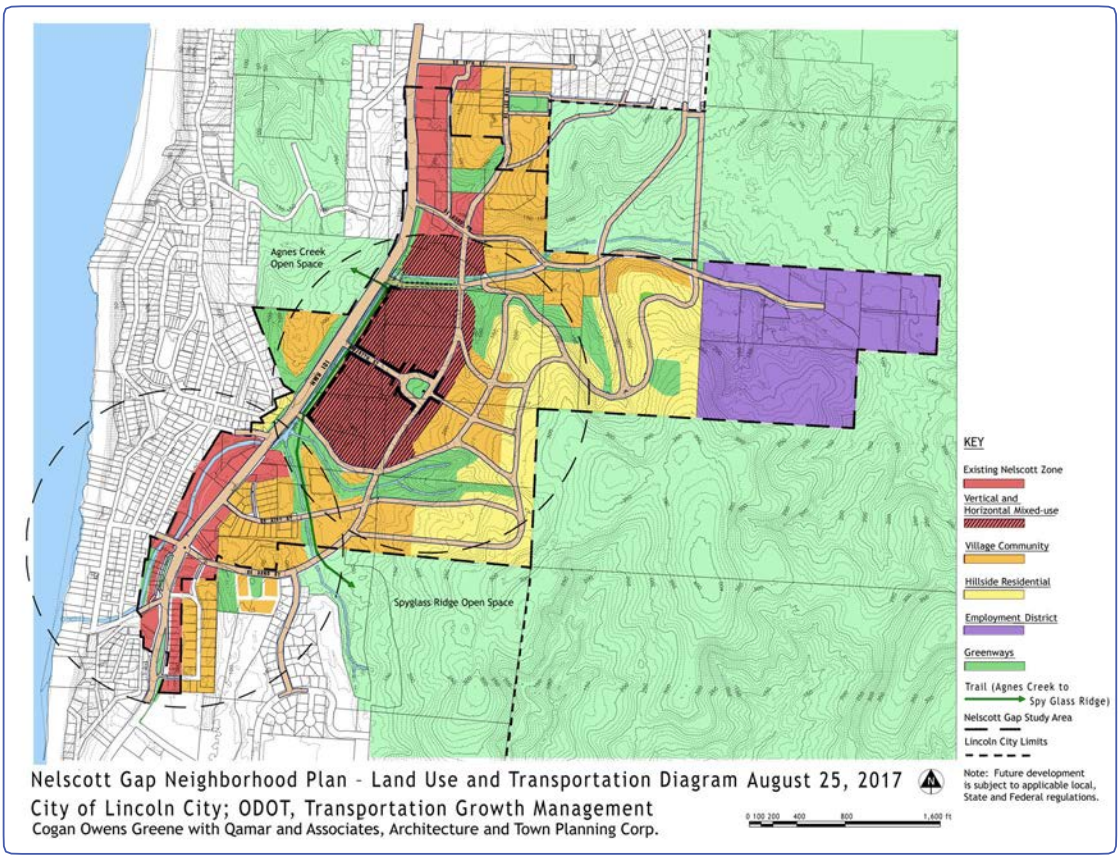


Figure 2. Land Use and Transportation Diagram

The above diagram shows land use zones for future development. Implementation of the Plan will provide for housing and employment opportunities and help existing businesses expand their operations through annexation, transportation and utility service improvements.

Annexation and Possible Amendment of the Urban Growth Boundary

The City's 2006 buildable lands inventory identified a need for 11.3 acres of buildable industrially zoned land; the City had only 5.3 acres in the city limits, but 41.12 vacant buildable industrial acres in the Urban Growth Boundary in the project area. The 2017 inventory shows a total of 87 acres within the UGB zoned for industrial use, far more than recent analysis suggests is necessary for the next 20 years. The Nelscott Neighborhood Plan recommends a portion of the currently zoned industrial land may develop as mixed use, including commercial and residential, as well as industrial.

The study area for the Nelscott Gap Neighborhood Plan extends to the Urban Growth Boundary (UGB). While the Plan proposes no land use changes outside the UGB, participants acknowledged that one or more transportation connections across resource land directly north of the UGB could provide convenient local connectivity as an alternative to Highway 101. These connections also could serve as additional evacuation routes to enhance emergency preparedness. The process to create public roads across resource land, which Lincoln County would administer, is well-defined in state law. The Plan does not propose service connections outside the UGB.

Neighborhood Centers

The Land Use and Transportation Diagram depicts two walkable neighborhoods roughly identified by two quarter-mile radius circles. These circles indicate approximately a five-minute walking distance from the center to the edges. The centers of these two neighborhoods are the existing historic Nelscott commercial area, and a proposed additional center on the east side of the highway a quarter-mile to a half-mile north.

Figure 3. Historic Nelscott

The historic Nelscott commercial area at SW 32nd Street is the primary neighborhood center. As the neighborhood grows, mixed-use and compact living accommodations would remain near the center. Density would decrease gradually as topography steps up the hillsides on the east side of US 101.

Community input identified Baldy Creek, through the Nelscott mixed use area, as a valued asset. Baldy Creek, which extends the entire length of the Nelscott (commercial) strip, could continue as a design feature in the commercial area that develops to the north of 32nd Street. Photo 3 shows a balcony overlooking the creek behind La Roca restaurant as an example of attractive patio development along the creek for commercial use throughout the planning area.

A new neighborhood center will serve the developing neighborhood east of the highway with jobs and work-live opportunities in a highly visible, walkable design.

The illustrative plan proposes three flexible mixed-use zones: Vertical and Horizontal Mixed- Use, Village Community, and Hillside Residential. It also proposes an Employment Development District. These zones (or typologies) describe the proposed land use concepts.

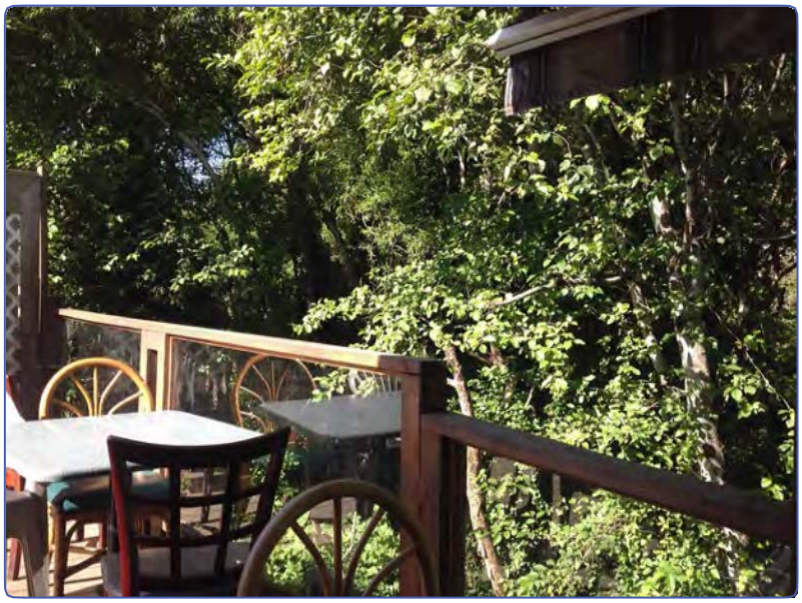


Photo 3. Balcony at La Roca Restaurant overlooking Baldy Creek

Mixed Use, Residential and Employment Development Districts

Vertical and Horizontal Mixed-Use would have the greatest diversity of uses. Typically, this zone would allow ground floor storefront retail and business, upper floor apartments and offices, apartment buildings and office or workshop buildings. The uses need not be vertically mixed to constitute a true mixed-use district. The mix can be side by side or within the same block and street for horizontal mixed-use. One-story commercial buildings on a main street with apartments and town townhouses beside or behind are perfectly reasonable mix-used strategies. More compact vertically mixed buildings can develop over decades. Uses within the buildings may vary over time.

Lincoln City does not have many higher density buildings, such as vertical apartment buildings, town houses, and duplex houses. With basic standards of design, they can provide for housing needs in coming years and decades attractively and economically.

Although the Plan depicts most of the commercial use in smaller scale buildings, it does show the potential for a retail building with a 60,000-square foot footprint. This represents a supermarket or other large retailer. A multi-story building could double or triple the square footage of the footprint. To maintain the village character, the Plan shows parking dispersed around the building and view of the entire site screened from adjoining streets by smaller buildings.

Village Community will accommodate a range of employment uses and residential types, including

Vision for a New Community Gateway

Although the Plan adds a new boulevard at the base of the foothills to join SW 32nd Street and SW 23rd Street for direct access through the core of the Nelscott Gap neighborhood, the most prominent "front entrance" into the new neighborhood will be through the existing SW 27th Street. The current street right-of-way is perpendicular to Highway 101, crosses over Baldy Creek and enters the woods, quickly rising up the hillside to the east. With direct visibility and access for a significant amount of highway traffic, SW 27th will offer a reasonable retail rate-of-return. It also is in the heart of the new neighborhood.

The upgraded SW 27th Avenue would grab the attention of passing drivers, not with glaring highway signage, but with buildings that present themselves as a small

cottage housing, small apartment buildings designed to look like larger houses, town houses, duplexes and small lot detached cottages. Houses and businesses with stoops and porches will be set close to the front sidewalks. They will have rear alley service to garages and parking mid-block, eliminating driveway cuts in the street frontages. Garages will be close to the alleyway rather than set deep into the lots, maximizing the backyard space between the main home and the detached garage and allowing higher density homes to gain light and outdoor access in both the front and back yards. Lot depths of 80 -100 feet will accommodate the proposed uses and fit the proposed street layout.

Hillside Residential, further from the neighborhood centers and adjacent to the more rural edges, will be comprised mostly of single-family detached homes on medium and larger lots. Duplexes and triplexes may intermix with the single-family homes, if their design fit the neighborhood context. Hillside residential will have more space between houses, deeper front yard setback from adjoining streets, and commonly porches and front gardens will be along these single-family streets. Lots a minimum 100-feet deep will fit the proposed street layout.

Alleyways will be ideal for garage access. Alleyways themselves are lively and engaging places to cross paths and interact in a more intimate mid-block sanctuary. Sometimes gardens spill out over low picket fences into the alleys, making them lush with greenery and garden views. If the lots are wide enough, access can be from the front street, if the garages are set back behind the faces of the houses. As in the Village Community, garages or carriage houses detached from the main house are common. Covered walks between the main house and carriage house can protect residents from the rain, but they are a luxury that many find unnecessary.

The Employment District is at the eastern end of 23rd Drive in the panhandle portion of the study area. It lies in mostly in Lincoln County outside the City limits, but is within the City's urban growth boundary.
The illustrative plan designates approximately 150 acres of land in the panhandle for employment. Zoning for the entire 200 acres allows for industrial use. Of that, 120 acres are currently occupied by a half-dozen existing businesses; the rest is vacant.

town main street where people live, work, shop and engage in an attractive public space.

The first feature to attract the passerby on the highway can be a small bridge over a newly enhanced and restored Baldy Creek. Although the existing culverted driveway suffices for water flow, a restored stream can expand that culvert to allow fish passage. An actual bridge with a significant stream passage is ideal. Either way, the roadway of SW 27th should be designed to appear bridge-like with a significant concrete or metal balustrade, bridge gateway piers, and pole lighting. Highway 101 has a series of beautiful bridges by C.B. McCullough dated from 1919-1935 to inspire the design. Why not celebrate the crossing of Baldy Creek as a gateway from the regional coastal byway into this new neighborhood ?

On the east side of Baldy Creek, SW 27th Ave will intersect with a wide multi-use lane designed for cyclists, pedestrians, infrequent emergency access vehicles, and maybe even the occasional equestrian. Dubbed Baldy Lane, it will be the frontage of a row of mixed- residential, and commercial buildings facing across Baldy Creek to Highway 101. Although these buildings will face west to the highway, a rear service alleyway on their eastern sides will provide access and parking. Standards will require front doors and windows onto Baldy Lane. Low (3' maximum) fences, hedges or walls may enclose yards facing Baldy Lane and the creek.

The vacant 80 acres to the south of the existing businesses on SE 23rd Drive are hilly and forested, which may be why the area has not already developed with industry. Instead of including these 80 acres in the Plan, the City may consider bringing in the clear- cut land north and northwest of existing industrial operations. Much of this clear-cut land is relatively level, making it more suitable for future industry and business. It is not currently within the urban growth boundary, but bringing it into the planning area and eventually into the city (possibly trading it for some of the current study area's land) will add more suitable industrial land and facilitate development of proposed north/ south street connections, which are necessary for good traffic circulation in the area.

Currently, the panhandle has access only via SE 23rd Drive, which terminates in a dead end near the eastern boundary of the study area. Although SE 23rd Drive could be designed to handle truck traffic to and from US 101, improvements and trucking operations would impact any existing and future residential or retail development along the street. Designing and constructing a network of streets within the business district and new mixed-use neighborhoods would avoid future conflicts between heavy industrial trucks and local neighbors.

The Plan proposes two street segments extending north of the planning area through the recently clear- cut land, eventually connecting through existing streets to East Devils Lake Road. The new segment of SE Lee would lead into existing residential streets and would not be suitable for industrial truck traffic from 23rd Drive. A connection to SE Reef would avoid most existing residential streets, creating a preferred truck route.

The majority of these buildings facing Baldy Lane and Creek can be mixed-use live-work buildings. Live-work buildings shall have the design of a residence or office building that allows retail business in the ground floor, but not necessarily with the broad storefront windows typical on a retail main street. Without car access along Baldy Lane, intensive retail frontage onto the lane is not required, but is encouraged.

Two mixed-use buildings at zero lot line (up to the street rights of way) on the two key corners of SW 27th Street and Baldy Lane will flank the most prominent gateway to the perpendicular mixed-use main street leadinginto the heart of the neighborhood. The corner buildings will have ground floor storefront windows extending a minimum 40 feet along the frontages of Baldy Lane, and 40 feet into the extended SW 27th Avenue main street. Ideally, these ground floor shops will have active retail entertainment, such as cafe restaurant seating in fair weather, with fixed awnings and internally lit transparent glass storefronts.

Creating an Employment "Innovation District" could allow small and large entrepreneurs in the panhandle to be in the city, but operate with more freedom and less city regulation. Standards to protect mixed-use neighborhoods from smoke, chemicals, and truck traffic associated with certain industries are necessary, but due to its relative distance from retail and residential uses, this area could have fewer regulations regarding quality of buildings and site development. The goal would be a lively place of business operations surrounded by a natural setting. Further analysis of employment strategies should follow.

Parks in the illustrative plan are at the center of the neighborhoods. Small parks ranging between 1/8- acre pocket-parks to parks no larger than one-acre are ideal for community gatherings, festivals, performances and daily recreation. Parks larger than an acre tend to

function less as community centers and more as open spaces that divide one neighborhood from another. These smaller central parks may have paved plazas, pathways, park pavilions and kiosks. They typically are surrounded by slow moving, narrow, local streets lined with shops fronts and residences. The neighboring uses face the park. Their "Eyes on the Street," (which means "on the park, in this case) generally make the park safer, as the people in surrounding homes and shops watch over activity in the public space and across the park to the other side.

Greenways, open spaces, and natural corridors border the edges of the new neighborhoods. Open Spaces at the edges of neighborhoods are typically linear corridors of land naturally designed with existing forests, streams and sloping topography. They may offer soft trails for hiking or biking between neighborhoods. The illustrative plan treats the linear open space along Baldy Creek as the west edge to the new neighborhoods. Development would improve and maintain Baldy Creek's stream habitat, which in turn would provide recreation, and establish an appealing buffer between the highway and new mixed-use buildings. Natural resources setbacks would be subject to the City standards in place at the time of development.

Trails in both Agnes Creek Open Space on the west side of US 101 directly north of the study area and the Spyglass Open Space southeast of the study area link to major regional trail systems. The Baldy Creek corridor will connect these two open spaces. The Plan proposes a pedestrian crossing at 28th Street. The crossing would utilize a currently vacant property on a hilltop west of US 101 that is only accessible by foot from the highway or from the Agnes Creek Open Space. The Plan proposes a new street access that would extend from a low-lying area on the highway along the edge of the open space, and curve up to serve new development on the hilltop property.

Regulating Plan

Since the late 20th century, form-based codes (FBCs) have become increasingly effective tools for communities to achieve their desired patterns of neighborhood development by guiding the design and placement of public places and buildings, rather than by separating uses or zones. Form- based codes acknowledge that some freedom and creativity in design brings diversity and character to a community. The most revered communities throughout the US developed based on a common urban and architectural language, either by design or circumstances. By tailoring a form- based code to its local climate, culture and economy, a community can achieve diversity and variation within a consistent and patterned neighborhood context.

Transect

The concept of a transect follows and transitions urban to rural character from neighborhood center to edge. Focusing first on the form of buildings and public spaces, and less on segregating uses does not imply a free-for-all in randomly mixing any building type and use through a neighborhood. Modeled after the way all great urban neighborhoods evolved throughout history, FBCs organize the blending of uses and building types in a patterned manner called a transect.

Table 1 includes a matrix allocating different standards for each zone in the Nelscott Gap Land Use and Transportation Diagram, also called a regulating plan. These zones are gradations of urban to more rural, referred to as a transect, which is a term from the analysis of natural habitats in ecology. Applied to the new Nelscott neighborhood, the transect helps organize similar types of buildings, landscapes, and architectural characteristics in common street spaces

In the Plan area, the topography from the lowland along US 101 and Baldy Creek up the hills to the east provides a sensible and comprehensive urban to rural transect. Near the highway, opportunities for new retail shops will generate more flow, and interaction of people in the new neighborhoods. As travelers make their way uphill toward the forested city edges, house lots will be more spacious and wooded, and retail will not be as viable.

Along the Baldy Creek multi-use path, buildings may be one to four stories, built close to the sidewalks with shops on the ground and apartments or offices above. They may have relatively simple, flat fronts with either a cornice or simple pitched roof. Street trees in sidewalk tree-wells complement sidewalk cafe seating covered by retail awnings.

Illustration by Laurence Qamar

Drawing 1. Awnings and Signage Example

Illustration by Laurence Qamar

Drawing 2. Baldy Creek Multi-Use Path Example

Rain happens...especially on the Oregon Coast. Even during summertime, steady winds tend to blow in from the northwest, so we need to design buildings that provide flexible wind and rain protection to enable outdoor living when the weather is fair, and indoors shelter when the rain and wind arrives. Light fabric awnings are not sufficient in high winds, but solid metal awnings do the job. Gutters and downspouts need careful design to not spill rainwater directly on storefront sidewalks. Retractable awnings are effective for letting the sun in when the rains dissipate. Translucent awnings can provide both daylight and rain protection without being retractable.

One or two blocks east of the Baldy Creek multi-use path along the new Foothills Boulevard, the character could change gradually to fewer retail stores, more connected townhouses with front stoops, and apartment buildings. The homes in this semi-urban street would be close to the sidewalk, with cars parked parallel along the street, or discreetly behind on rear alleyways in detached garages with accessory dwelling units (ADUs) above. Instead of trees planted in sidewalk tree-wells, these streets would have more landscaping, including continuous curb-side planting strips with larger trees.

Continuing the transect a couple of streets up the hill into the Hillside Residential district, the townhouses give way to duplexes mixed with four-plex buildings that appear to be big houses. The street trees are in wider continuous planting strips between the sidewalk and the curb. The houses are set back a little further from the front property line. The materials and style of the houses become less urban and more rustic than the stores and apartments in the core of the neighborhood.

Toward the top of the hills in the Hillside District, buildings will be even more rural and casual as single-family houses mix with a few duplexes that have broader porches and deeper setbacks from the sidewalks. Highland Avenue will have no retail shops, and not enough

traffic or nearby residents to fully support them. Some blocks may have alleys for rear service access. Where lots are wide enough (60' minimum) to accommodate a front entry driveway and garage, the face of the garage door must be a minimum 10' back from the front of the main body of the house. This, along with no more than a two-car garage, helps reduce the impact on the streetscape of garage doors and cars parked in the driveway.

Form Based Code Elements

Table 1 presents an overview of the four distinct zones (in addition to parks and the Nelscott Business District) in the Land Use and Transportation Diagram (Figure 1), which is the regulation plan for the project area. The table includes the key form-based code elements that define each zone - building types, architectural standards, and landscape standards, and guidelines aimed to establish the transect.

Table 1. Implementation Measures and Standards

Packages of Implementation Measures	Building Standards	Architectural Standards	Landscape Standards
Horizontal and Vertical Mixed-Use	**Placement:** Buildings of both commercial and multifamily uses co-exist in this urban core area of the neighborhood. Depending on the building types, the front setbacks can vary between 4'-8' 8' This shallow setback on a storefront can accommodate a sidewalk extension for store display or cafe seating. Zoning could require shop fronts to all align along a given street front, or step forward and backward to vary the sidewalk widths. Apartment buildings could align with retail storefronts on the lane and main streets around the park. Other streets could have apartments and row houses set back 4'-8' with door stoops and entry vestibules. **Use:** This zone permits residential, office, retail and clean light manufacturing. Retail should be on several specific street corners along the Baldy Creek multi-use path as a minimum requirement.	**General notes:** Scaling buildings and their associated characteristics to the pedestrian, rather than the fast-moving driver, is the hallmark of successful mixed- use districts. Older mixed-use buildings in downtowns of cities throughout the region should inspire design. Classic main street buildings are simple boxes with local natural siding materials, well-proportioned windows and doors, and limited ornament. Vertically proportioned facades, rather than long horizontal big boxes, are better scaled to the pedestrian. **Roof Forms:** Allowance for flat roofed buildings with parapets as well as hipped, shed and gabled roofs. **Windows and doors:** Storefront windows on ground floors can be broad horizontal fixed storefront, roll up glass garage doors, awning, double hung windows, etc.	**General notes:** Minimal required landscaping in commercial zones on private parcels to allow greater density and a more urban character. **Street Trees:** Trees planted in tree wells on retail mixed-use streets between the sidewalk and curb. Greater spacing of trees on retail streets in order not to block store signs. **Yard Surfaces:** Plazas and hardscape surfaces for courtyards and entry courts are encouraged for increased public pedestrian activity. Limit use of grass lane on private lots. Landscaping provided in common park spaces and along Baldy Creek. **Yard enclosure:** Wood fences with vertical pickets or trimmed hedges required: maximum 36" high on front, sides and rear of lots with allowance for 50% trellis screening up to 72"at sides and back. Trimmed hedges also permitted with chain link fences embedded in hedge at the same heights as above.

Packages of Implementation Measures	Building Standards	Architectural Standards	Landscape Standards
Horizontal and Vertical Mixed-Use (continued)	Standards should set a maximum big box retail building floor area (currently 60,000 square feet). Large parking lots for big box retail must be hidden from street view by retail liner buildings. **Height:** 1-4 stories. **Parking:** On-street parallel or diagonal, on-site parking access from rear shared alley only. **Frontage Types:** Storefront, front cafe seating, upper balconies, stoops and dooryards for residential.	All upper floor windows shall be vertically proportioned so that the overall window height is twice the width. Windows shall be generally aligned vertically, not randomly staggered. Shudders shall be of a size that appears to properly fit the window. **Materials:** Hardiplank permitted with extra space under each course; vertical or horizontal cedar siding, corrugated metal in wave pattern. Not permitted: Vinyl siding, glass curtain walls.	
Village Community	**Placement:** Depending on the building types, the front setbacks can vary between 8'-14'. Side setbacks can be 0' for attached building types, or minimum 5' for detached. Rear garages must be set back a maximum of 6 feet from 20' alley right-of-way, to provide for a 26' back up space. If the regulating plan indicates an alley, it must be built and it must be used for parking access. **Use:** Residential, limited office, limited workshops for clean manufacturing. **Height:** 1-3.5 stories. **Parking:** On-street parallel; access from rear shared alley only. **Frontage Types:** All frontage depths must wrap around street corners. Porches (8' minimum depth), stoops (3' minimum depth), decks, paved patio door yards are all permitted and encouraged.	**General notes:** Various housing types in the Village Community can be mixed, as long as they generally maintain building scales and proportions that are comparable and adherent to contextual patterns. Houses are designed as part of a community in which individual variations are within a range of agreeable scale, proportion and character. Row houses shall be no more than 5 houses in a row, and either can be articulated with a vertical division between each unit, or designed as one large house with multiple residences. Similarly, design of small vertically stacked apartment buildings and duplexes can appear as large single homes. Individual cottages grouped in clusters surrounding a common cottage court or green can be an alternative affordable type. **Roof Forms:** Simple equal gable roofs, sloped and sized gable roofs with dormers are permitted. Small scaled dormers in roofs can provide windows	**General notes:** Minimal required landscaping in commercial zones on private parcels to allow greater density and a more urban character. **Street Trees:** Trees planted in continuous planting strips between the sidewalk and curb. Closer spacing of trees in these higher density residential areas. Deciduous trees permitted as street trees. **Yard Surfaces:** Plazas and hardscape surfaces for courtyards and entry courts are encouraged but with greater integration of planting beds filled with ahigh percentage of indigenous plant materials. Limit use of grass lawn on private lots. Lawn provided in common park spaces. Yard enclosure: Wood fences with vertical or horizontal pickets or trimmed hedges required: maximum 36" high on front, sides and rear of lots with allowance for 50% trellis screening up to 72" on sides and back. Trimmed hedges (with or without embedded chain link fence) are permitted at same height as fences.

Packages of Implementation Measures	Building Standards	Architectural Standards	Landscape Standards
Village Community (continued)		for living spaces. Multiple complex roof forms and non-functional gables are discouraged. **Windows and doors:** Tall vertically proportioned doors and windows that are aligned vertically and horizontally as double hung windows or casements are encouraged; awning or slider windows are discouraged.	
Hillside Residential	**Placement:** The building type is predominantly residential as either detached single family or duplexes. The front setbacks can vary between 10'-20'. Side setbacks can be 0' for attached duplexes, or minimum 7' for detached. Rear garages must be set up to the alleyway with maximum 6' setback from 20' alley right-of-way, and a 26' back up space across the alley. If an alleyway is indicated in the regulating plan, it must be built and parking must be accessed by such. If no alley is provided, front access for on-site parking is permitted, but garage doors must be set back 10' from primary house face for a single car garage, or 20' for a two car. **Use:** Residential, home occupations, limited office. **Height:** 1-3.5 stories. Parking: On-street parallel; access from rear shared alley only, if alley is provided. **Frontage Types:** All frontage depths must wrap around street corners. Porches (8' minimum depth, stoops (3' minimum depth), decks, paved patio door yards are all permitted and encouraged	**General notes:** This more rural, single family area of the neighborhood allows more freedom of architectural expression, compared to the core of the neighborhood. Greater individuality and custom design in single family homes is appropriate for this zone.	**General notes:** Much higher required landscaping in Hillside Residential zone on private parcels in order blend with the surrounding rural forests and provide a more rural neighborhood character. Only indigenous planting materials permitted that would commonly be in the surrounding forests. **Street Trees:** Trees planted in continuous, wider planting strip between the sidewalk and street. Curbs in this zone are eliminated, allowing stormwater to infiltrate directly into planting strips. Closer spacing of street trees to create a lush canopy. More integration of conifers to blend with surrounding forest habitat. **Yard Surfaces:** Limited hardscape surfaces. Compacted gravel and wood chips for pathways and edges to provide less hardscape and more opportunities for rainwater infiltration. Grass lawns are not permitted on private lots. Lawn provided in common park spaces. **Yard enclosure:** Fences are not permitted except for chain link that is completely obscured

Packages of Implementation Measures	Building Standards	Architectural Standards	Landscape Standards
Hillside Residential (continued)			by untrimmed hedges: maximum 36" high on front, sides and rear of lots.
Employment District	**Placement:** The main entrance to the building must be oriented to the entry street with no parking between building and sidewalk on the street. **Use:** Employment **Height:** Maximum 4 stories. Parking: Must be located between or behind buildings, but not between street and primary building entrance. **Frontage Type:** None.	**General notes:** Since this Employment District is relatively remotely located, it can be a free design zone with limited requirements for architectural character. Simple corrugated metal siding is encouraged for both affordability and durability, as well as being a material that can create a consistent character. **Roof Forms:** Simple sheds vaulted, or flat roofs are encouraged. Gable roofs that appear residential are discouraged. **Windows and doors:** A minimum of 25% of a facade facing a street should be glazed with windows and doors. Instead of grouping the glazing in limited areas, these windows should be dispersed into simple, equally spaced, and vertically proportioned windows.	**General notes:** Edges and borders between parcels shall be landscaped with natural indigenous materials aligned in loose heed-like format, and can contain chain link fencing that is completely obscured by hedges: maximum 36" high on front, sides and rear of lots.

Signage

Retail signage greatly affects the character, quality and ambience of a neighborhood or district. The Nelscott Gap is conceived as a neighborhood with an internal retail main street to serve local walk-in residents as well as drive-by customers on US 101, who park once, then walk to shops and restaurants. Signage should present the entirety of the main street retail district, rather than Individual businesses calling out to highway passersby. The character of the buildings and the presence of people actively walking on main street are signs in themselves for businesses and eateries in the Nelscott Gap.

Signs on the fronts of stores should be relatively small and scaled to the passing pedestrian, cyclist and slow driver. Signs are either flat to the wall, fin signs projected from the wall, or awning signs. Maximum size of signs should be about six square feet. Internally lighted signs are not acceptable in the Gap. Hand painted signs are desirable.

Illustration by Laurence Qamar

Drawing 3. Signage example for Nelscott

Chapter 3 - Transportation

The character of streets and roads in Nelscott are a defining feature. More intensive development will concentrate at corners near US 101, building on the success of the historic Nelscott commercial area. This will help capture pass-by traffic as well as serve the local community.

Street Design

The goal in designing the Plan area network and street cross sections is to produce an attractive, transit-oriented, walkable neighborhood composed of vibrant centers linked by convenient transportation. The streets in Nelscott are first and foremost places for civic and community engagement, and secondarily connections for driving between destinations.

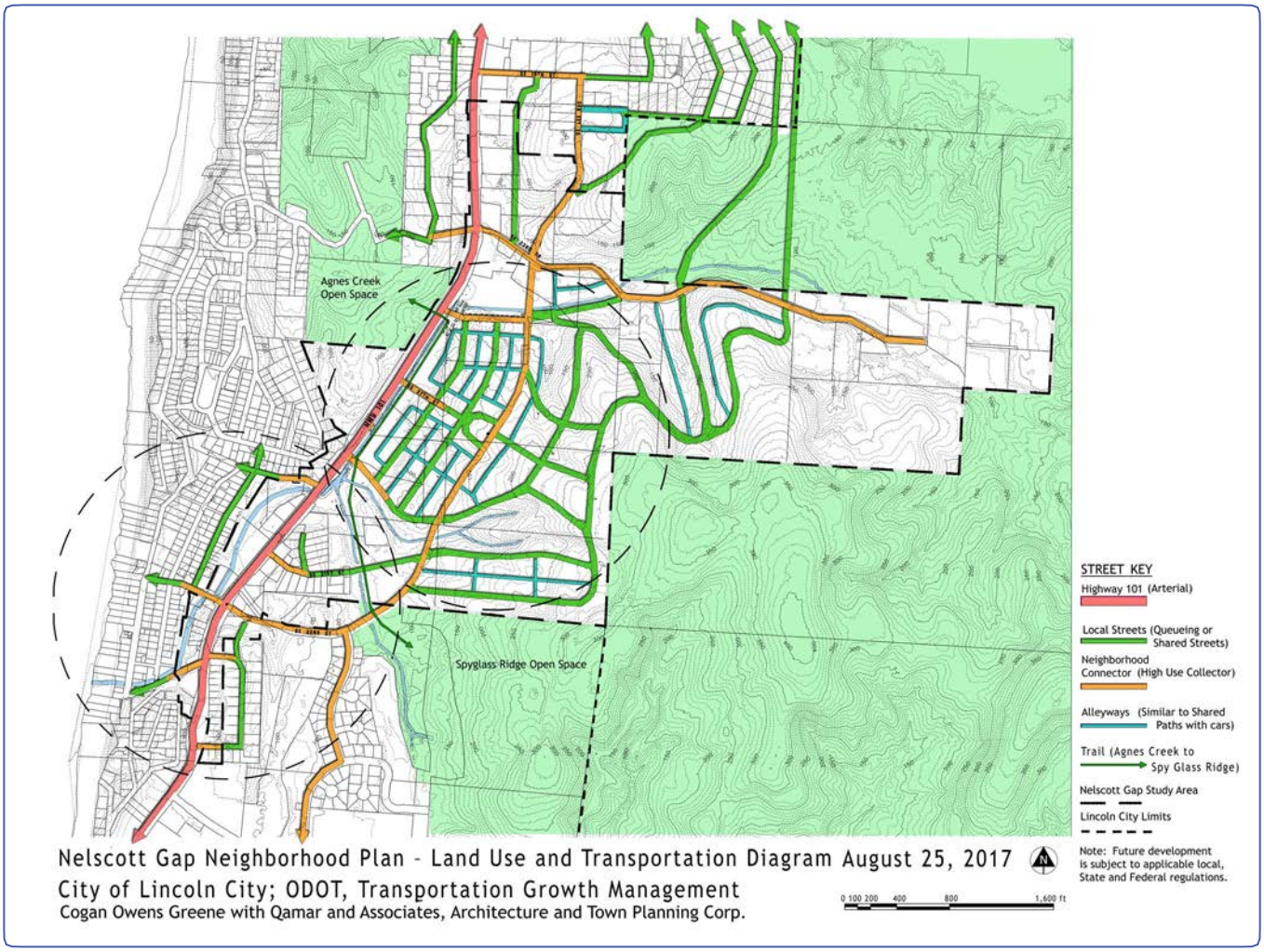
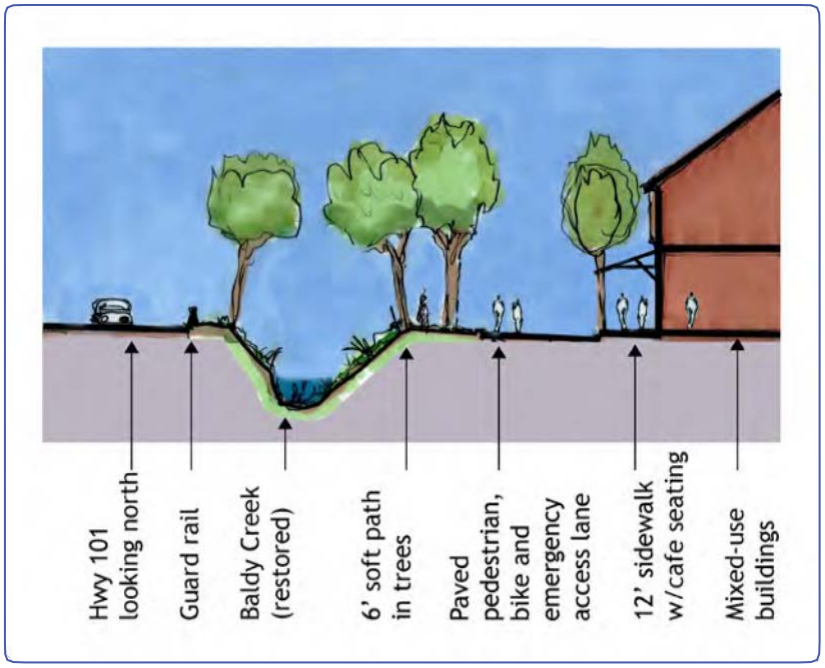


Figure 4. Street Diagram

Proposed Transportation System Improvements

Connectivity and small blocks are a hallmark of the Nelscott Neighborhood Plan with the intent that residents and visitors can drive in the most direct manner to their destinations. In this plan, speed is the determining factor. While US 101 provides a more efficient route for longer distance regional travel, all other streets in the new Nelscott Gap, including Foothill Boulevard, should be designed for no more than 20 miles per hour, reflecting the phrase "twenty is plenty." Narrowing the overall lane widths and including on-street parking lanes will compel drivers to slow down. Drivers naturally react to the presence of parked cars close beside the travel lanes.

All planned street sections for the Plan area are suitable for fire and other emergency access. A minimum 20' width for fire truck access is necessary for firefighters to spread their outriggers and hoses and freely move around the vehicle while deploying their equipment. Fire safety does not require a full 20-foot continual open driving surface for all streets and building access fire lanes. Roadways narrower than 20 feet are suitable if fire- fighting deployment points are within a maximum of 150' of the furthest extent of any building. Typically, intersections of street to street, streets to alleyways, and driveways to streets provide such access points.



Drawing 4. Cross Section for Baldy Creek Multi-use Path

Following are descriptions of the four basic street types identified for the Nelscott Gap Plan Area in Figure 4, above.

1. **Neighborhood Connectors (NC)** are slow speed streets generally parallel to US 101 that extend through the neighborhoods. Locals can use these streets to move between neighborhoods, home and school, work and shopping without relying only on US 101. The street section consists of two 10-foot travel lanes and two seven-foot parallel parking lanes with tree lined medians between the parking lanes, and minimum five- foot sidewalks along the edges of the right of way. Two options for street sections for Foothill Boulevard (Figure 5 below) include bike ways separated from the travel lanes either between the parked cars and tree median, or combined with the sidewalks for an extra wide shared walkway. Placing parallel parked cars on a different paving surface from the travel lanes and on a slightly elevated rolled or flush angled curb gives a visual impression of a narrower roadway even when no cars are in the parking lanes. Where side slopes constrain the right-of-way, the street design could eliminate bikeways. Alternatively, the design could eliminate the street trees, which are not essential to this neighborhood connector.

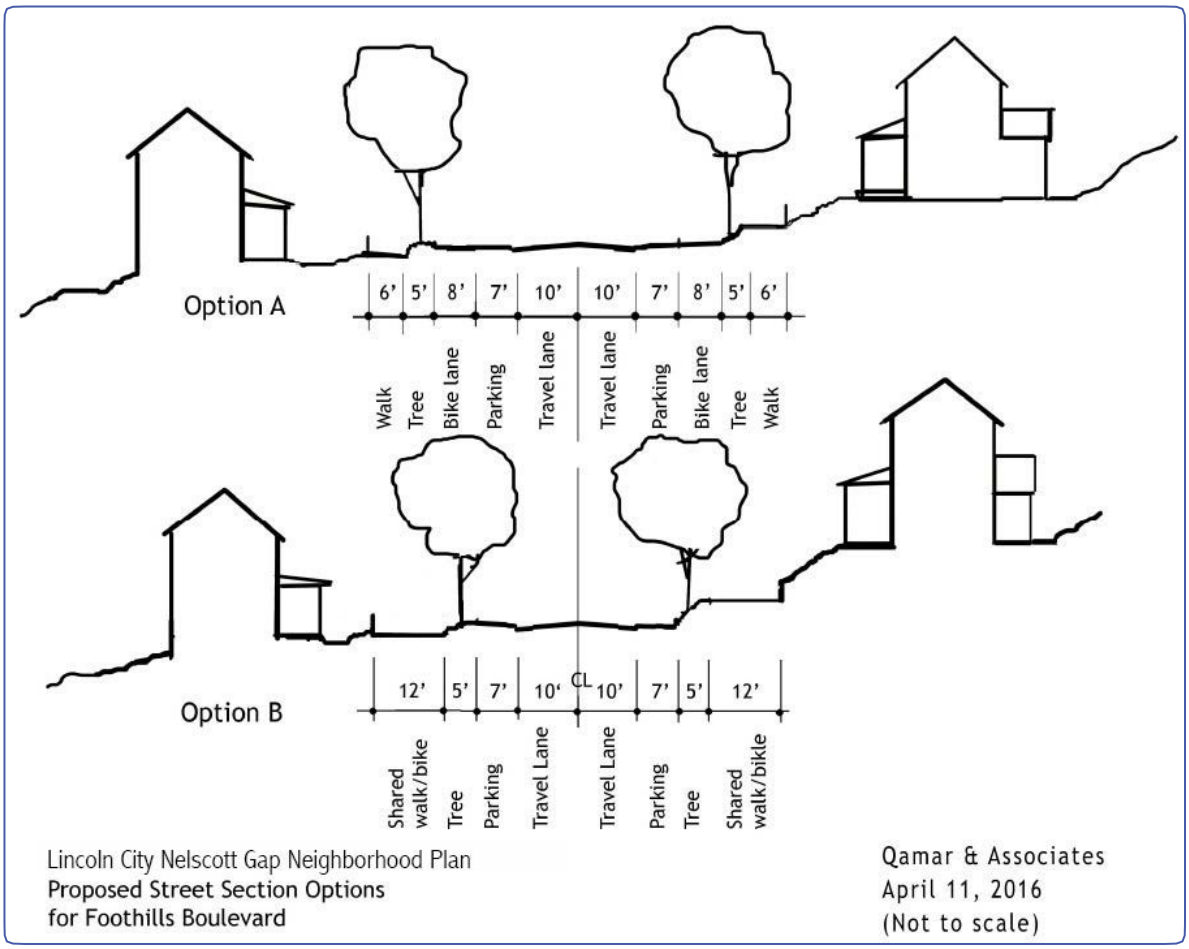


Figure 5. Proposed Neighborhood Connector Street Section

2. **Queuing Streets (QS)** are skinny compared to standard widths, and are primarily for local residential access. They should not dead-end in cul-de-sacs, but ensure a way out in case of a blockage. Queuing streets are typically between 24 feet-28 feet in width with two seven-foot parallel parking lanes and two-way travel on a shared drive between 10-feet and 14-feet wide. Two cars cannot pass in a space that narrow, but on queuing streets, one car pulls to the side into a parking lane or intersection and allows the oncoming car to pass. This common street type works throughout cities that typically have a lot more traffic than the quiet neighborhoods of Nelscott.

3. **Baldy Creek Multi-use Path (AL)** Access lanes along Baldy Creek and around the central park in the new neighborhood provide for emergency access as well as normal access and visibility. The design could incorporate elements of the pedestrian infrastructure to achieve the design standard for fire access (20 feet wide, 70,000- pound load rating). For example, the first several feet of the park's edge can be of compacted subsurface gravel for outrigger placement and operational space. For Baldy Creek, design could reduce pavement along the edge of Baldy Creek, or could include a short retaining wall with a hand rail for a more established pedestrian sidewalk overlooking the creek. The emergency access lane need not be continuous. Depending on the actual development plans, one or more on-site

corridors may provide alternate access to the creek side of buildings. The Baldy Creek Trail is a segment of the Head to Bay Trail. A cross-section is included in Drawing 5 and Figure 6.

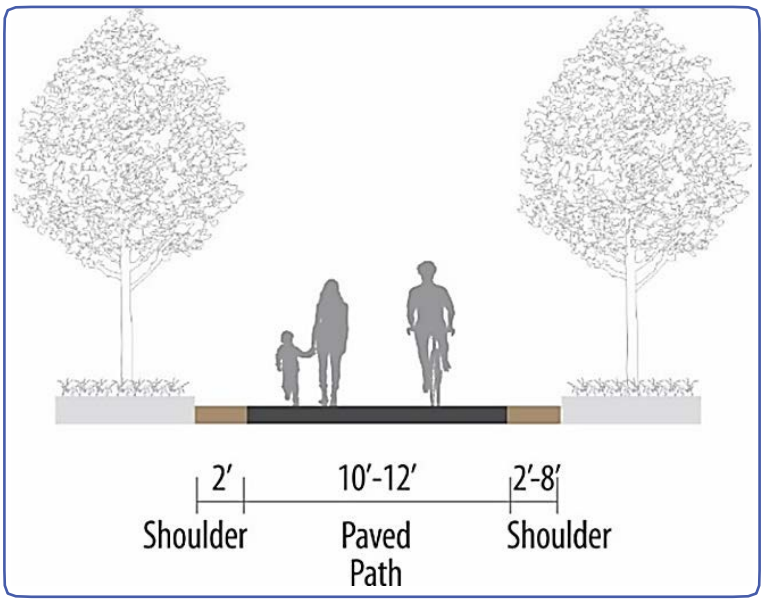


Figure 6. Baldy Creek Multi-use Path Section

4. **Alleyways** in the middle of blocks are mainly for rear service to lots. They should be at a slightly higher elevation than connecting streets, detailed with a ramp up at intersections to differentiate the two. The right-of-way (ROW) is no more than 20 feet (the minimum fire access width). The fire district should approve the use of alleyways for emergency access since they are full driving surfaces across 20 feet. Only 12 feet needs to be paved in the middle of the alley with a four-foot wide compacted gravel surfaces on each side. A 26-foot minimum back up space is all cars need to enter and exit garages doors. Setting the garage doors back six feet from the right of way will achieve that depth.

Implementation Strategies

Local streets in the study area will see expected two-way average daily traffic demand of less than 2,000 vehicles. With the recommended improvements in place and adoption of the recommended alternative mobility targets, the zone change proposed for the Nelscott Gap area would not significantly impact the transportation system. The Oregon Department of Transportation and Oregon Transportation Commission would need to approve the alternative mobility target.

Table 2. Recommended Intersection Improvements

		Mobility Target	2035 with Recommended Intersection Improvements			Recommended Intersection Improvements
			Volume/ Capacity	Delay (seconds)	Level of Service	
1	US 101/ SE 19th Street	0.95 v/c / 0.95 v/c	*	*	*	N/A
2	US 101/ SW Bard Road	0.95 v/c / 0.95 v/c	*	*	*	N/A
3	US 101/ SE 23rd Drive	0.95 v/c / 0.95 v/c	1.22**	86.8	F	Traffic signal; left turn lane on SE 23rd Drive at US 101; adoption of alternative mobility target.

Note: * Due to the mixed-use nature of the proposed Nelscott Gap zoning, a greater number of internal trips could be internal to the neighborhood, which would result in fewer trips on the highway than forecasted. Therefore, no mitigation at this location is recommended.

** Similar to the nearby US 101/ SW 32nd Street intersection, the mainline volumes (along US 101) are too high for a single travel lane at a traffic signal. Therefore, the same alternative OHP mobility target v/c ratio of 1.0 (an "at full capacity" condition) for eight hours per average weekday may be required for this intersection.

Recommended Street Functional Classification

Functional classification of streets in the Nelscott Gap Neighborhood Plan area, based on a hierarchy according to the intended purpose of each street, (from highest to lowest intended usage) includes: principal arterial, minor arterial, collector, and local streets. Roadways 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.

Given the City's standards, the projection of traffic volumes on area streets (at full build out), and overall circulation needs, recommended classification/reclassification is as follows:

- Maintain classification of SE 23rd Drive from US 101 to the entrance to the industrial area as a collector.
- Reclassify SE 23rd Drive within the industrial area east as a local street.
- Classify SE Foothills Boulevard (connecting SE 32nd Street to SE 23rd Drive) as a collector.

- Classify SE 32nd Street from US 101 to SE Fleet Avenue as a collector.
- Design all remaining streets in the Nelscott Gap area as local streets.

Walking and Biking

Residents in the Nelscott Gap area will be able to travel safely and efficiently between destinations via active transportation modes, such as walking and biking. A system of sidewalks, bikeways, and trails will provide access to key destinations such as parks and commercial areas—improving the overall health and livability of the neighborhood.

During the Nelscott Gap Neighborhood Plan process, transportation consultants compared the recommended street type designations with the City's standards and the updated system analysis information in the Lincoln City Transportation System Plan. Based on the overall circulation needs, recommended modifications in the designations for the following streets are to:

- Change SE 28th Street to low-use street from medium-use street between US 101 and the SE Foothills Boulevard extension.
- Change SE 23rd Drive to medium-use street from US 101 to the entrance of the industrial area.
- Design all remaining streets in the Nelscott Gap area as low-use streets, unless shown as otherwise in the TSP.

Sidewalks and Bikeways

Most of the existing streets in the Nelscott Gap area are not improved to urban standards and lack facilities for pedestrian and bicycle users. Recent improvements to US 101 through the study area include sidewalks between SE 23rd Drive and SW 32nd Street; however, the segments of US 101 north and south of the Nelscott Gap area currently lack adequate pedestrian and bicycle accommodations. The Lincoln City TSP recommended sidewalk and bike lane improvement projects along these segments, but these projects are not funded.

The Nelscott Gap study area has many stream corridors and the potential for many neighborhood and community parks. To facilitate future residents' travel to these scenic, natural, and recreational areas, the Plan envisions a high-quality network of low-stress pedestrian and bicycle facilities. All future streets will have sidewalks. Dedicated bicycle facilities will vary based on the street classification. Collector streets will have either bike lanes or shared use paths. Wayfinding signage should direct travelers to key destinations, such as parks and shopping. These signs would improve destination and route finding for both residents and visitors, encouraging exploration and activity.

In addition to meeting the community's desire (expressed in the recently adopted Walking and Biking Plan and TSP) to have increased opportunities for walking and biking, the pedestrian and bicycle facilities in the Nelscott Gap area should integrate with the existing trail and bikeway network, including bike lanes along SE 32nd Street, and existing trails in the Agnes Creek Open Space and Spyglass Ridge Open Space. These measures help ensure that future Nelscott Gap study area residents will be able to access goods and services without the need for an automobile, both within and outside of the area.

Trails

The trail network should connect residents to existing and future trails, as well as key destinations within and near to the Nelscott Gap Neighborhood Plan area, including the mixed-use area and employment district.

The TSP envisions a shared use path parallel to the new north to south collector, SE Foothills Boulevard, and an extension of SE Lee Avenue. This path would connect SE 19th Street to SE 32nd Street, providing an alternate walking and biking route to US 101 to the west. The TSP also recommends an east to west trail corridor, connecting the new enhanced pedestrian crossing of US 101 at SW 28th Street with the north to south trail along SE Foothills Boulevard.

The Baldy Creek multi-use path, adjacent to US 101, would connect existing trails in the Agnes Creek Open Space and Spyglass Ridge Open Space. This will include a landscaped greenway adjoining Baldy Creek with a shared-use path for pedestrians and bicycles. The shared-use path would also function as an emergency access lane when needed by the fire department. A minimum 20-foot roadway width is required to function as an emergency access lane and comply with the fire code.

Street Crossings

As a major street connection through the Nelscott Gap area, US 101 should be an asset to the neighborhood rather than a barrier. Recent improvements to US 101 added a third lane. Posted speeds are between 30 and 35 miles per hour. Pedestrians and bicyclists need safe and comfortable crossings in convenient areas for ease of access between the neighborhoods, public facilities, amenities, and commercial areas on both sides of the highway.

The traffic signal recommended for the US 101 intersection with SE 23rd Drive and pedestrian crossings at the SE 32nd Street (traffic signal), SW 28th Street (flashing beacon), and proposed in the TSP at SE 19th Street (crosswalk with median island) would provide sufficient crossing opportunities. No additional crossings of US 101 are recommended.

Transit

The Nelscott Gap Neighborhood Plan sets the stage for future transit, recognizing that the type and extent of service improvements will evolve over time. Specifics of transit service will depend on the actual rate and type of development, City and County resources and policies, and consideration of local options. The land use designations in the Nelscott Gap Neighborhood Plan area make transit a viable option in the future. Walking and biking accommodations and connections will enhance and support transit service along study area streets.

Street Design

The Lincoln City TSP includes the typical street cross sections for the Nelscott Gap Neighborhood Plan area. The City may choose to adopt different street standards for select streets within the area where they would better fit the vision for this community. Although the application of typical street cross sections will work in many situations, several future streets in the Nelscott Gap area need additional design treatments or are envisioned to be different from the typical cross sections. They are as follows:

- **The main north to south collector, SE Foothills Boulevard**, which is parallel to and east of US 101, is seen as a street that seamlessly integrates a street-side trail into its design (as recommended in the Lincoln City TSP), provides safe and comfortable multi-modal travel options, and includes high-quality pedestrian-scale design treatments that defines it as a neighborhood street. To balance mobility with safety and comfort, controlling speeds along this street will be important. A variety of design approaches can facilitate through-travel, but not attract cut-through traffic. Stop control, however, should be limited along the route, with minimum spacing of 1,000 feet between stop signs. The overall design of the street should serve to enhance the neighborhood and the adjacent residences and not serve as a barrier to those who will live on either side of it. The design process should carefully consider residential parking and access needs, including, at a minimum, an evaluation of how any proposed parking and access would impact trail users, and vehicular travel speeds and volumes. Lastly, it will be important to allow the alignment to shift in response to topography and stream crossings, as necessary.
- **The east to west collector, SE 23rd Drive**, travels through a portion of the mixed-use area in the Nelscott Gap area, but also supports heavy vehicle movement to the proposed employment district at the east end of the study area. As such, it will be important to control speeds along this street to make it comfortable for pedestrians and bicyclists, and accommodate heavy vehicle movement. The street may need wider lanes (12 feet) for the short distances where trucks must negotiate right turns without encroaching into adjacent or opposing travel lanes.

Summary of Transportation System Recommendations

Table 3 and Figure 7 summarize transportation improvements to support future growth and new development within the Nelscott Gap Neighborhood Plan area, including projects previously identified in the TSP. They include a mix of projects funded by a combination of sources such as the City, ODOT, and developers.

Not all recommended improvements need to be in place prior to developing land within the Nelscott Gap Neighborhood Plan area. Upgrade of the existing streets will be driven by the multi-modal access needs of the adjacent properties. Many of the street extensions, such as the SE 27th and SE 28th Street extensions, will be dependent on new development.

Table 3. Recommended Transportation System Improvements in the Nelson Gap Area

Project ID	Project Description	Project Summary	Primary Funding Source	Project Source
Projects Constructing or Improving Streets within the Plan area				
1	US 101 Improvements	Improve US 101 from SE 23rd Drive to SE 19th Street to include sidewalks and bike lanes.	ODOT	Lincoln City TSP Project P39
2	SE Lee Avenue Extension	Extend SE Lee Ave to SE 23rd Drive as a medium-use local street; install sidewalks along the west side and a shared use-path along the east side.	Developer/ City	Lincoln City TSP Project D14
3	SE Foothills Boulevard Extension	Extend SE Foothills Boulevard from SE 32nd Street to SE 23rd Drive as a medium-use collector street, and connect to stub streets east of US 101; improvement includes pedestrian and bike facilities.	Developer/ City	Modified version Lincoln City TSP Project D15 (modified project description)
4	SE 23rd Drive Upgrade to urban standards, segment 1	Improve SE 23rd Drive from US 101 to the entrance of the employment district as a medium-use collector street; improvement includes sidewalks and bike facilities; project should accommodate heavy vehicles.	Developer/ City	Modified version of Lincoln City TSP Project P41 (Change from low-use collector to medium-use collector)
5	SE 23rd Drive Upgrade to urban standards, segment 2	Improve the east portion of SE 23rd Drive within the employment district as a low-use local street; improvement includes sidewalks.	Developer	Modified version of Lincoln City TSP Project P41 (Change from low-use collector to low-use local)
6	SE 25th Street Extension	Extend SE 25th Street east from US 101 to SE 23rd Drive as a low-use local street; improvement includes sidewalks.	Developer/ City	New Project
7	SE 27th Street Extension	Extend SE 27th Street east to the proposed SE Foothills Boulevard extension as a low-use local street, and upgrade existing facility; improvement includes sidewalks.	Developer	Lincoln City TSP Project D16
8	Baldy Creek Path	Create a shared-use path along Baldy Creek.	ODOT	New Project
9	SE 28th Street Extension	Extend SE 28th Street east to the proposed SE Foothills Boulevard extension as a low-use local street, and upgrade existing facility; improvement includes sidewalks.	Developer	Modified version of Lincoln City TSP Project D17 (Change from medium-use local to low-use local)
10	SE 31st Street Extension	Extend SE 31st Street east to the proposed SE Foothills Boulevard extension as a low-use local street, and upgrade existing facility; improvement includes sidewalks.	Developer	New Project
11	US 101/ SE 23rd Drive Intersection Improvement	Install a traffic signal; include a left turn lane on the SE 23rd Drive approach to US 101.	Developer/ ODOT	New Project

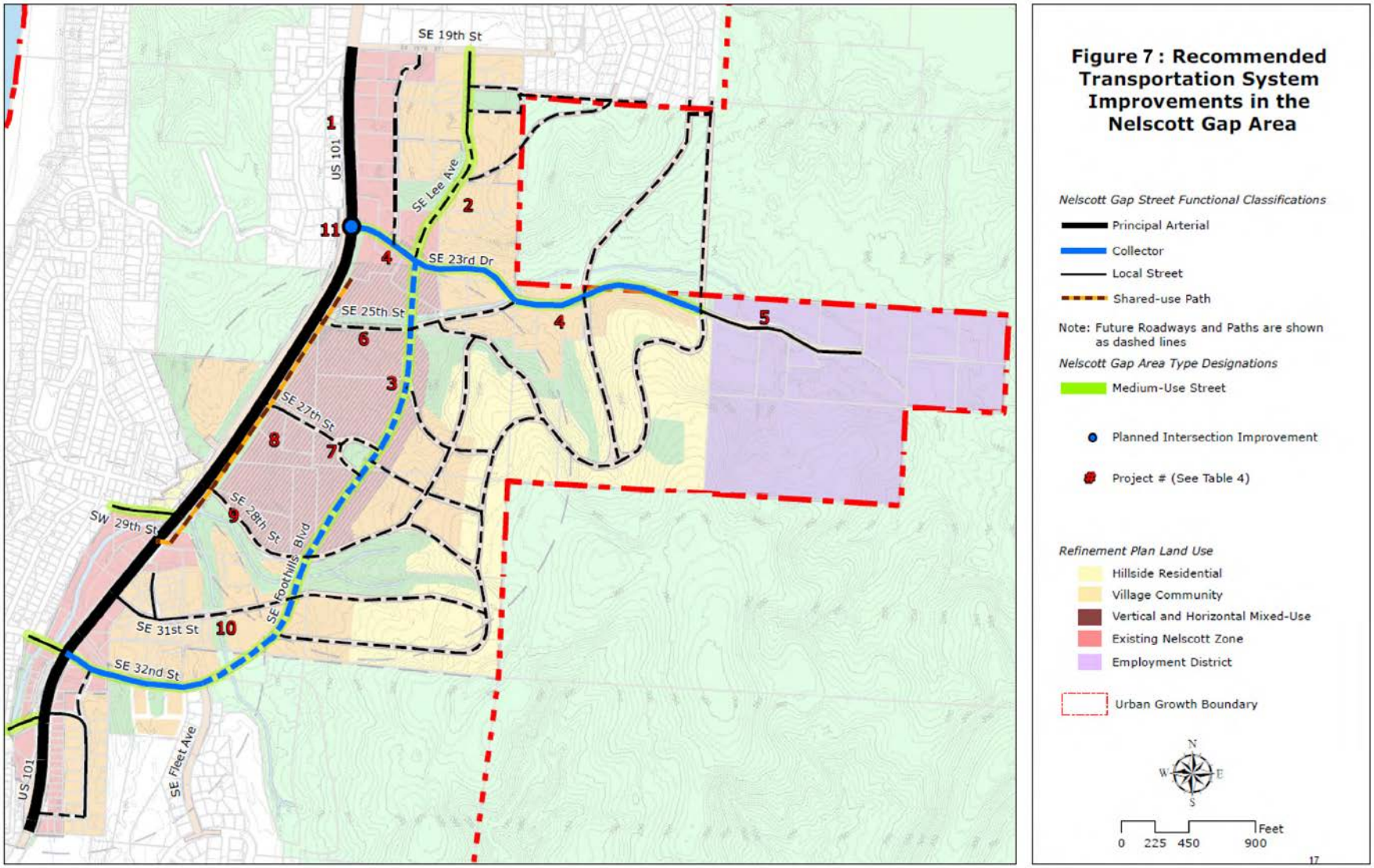


Figure 7. Recommended Transportation System Improvements

Recommended Transportation System Plan Amendments

The following provides a summary of the recommended amendments to the Lincoln City Transportation System Plan (TSP)to implement the Nelscott Gap Neighborhood Plan. The City should amend the TSP as soon as feasible to ensure recommendations are included in an adopted plan before future land use actions in the Gap area are proposed.

- The City should add the modified or new transportation system improvements in Table 3 to the TSP Aspirational Project List.
- These recommended street functional classifications for the Nelscott Gap area should update the classifications shown in Figure 12 of the TSP:
    - Maintain classification of SE 23rd Drive from US 101 to the entrance to the industrial area as a collector.
    - Reclassify SE 23rd Drive within the industrial area as a local street.
    - Classify SE Foothills Boulevard (connecting SE 32nd Street to SE 23rd Drive) as a collector.
    - Classify SE 32nd Street from US 101 to SE Fleet Avenue as a collector.
    - Change SE 28th Street to low-use street from medium-use street between US 101 and the SE Foothills Boulevard extension.
    - Change SE 23rd Drive to medium-use street from US 101 to the entrance of the industrial area.
- Use the same alternative mobility target recommended for adoption for the US 101/ SW 32nd Street intersection for the US 101/ SE 23rd Drive intersection. This alternative mobility target would allow for a volume to capacity (v/c) ratio of 1.0 (an "at full capacity" condition) for eight hours per average weekday.
- The City may choose to adopt new designs for the future streets in the Nelscott Gap study area that differ from the TSP optimum designs, including for SE Foothills Boulevard and SE 23rd Drive. This would require an amendment to the City's street design standards included in the TSP.
- The City should modify typical street cross sections to include a caveat that the side of the street adjacent to a trail may not need walking and biking facilities in addition to the trail. In such cases, the trail should generally be no more than 30 feet from the street, with no development between the trail and street.

Chapter 4 - Infrastructure

Water

Existing mains in US 101 provide the backbone for the Zone 2 distribution system in the Plan area. Improvements made to these water lines prior to recent ODOT US 101 enhancements ensure adequate service delivery well into the future. Improvements in the water system will be needed to provide potable and emergency water service to support planned development. The current water system plan identifies no major water improvements in the Nelscott plan area. Additional extensions to the Zone 2 water distribution system would be concurrent with development and at developer expense.

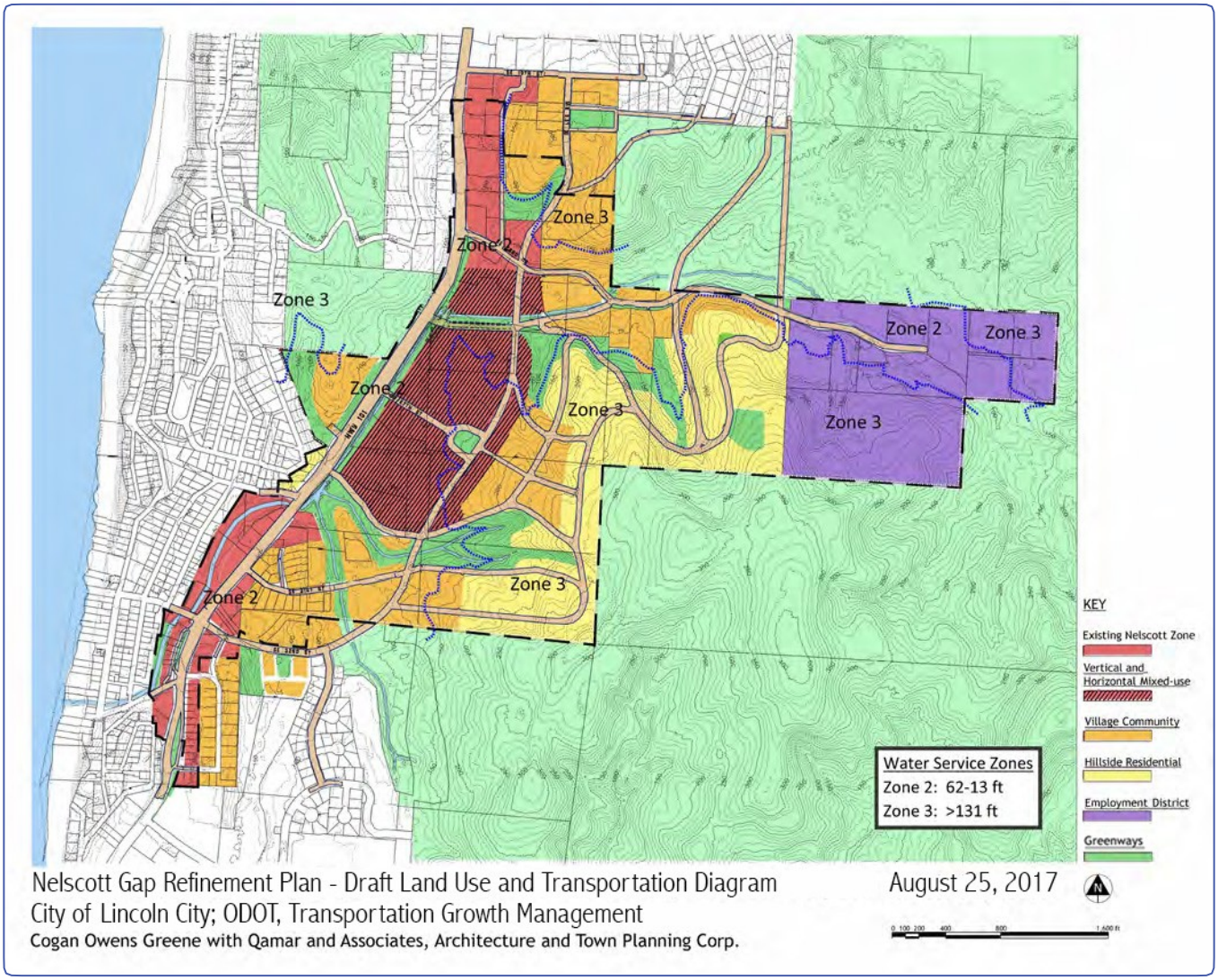


Figure 8. Water Service Zones

Water pressure Zone 3 includes more than 100 acres south of SE 23rd Street and east of US 101. Zone 3 also extends outside the Plan area to the north, northeast, and south. Zone 3 is above the 131-foot elevation limit for pressure Zone 2. The City's Water Capital Improvement Plan for Fiscal Years 2016-2026 proposed no projects in the Zone 3 area. A refinement plan/master plan update must establish a service solution for the land in water service Zone 3. The area likely will need a new water reservoir, a pump station, and transmission system investments.

An estimated 220 new dwelling units are forecast in the Plan area during the 20-year planning period. The portion of the Plan area that lies in the Zone 2 pressure zone has capacity for more than 600 dwelling units, as summarized in Table 4, below. The development potential in Zone 3 is greater still.

Table 4. Summary of Dwelling Unit Capacity by Zoning Designation in Water Zone 2

Land Use Zone	Acres	Average Density	# Dwelling Units
Vertical & Horizontal Mixed Use	17.6	22 Dwelling Units / Acre	388
Village Community	15.5	15 Dwelling Units / Acre	233
Totals	33.1		621

On this basis, the Zone 2 water service level has more than enough land available for residential use to meet forecast land needs for the next 20 years. Development of the area will not require Zone 3 water service until well beyond the 20-year planning horizon; however, development on a case-by-case basis above the Zone 2 service boundary is possible, with the installation of special infrastructure to meet domestic consumption and fire flow demand.

Water Master Plan Update

The City may wish to update the Water System Master Plan to establish the location and sizing for water storage, transmission, and distribution lines in the Plan area, particularly for Zone 3. When the City updates the 2004 Master Plan, a comprehensive, City- wide review also would identify need for pressure regulating or other extraordinary measures to serve Zone 3, and would provide guidance to developers for system extensions that may be eligible for SDC credit. The cost to prepare an addendum to the master plan is nominal and would be eligible for funding with SDC funds. Alternatively, the next update of the citywide water distribution model could include this analysis.

Sewer

Planned Sanitary Sewer Capital Improvements

Most of the "backbone" sanitary sewer system elements to serve the Nelscott area are in place or planned. For properties in the Plan area that abut US 101, a gravity sewer is in place along the highway between the 3rd Street pump station and the Nelscott Pump Station at SE 35th Street. This major interceptor sewer line is part of the citywide backbone sanitary sewer system that is critical to the function of the wastewater system. In 2006, the City upgraded the US 101 trunk sewer to a 24-inch line. The sewer now has capacity to convey wastewater flows at build-out conditions throughout this part of the city.

Ester Lee South Pump Station: In the part of the Plan area west of US 101, an existing gravity collection system conveys wastewater in a southwesterly direction to the Ester Lee North (EL-N) pump station located at SW 37th Street and Anchor Avenue, which is outside the Plan area. Infill development on the west side of US 101 will tie into this existing wastewater collection system at developer expense. Planned upgrades to the EL-N pump station will eliminate the need for the Ester Lee South pump station, which will be phased out of service after the EL-N improvements have been made. The EL-N project is scheduled for 2021 in the Sewer Capital Improvement Plan (CIP).

The Nelscott Pump Station at 35th Street near the highway diverts sewage from this area to the sewage treatment plant in Taft via the Nelscott force main. Planned improvements totaling $2.9M at the Nelscott Pump Station will increase pumping capacity and add a second force main pipe. These improvements are scheduled for the year 2026 in the sewer capital improvements plan (CIP). They provide capacity to convey all sanitary sewage from the Plan area east of the highway to the treatment plant.

Other Sanitary Sewer System Improvements

Most properties in the Plan area that are east of US 101 are not served by City sewer. The US 101 trunk sewer has capacity to intercept gravity sewers that are extended from the highway to the east. Most of this gravity sewer collection system would be extended on an incremental basis at developer expense. Because of a need to install oversized pipes at the lower end of the sub-basins that serve the upper part of the Plan area, over-sizing credits financed with system development charge (SDC) funds or through development agreements may be necessary to incentivize development near US 101.

Sanitary Sewer Refinement Plan

We recommend the City prepare a sub-basin analysis for the Plan area east of the highway when it next updates the sewer collection model or as a standalone spreadsheet analysis. The cost to prepare the refinement plan as well as the sewer mains that may be added to the City's capital improvement program based on the Plan are eligible use of system development charge (SDC) funds, but should not have a significant influence on current SDC rates. At the margin, the refinement plan represents a nominal cost compared with the overall sewer system capital planning and investment program financed with SDCs. Likewise, the service mains and collectors serving the sub-basins east of the highway should not have a significant impact on SDC rates, as these projects would be in line with current per-capita fees that finance sewer mains in other parts of the city.

Stormwater Facilities

The Plan area lies in the Baldy Creek drainage basin. In its current underdeveloped condition, stormwater is conveyed in open channels and culverts that discharge to Baldy Creek. Lincoln City's development regulations require that runoff from private development be managed in privately-owned and maintained detention facilities for release at pre-development rate. The storm water may be released to public storm drains constructed at the developer's expense.

Lincoln city recently updated its Stormwater Management (SWM) Master Plan. The Plan includes capital improvement program projects to be funded with utility fees and system development charges (SDCs). There are no projects in the SWM plan for the Nelscott area. Planned development may result in water quantity, water quality, and fish passage issues in the Plan area. For example, a segment of Baldy Creek east of US 101 flows through a buried culvert. Funding to improve this facility could come from utility fees, SDCs, developer contributions, or from a watershed enhancement grant. At this time, however, no adopted stormwater management capital projects are in the Plan area. Further study is needed to establish a solution for Baldy Creek and the other drainage systems in the Plan area. The greatest impact on the natural drainage ways in the Plan area will be from runoff from new public roads.

Parks and Greenways

To ensure the Plan area vision for access to parks and nature in future neighborhoods, the concept plan for the Nelscott Mixed Use Area shows two small neighborhood-scale parks. One is about a half-acre in the middle of the Plan area near the intersection of Foothills Boulevard and 27th Street. The Plan envisions that it will be an urban plaza/ central green type of park. Another is approximately 1.5 acres south of SE 23rd Street and west of the employment district. The location could change depending on the future development pattern. These parks are not called out specifically in the city's 2017 Parks and Recreation System Plan, but small pocket parks within walking distance of neighborhoods in general are a priority. The 2017 Parks and Recreation System Plan does specify new neighborhood parks near the Agnes Creek Open Space and in coordination and near the Taft schools.

The cost to develop these parks will be similar to the cost for developing other neighborhood parks. As such, these facilities are not expected to have an impact on park system development charges (SDC). The City may wish to acquire property for these facilities to ensure that land for them is available. Land acquisition could be financed either using Park SDC or could rely on the 35% open space requirement for large scale mixed use planned unit developments (PUDs). Additionally, financing some park improvements using Urban Renewal funds) is possible, if a new Nelscott Urban Renewal District is formed.

Greenway

Several undeveloped open space areas include tributaries to Baldy Creek and/or have steep slopes. One of these may include part of the Head to Bay Trail (see below). Private development in these open space areas may be constrained, especially if subject to flooding or slope stability hazards. The City may wish to consider density transfers or an open space acquisition bank to ensure preservation of these spaces.

Head to Bay Trail (multiple segments)

A series of interconnected trail improvements are envisioned in the Plan area as part of (or linked to) the Head to Bay Trail system. A variety of funding sources may be available to fund these improvements, including system development charges (SDC), state grants, urban renewal funds, public-private partnerships.

Three trail segments that have been identified within the Plan area, beginning in the northwest and working southeast.

- Segment 1- Northwest

An extension from the Agnes Creek Open Space trail system to US 101 at the City's new parking lot at SW 29th Street, where the Plan envisions an interpretive kiosk and pedestrian crossing to the east side of the highway.

- Segment 2 – US 101

A highly visible section of trail would begin at the east side of the Segment 1 highway crossing and extend south along US 101 for over a mile (approximately 6,000 feet). This trail would run along the top of bank of Baldy Creek next to the emergency access lane. Improvements may include paved and soft pathway, removal of non-native vegetation, native plantings, and pedestrian amenities. The design of this trail segment needs to coordinate with the multi-use path design at points where vehicles cross the trail alignment to access the highway. The improvement may be eligible for state and federal transportation grants.

The Head to Bay Trail is a priority in the 2016 Parks and Recreation System Plan, which could allow construction in the Plan area prior to other development.

- Segment 3 – Southeast

This segment begins at the south end of the multi-use path and extends southeasterly approximately 3,800 feet to connect with the Spyglass Hill Open Space trail system, which connects with the high school trail and the Taft trail.

Parts of this trail may be on-street to reduce costs. It may include a section through an open space corridor along a Baldy Creek tributary, if the City is able to acquire it or obtain a dedicated public access easement when development occurs. This trail may be a tsunami evacuation route if it provides the most direct access to high ground. Dependent on funding, as a tsunami and seismic lifeline route, the City may push to develop this segment sooner.

Financing for these trail improvements may include system development charges (SDCs) either from park system fees or from transportation system fees, depending on how these trail segments are portrayed in those system plans and on the related SDC fee methodologies. Other potential funding sources for trail improvements include public-private initiatives, state grants, developer contributions/exactions, and open space acquisition/banking programs.

Baldy Creek Enhancements (multiple segments)

These improvements would enhance stormwater conveyance, fish passage, and habitat in the creek and its major tributaries. A watershed enhancement plan could guide and prioritize this work. Funding for enhancements may come from ODOT mitigation, developer contributions, stormwater management funding, and Oregon Watershed Enhancement Grants sponsored by the Salmon-Drift Creek Watershed Council. Timing is dependent on sponsorship and development patterns.

Chapter 5 - Funding

Housing

For the Plan area, the highest priority appears to be the provision of workforce housing. If the City can buy down the cost of either the transportation (i.e., Foothills Boulevard), sewer (i.e., the upgrade in pipe size, crossing Baldy Creek, connection to the trunk line Highway 101) or water (i.e., Zone 3 improvements) in exchange for a certain number of units in a defined affordability range, the likelihood of more modestly priced workforce housing will increase. In addition, the discussion of form-based code techniques identifies packages of implementation measures by zoning type to provide greater diversity and density of attractive neighborhood-scale housing.

Several strategies recommended in the 2006 Economic Opportunity Analysis and Workforce Housing Needs Assessment could help to provide adequate housing for Lincoln City residents. Those recommendations include:

- Increasing housing density through a range of strategies, including:
    - Reducing minimum lot sizes, which now are 5,000 – 7,500 square feet for a single-family and 1,200 – 2,250 square feet for apartments;
    - Allowing accessory dwelling units in single-family zones, which the code has done since 2014; and
    - Increasing land zoned for multifamily residential development. In 2010, the city zoned 77 acres of property from county zoning to R-M, Residential Multi-family.
- Reducing system development charges (SDCs) for multifamily residential units.
- Fast-track permitting for affordable units.

Policies for the study area should reflect the implication of the second-home market and strategies to ensure housing suitable for year-round households.

Please see additional recommendations in the 2017 Housing Needs Analysis under separate cover.

Infrastructure

Financing Resources

Funding resources vary according to services or projects. Technical Memorandum #5 in Appendix E provides details for a variety of funding sources. The graphic below shows several sources for housing, transportation, water, sewer/storm and parks.

Table 5. Funding Resources

	Tax increment financing, special excise taxes, transient room (hotel/motel) tax, urban renewal/tax increment financing (TIF)
	System Development Charges (SDC), private contributions, ODOT, grants, developers, local improvement districts (LIDs)
	SDCs, utility funds, utility rates
	SDCs, utility funds, utility rates, developer contributions bonds, urban renewal/TIF
	SDCs, developer agreement, exactions, private contributions, ODOT mitigation, Watershed Enhancement Grants, open space/hazard area bank, other

Table 6. Nelscott Plan Area Public Facility Investment Summary

	Project Description	Type	Cost (1000)	Timing*	Funding Sources
1	Emergency Access Lane	Transportation	$1,000	Incremental	Developer
2	SE 23rd. Drive - Collector	Transportation	$7,370	Incremental	SDCs, private contributions, other
3	SE Foothills Blvd - Collector	Transportation	$5,984	Incremental	SDCs, private contributions, ODOT, other
4	Head to Bay Trail – Agnes Creek link	Transportation	TBD	Incremental	SDCs, grants, private contributions, other
5	Head to Bay Trail – US 101 link	Transportation	TBD	Phase 1	SDC, ODOT, other
6	Head to Bay Trail – 101 to Spyglass link	Transportation	TBD	Incremental	SDCs, grants, private contributions, other
7	Water System Refinement Plan	Water	$30-50	Within 5 years	SDCs, utility funds
8	Sewer System Refinement Plan	Sewer	$10-30	Within 5 years	SDCs, utility funds
9	Ester Lee N. Pump Station	Sewer	$1,350	2021	Sewer bonds/utility rates
10	Nelscott P.S./2nd Force Main	Sewer	$1,370	2017	Sewer bonds/utility rates
11	Nelscott P.S. /Force Main	Sewer	$2,900	2026	Sewer bonds/utility rates
12	Nelscott East Sewer Mains (interceptor link)	Sewer	TBD	Phase 1	SDCs, Developer contributions, bonds,
13	Foothills Central Green Mini-Park (Foothills and NE 27th)	Parks	$100	Development driven	SDCs, development agreement, other
14	Foothills Neighborhood Park (no location)	Parks	$200	Development driven	SDCs, development agreement, exactions
15	Open Space Areas (various)	Parks	TBD	Incremental	Private contributions, TDR, development limitations, other
16	Baldy Creek Enhancements	Parks	TBD	Incremental	ODOT mitigation, Watershed Enhancement Grants, other

* Phase 1 means during the current 20-year comprehensive plan horizon that ends in 2035. Phase 2 is expected to be after 2035

(This page left blank intentionally)

APPENDICES

APPENDIX A

MARKET ANALYSIS SUMMARY *(for full Market Analysis, see Appendix C)*

The goals stated here are based in part on the market analysis summarized below and available in its entirety in Technical Memorandum #2 in Appendix C. It builds off several other analytic efforts in the area including the City's 2006 Economic Opportunities Analysis (EOA), local population projections, the 2011 Workforce Housing Needs Assessment for Lincoln County, and the 2015 draft Lincoln City Transportation System Plan.

- Overall, Lincoln City and the Lincoln County region have experienced slower growth than the State of Oregon average. Though forecasts are cautiously optimistic with higher rates of annual growth forecast for the city and county areas, projections anticipate growth rates below that of state averages.
- The region does enjoy a relatively educated population and low unemployment rate. However, despite having a higher percentage of residents with a bachelor's degree or higher, the city has a lower median household income than Lincoln County or the State in part because of the industry distribution of employment in Lincoln City, skewed more toward the lower-paying industries of retail trade and arts, entertainment, and recreation, and accommodation and food services, rather than the relatively higher-paying industries of manufacturing, finance and insurance, and real estate and rental and leasing, and educational services, and health care and social assistance.
- The dependence on tourism of Lincoln City's economy creates a challenge because of the prevalence of second homes, which affects the housing market as competition of second-home buyers can have inflationary price impacts on homes otherwise available to workforce households.
- As noted in the Workforce Housing Needs Analysis, a large proportion of total households and particularly renter households are cost burdened at the prevailing prices. A greater proportion of occupied housing units are occupied by renters in Lincoln City than in Lincoln County or on average in the State of Oregon.
- The 2006 EOA included an analysis of the workforce supply in the Lincoln City region. The EOA found that the workforce supply in Lincoln County is in danger of experiencing notable deficiencies in experienced workers in their productive years. Combined with the lack of workforce housing, workforce supply issues will continue to be a challenge for the region.
- According to the 2006 EOA, Lincoln City had very few buildable industrial acres at the time of the last inventory. *The proposed development program will allow the planning area to help provide land for some of the employment uses in the region though the upcoming EOA will analyze the current situation.*
- The general market for development in Lincoln City suggests the study area could support a mix of residential and retail development.
    - A combination of single-family, duplex, townhouse, and other attached housing could combine with more standard multi-family units to create a mix

of housing types with a variety of price points, enabling the planning area to help satisfy the region's need for workforce housing.

- Similarly, with little commercial and industrial property available, the strengthening economy may support commercial and industrial development in the medium- and long-term. The City could assist these types of operations by supporting a shared or "incubator"-style development.

APPENDIX B

Public Process

Key Dates in the Public Process

Kick Off - May 2015

The project started off with the formation of a Project Advisory Committee (PAC) composed of 19 community members. The Project Management Team, composed of city and state staff and consulting team members, kicked off the project in May 2015, with a site visit and meeting. Consultants interviewed stakeholders, including several property owners who had large parcels in the project area.

PAC Meeting #1 – June 3, 2015

The project advisory committee provided input on the vision, goals and objectives for the Plan.

Images from the Community Design Week

PAC Meeting #2 – August 6, 2015

The Project Advisory Committee reviewed draft technical memos covering existing and proposing future conditions and the vision and goals.

Community Design Week Summary - September 30 - October 3, 2015

Design week included several events that allowed the public to weigh in on the vision and goals for the area and participate in hands on planning led by national urban designerJames Rojas. In the design studio, Staff engaged PAC, planning commission, and city council members, property owners, neighbors and students in the drafting the land use and planning diagram for the Nelscott gapneighborhood.

PAC Meeting #3 - October 3, 2015

Members and others considered lessons learned from Community Design Week and provided feedback on land use and transportation elements.

PAC Meeting #4 - December 10, 2015

The committee reviewed and refined the land use and transportation elements.

Joint Planning Commission/City Council Presentation - December 10, 2015

Members reviewed and discussed land use and transportation elements.

PAC Meeting #5 and City Council Presentation - April 19. 2016

The committee reviewed land use, transportation, costs and funding and implementation strategies.

Stakeholder Interviews - May 14, 2015

Stakeholders were interviewed and responded to questions.

Public Event #2 - May 24, 2016

On May 24, 2016, the project team held a public event at the Eagles Lodge to inform the public about the proposed land use and transportation system elements of the Draft Nelscott Gap Neighborhood Plan, sharing information in both English and Spanish. Discussion focused on the proposed implementation measures. Approximately 25 people attended. Following the presentation, participants and other could submit feedback in person and online. Following the public meeting, the consultants and project management team worked with ODOT for several months to resolve questions about the street network and get the project back on track. The consultants, ODOT representatives, and the project management team met in December 2016 to agree on the best approach.

Public Event #3 - May 24, 2016

On May 24, 2016, the project team held a public event at the Eagles Lodge to inform the public about the proposed land use and transportation system elements of the Draft Nelscott Gap Neighborhood Plan. Information was provided in both English and Spanish. The event objectives included discussing the proposed implementation measures and gathering feedback. Approximately 25 people attended. Following the presentation, a comment form was provided both in person and online to obtain feedback from interested stakeholders.

Comment Form Responses - Abbreviated Summary

Fifteen people responded to the questions on the comment form. Over 50% of the respondents were property owners in the study area. Nearly 40% were Lincoln City community members, two were residents in the study area and one was a business owner. All rated the draft plan elements as on the right track, giving either a 5 or 4 on a five-point scale.

Feedback on the comment forms focused on employment and job opportunities and the potential impact of construction on existing businesses. Other respondents asked planners to consider housing, parking needs, and north/south traffic options east of Hwy 101. Some mentioned egress options in case of a tsunami, traffic concerns, and the importance of maintaining the character and ecology of the Nelscott neighborhood.

PAC Meeting #6 – May 10, 2017

Committee members review the revised land use and transportation diagram, and changes to Technical Memos 4, 5 and 6.

Joint Planning Commission/City Council Presentation - June 5, 2017

Consultants returned to meet with property owners and to present the revised technical memos and land use and transportation diagram to the city council and planning commission.

Adoption Process-August 2017

The Planning Commission and City Council held public hearings to take testimony. Staff revised the Plan accordingly.

Cogan Owens Greene

Engaging people to create and sustain great communities.

320 WOODLARK BUILDING
813 SW ALDER STREET
PORTLAND, OREGON 97205-3111
503.225.0192
FAX: 503.225.0224
www.coganowens.com

Integrated Services in Planning, Sustainability and Community Engagement

APPENDIX C

Existing and Future Conditions-

Final Technical Memorandum #2

DATE: November 16, 2015

TO: Deb Nicholson, City of Lincoln City and
Project Advisory Committee Members

FROM: Kirstin Greene, AICP and Jill Statz

CC: Bonnie Gee Yosick, Rich Catlin, John Bosket, Laurence Qamar, Steve Faust

RE: Nelscott Refinement Plan

Final Memorandum #2: Existing and Future Conditions

INTRODUCTION

Memorandum #2 summarizes existing and future conditions in the Nelscott Gap (study area) of Lincoln City in order to establish the context for planning land use and transportation alternatives over the next twenty years. This memo describes land use and constraints, and provides an assessment of the study area's existing and future conditions for development. In addition, the memo analyzes the likely level of market support for potential residential, commercial and industrial activity in the study area.

The information in this memo is based on a review of previous planning efforts and documents, conversations with City staff and the results of stakeholder interviews. To the extent possible, the assessment of future conditions in this memorandum describes conditions 2035, the same future year used in the development of the City's Transportation System Plan (TSP). The memorandum includes the following sections:

7/21/17 Note: An updated Economic Opportunities Analysis, Housing Needs Analysis, and Buildable Lands Inventory, was adopted by the city council in June 2017.

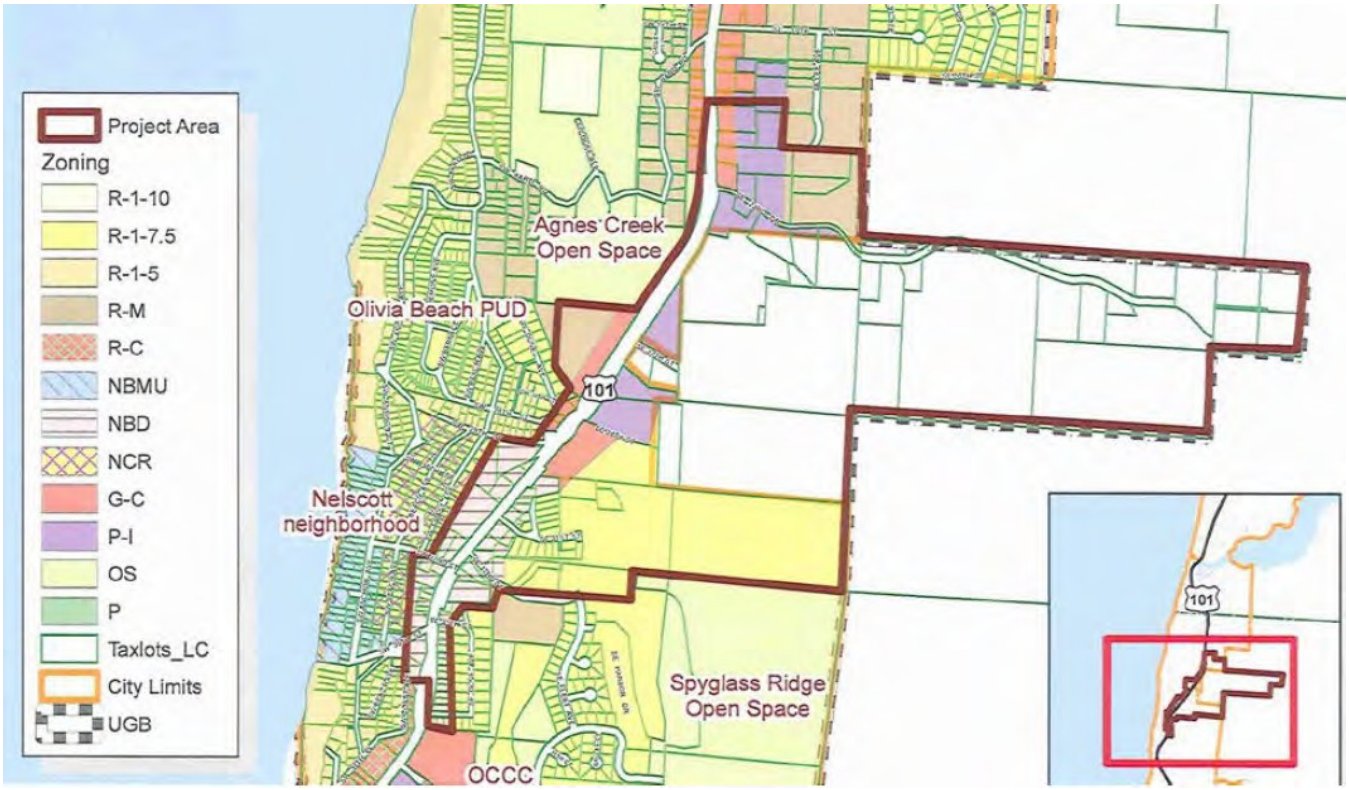
Cogan Owens Greene is a limited liability company

LAND USE

Study Area by Use, Designation and Zoning

The study area consists of predominantly vacant and under-developed land east and west of US 101 from south of SE 19th Street to south of SW 35th Street. The study area lies entirely within the City's urban growth boundary (UGB), but a portion is outside the Lincoln City limits.

Figure 1. Project Study Area by City Zoning*



Source: City of Lincoln City

**Land outside of city limits is zoned at the County level as PI (planned industrial)*

The study area is comprised of 123 tax lots totaling approximately 240 acres. The area is a mix of commercial, residential and planned industrial zones (Table 1). These zones reflect categories of development patterns designated in the City's Comprehensive Plan for residential, commercial, industrial and environmental growth.

Table 1. Study Area by Zoning and Designation

Zone	*City Acreage*	*County Acreage*	Total Acreage*
Nelscott Business District	*13.65*		13.65
General Commercial	*21.81*		21.81
Low-medium density Residential (R-1 to R-1-5)	*40.5*	*21.99***	62.49
High density Residential (RM)	17.41		17.41
Planned Industrial	*20*	*128.46*	148.46

* *Due to overlapping zones, the acreage sum is more than the study area's total acreage.*

** *All County residential acreage is R-1*

Of the nearly 60% of the study area designated as planned industrial, the majority lies outside City limits. In addition to commercial and residential uses, the study area also encompasses the entire Nelscott Business District (NBD).

The Nelscott Business District (NBD) is a zoning subdistrict of the Nelscott Plan category, designated by the City's Comprehensive Plan. As stated in the NBD zoning ordinance, the intent of this subdistrict is to "encourage and enhance the traditional character of the Nelscott commercial core along US 101 and to concentrate the businesses in a pedestrian-friendly manner."[1] This subdistrict emphasizes providing retail, commercial and personal services for the neighboring residents and visitors.

Land use and design standards ensure that development projects in this zone support the following objectives:

- Integration and functionality of land uses (what does this mean?)
- Connecting Nelscott to the ocean
- Respecting neighborhood transitions
- Designing for climate
- Aesthetics and context-sensitive design
- Balancing durability and affordability

Design standards place special emphasis on continuing the pattern of eclectic design elements that characterize the existing Nelscott strip along US 101. The city intends for the standards to implement the community's vision of a cohesive streetscape with a safe and comfortable pedestrian environment. The standards codify the city's preference for mixed-use projects over single-use development. The code encourages corner properties, particularly those in gateway locations along US 101, to incorporate signature architectural features. Pertinent development standards in the NBD include a maximum lot coverage of 90% and a minimum landscaped area of 10%.

1 City of Lincoln City, Zoning Ordinance Chapter 17.34.020

Land Use Designation and Policies by District[1]

Nelscott Plan District provides for the integration of residential, commercial, and recreational uses in a well-planned, pedestrian-oriented, mixed-use environment in the Nelscott area. The district provides maximum flexibility in land use that combines predictability and efficiency in the land use approval process while protecting the unique character of Nelscott.

General-Commercial District (G-C), accommodates [a] wide range [of] retail commercial uses which attract shoppers from the community or the larger market area. The District extends along US 101. For greater visual quality, the city's commercial design standards promote excellence in design and landscaping.

Planned Industrial District (P-I), accommodates commercial use, including more intensive and large-scale enterprises, and "light" industrial uses. To create attractive settings for business activity, the district emphasizes landscaping, site and building design, signing, and access to the highway.

A Medium-Density Residential District (R-7.5) allows a minimum lot size per dwelling unit of 7,500 square feet and density of four to five dwelling units per acre.

A Single-Family Residential District (R-5) allows primarily single-family dwellings in quiet residential neighborhoods in which all structures have approximately the same height and bulk and lots are 5,000 square feet or less.

A High-Density Residential District (R-M) allows the widest range of housing types at a high density. Such areas are located in areas with good access to major thoroughfares and to shopping facilities. Special land use regulations ensure adequate open space and off-street parking accommodations in order to avoid congestion and to provide an attractive environment.

1 Lincoln City Comprehensive Plan, 1998.

Assessing the past and planning for the future in the Nelscott Gap

A walkable communities strategy is key to planning for future development in the Nelscott Gap. A walkable neighborhood provides places to live, work, shop, learn, play and gather together within a safe, convenient and attractive community. Communities established before the advent of the automobile were walkable by nature, as is evident in countless older towns and villages along the Oregon Coast. In particular, the Nelscott neighborhood is among the most walkable in Lincoln City's "String of Pearls." For over half a century, Nelscott has been a walkable community in which distances are short between homes, shops, restaurants, theaters, schools and the ocean.

Over the past decade, the newest neighborhood in Nelscott, Olivia Beach, was developed with a new park, sidewalks along the old Nelscott shopping string, pedestrian passages through blocks, alleyways for mid-block parking, front porches overlooking the street and traffic calming measures.

In order for a community to inspire its residents to access their daily activities on foot, it is essential that streets maintain three basic characteristics: safety, convenience and visual interest.

- Safety – For a street to feel safe to pedestrians, vehicles must slow down. Rick Hall, a revered traffic engineer who promotes pedestrian safety, is often quoted as saying "twenty is plenty." Above 20 MPH, pedestrians and cyclists tend to have increased fatality rates in auto/ped crashes. Below 20 MPH, drivers and pedestrians are much more able to see one another and react accordingly.
- Convenience - When local shops, jobs, schools, entertainment, and transit are within a ¼ mile walk, people are more willing to access their daily needs on foot. If it's much further than that, most people tend to use their car.
- Interesting environment – A street filled with people, porches, windows, attractive buildings, shop fronts, street trees create vibrancy. People enjoy watching other people, not blank garage doors lining residential streets or fields of parking blocking the view of store fronts.

Land Use Constraints

This section evaluates land conditions within the study area in terms of adding new walkable neighborhoods to the existing Nelscott community. Conditions in the study area that may constrain development include slopes, soils, waterways, wetlands, protected habitat and utility corridors.

The Nelscott study area is nestled in the hillside topography of Nelscott that is typical of Coast Range foothills. US 101 follows a lower elevation corridor where SE 23rd Drive climbs easterly into the lower reaches of the Baldy Creek watershed. Existing development patterns are in the lowest elevations; upslope areas are heavily wooded. Numerous minor drainage- ways have incised the hillsides creating a series of minor ridges extending into the study area. Elevations range from 60 to 350 feet. Slopes range from 5 to 25 percent, in a few places approaching 40 percent. Slopes are predominantly west and east facing along the highway corridor and north facing along SE 23rd Drive.

The State of Oregon previously studied the susceptibility to landslide triggered by earthquake, using published topographic and geologic conditions as a base.[2] The state did not conduct field investigation. In general, an "Intermediate" risk of landslide triggered by earthquake exists on steeper slopes in the study area. The analysis was not site specific. The study notes that a landslide may occur if the necessary conditions are present, such as unusually heavy

2 Landslide Susceptibility Map of the Siletz Bay Area, Coastal Lincoln County, Oregon (DOGAMI, 1995).

or prolonged rainfall or over-steepening of slopes, but the study did not define the conditions for this area that would trigger an event.

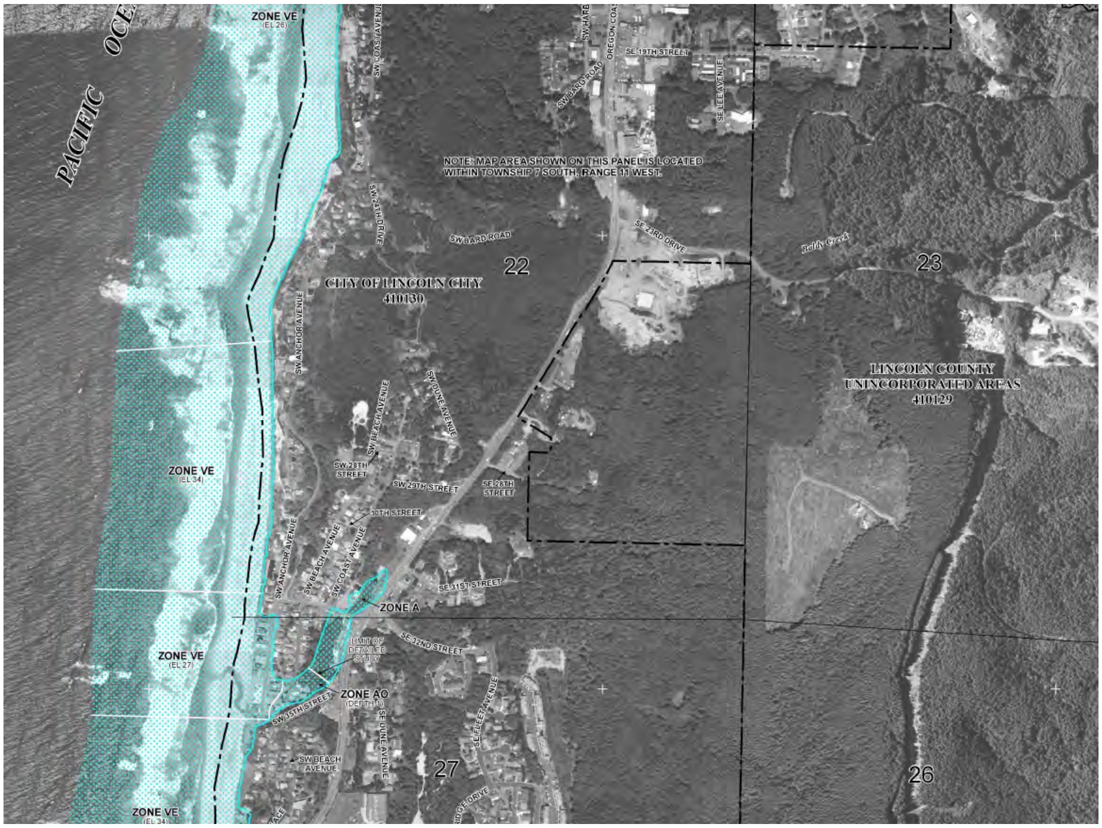
DOGAMI has compiled landslide data in the Statewide Landslide Information Layer of Oregon (SLIDO), a mapping tool that presents the best currently available mapping of landslide features throughout Oregon. Data was derived from published geologic reports and geologic hazard studies that range widely in accuracy, scale, and completeness of information. It is not intended for site-specific determinations, but helps identify vulnerable areas that may require additional planning and investigative considerations. Within the study area, SLIDO shows a 60-acre area identified in 1973 and 2004 reports located south of SE 23rd Drive. Additional research by a trained professional would provide a better understanding of the nature and significance of this feature.

The Nelscott study area occupies a portion of the one square mile Baldy Creek drainage basin, which extends outside the UGB into forestlands. The creek enters the UGB near the east end of the study area and parallels SW 23rd Drive to US 101, then extends under US 101 at SW 35th Street via a perched culvert through a concrete retaining wall, from where it flows into the ocean. Development has greatly modified Baldy Creek, channelizing or diverting into culverts approximately one-half of the overall length and two-thirds of the length within the study area.

Baldy Creek is a fish bearing stream, according to the Oregon Department of Fish and Wildlife (ODFW). During replacement of the Baldy Creek culverts, ODOT conducted fish salvage prior to dewatering. The biologist found adult and juvenile cutthroat trout, Pacific giant salamander, juvenile lamprey (species unknown, but likely brook), and crayfish. In ODOT's communication with the Newport ODFW office it became clear that ODFW views Baldy Creek the same as any other fish bearing stream, despite its degradation due to development and alteration. While this has proven frustrating at times, it is difficult to argue given the presence of native fish species, some of which are somewhat intolerant of degraded water quality. That tells us the stream is actually in relatively decent shape with potential for further restoration and improvement as an ongoing asset for the Nelscott community.

The Federal Emergency Management Agency (FEMA) has designated a special flood hazard area along Baldy Creek west of the highway to the ocean (Figure 2). Localized flooding may occur elsewhere in the study area, but does not require mitigation, according to current city or FEMA regulations.

Figure 2. Special Flood Hazard Area, Lincoln City 1998



Source: FEMA Flood Insurance Rate Map 410130 0001 C, revised August 17, 1998.

Recent Tsunami Evacuation Route maps for Lincoln City prepared by the State of Oregon illustrate the extent of tsunami hazard areas along the coast and into the study area.[3] Distant tsunamis likely would inundate a narrow band along the coast, primarily beaches and very low-lying areas. Local tsunamis generated from near offshore earthquakes will push farther inland to higher elevations. Within the study area, the Local Tsunami Evacuation Zone crosses the highway in a swath from SW 29th Street to SW 35th Street and reaches an estimated elevation of 52 feet on the east side of the highway.

Wetlands associated with drainage-ways are common throughout the study area. A reconnaissance-level investigation using aerial photos, soils and topographic maps, and limited groundwork identified conditions usually attributed to wetlands along Baldy Creek and many of the minor drainage-ways (Figure 3). Follow up groundwork is necessary to confirm the presence and extent of wetlands that are subject to state and federal regulation. The City of Lincoln City has designated some wetlands in the study area as “Significant” in part for their fish and wildlife habitat values. No published information is available regarding protected species in the study area.

3 DOGAMI, Revised 04-22-13.

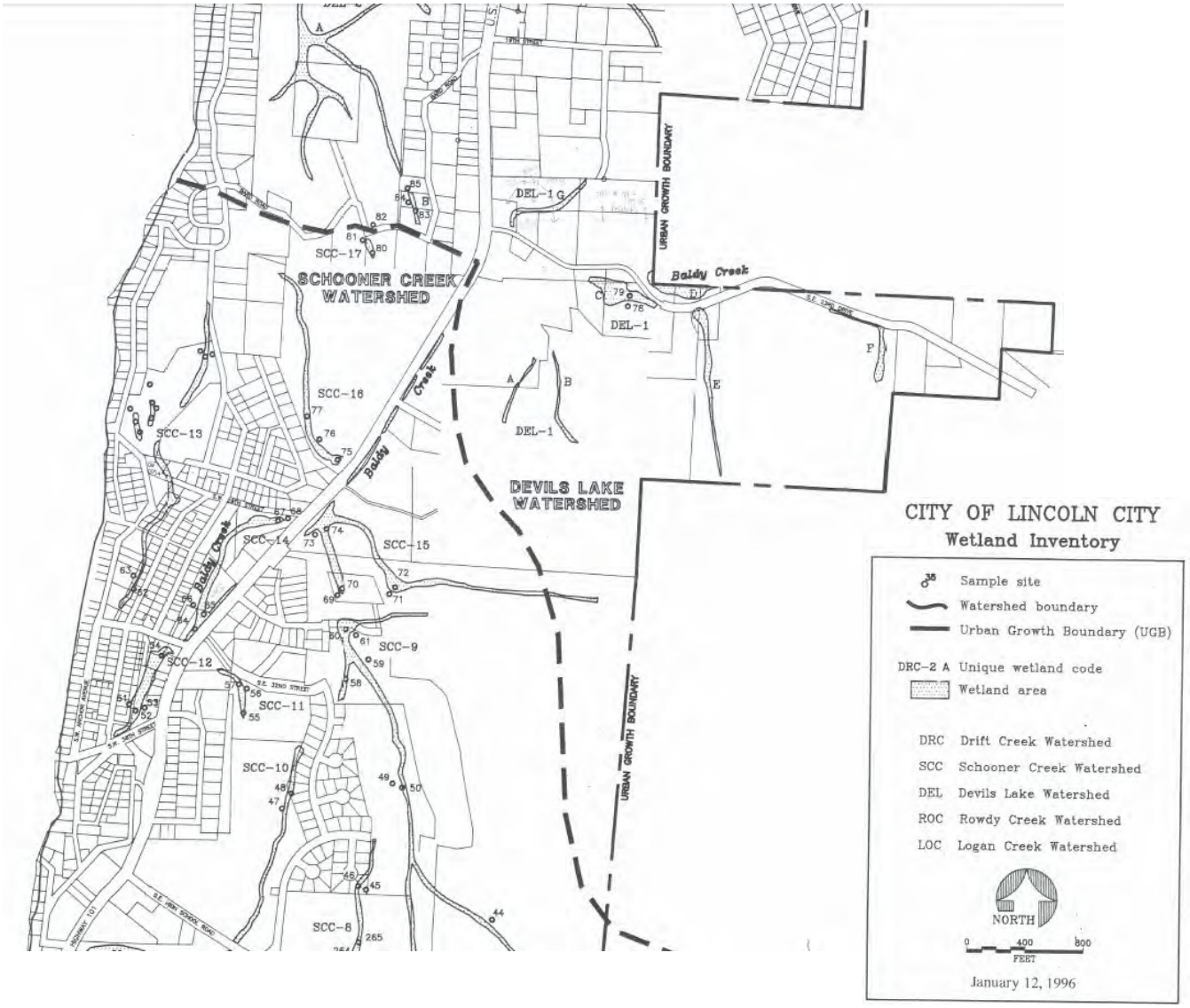


Figure 3. Local Wetland Inventory, City of Lincoln City, 1996

Source: City of Lincoln City Wetland Inventory (SRI/Shapiro, 1995).

Habitat conditions in the study area have changed since settlement began. Early surveyors observed a closed upland forest typical of the Central Oregon coast in the study area.[4] These conditions prevail at the upper elevations of the study area, but forest management practices have modified them.

The Lincoln City municipal water system supplies water to portions of the study area. The19th Street Reservoir just north of the study area supplies water to services from sea level to 160 feet. Approximately 30 percent of the study area is situated above that elevation range. The distribution network provides service to existing development in the study area, except for the industrial cluster at the east end of SE 23rd Drive. A water main extends approximately halfway (0.3 mile) up SE 23rd Drive.

4 "Historic vegetation of the Pacific Coast, Oregon, 1855-1910" (Hawes et al; 2008)

The Lincoln City municipal sewage system serves a portion of the study area. A gravity collection system serves existing development in the study area except for properties on SE 23rd Drive. The Ester Lee South station pumps to the wastewater treatment plant in Taft.

Most of the study area relies on the natural drainage channel of Baldy Creek to convey runoff to the ocean. Public and private stormwater conveyance pipes and ditches serve existing development.

Utility corridors typically follow transportation corridors. Where they divert from transportation corridors, utility corridors may affect the use of land. Within the study area, a 100-foot powerline easement traverses north and south across four parcels near the east end of SE 23rd Drive.

Assessing opportunities for development

The study area offers opportunities for developing a walkable community. Environmental and infrastructure conditions, however, may constrain particular development patterns. The variation in elevation from 60 to 350 feet, with steep slopes ranging from 25% to as much as 40%, are challenging in laying out streets to meet current road standards. Steeply sloped streets, if feasible and necessary are an advantage for slow driving speeds, which is highly desirable for pedestrian and bike safety. The numerous drainages flowing down the hills toward Baldy Creek and US 101 pose challenges at several stream crossings, necessitating culverts or even bridges.

One of the clearer objectives will be to traverse the study area north and south in at least one new street running parallel to US 101. A parallel street to the highway would be desirable, creating a quieter neighborhood connector that is more conducive to slow vehicular speeds, walkers and cyclists that would buffer adjoining uses. The intent of a new parallel street to the highway is not to function as a highway bypass that attracts thru traffic off the highway. The intent is to provide local neighborhood residents an alternative to the highway as their only way in and out of their neighborhoods.

To capture local and regional shopping activity, location of new retail along the highway would benefit from visibility and ease of access. The goal, however, would not be to further expand the single-use commercial shopping center zoning prevalent along much of the highway that runs through the City, but to concentrate a mix of residential, retail and civic uses in walkable centers. These mixed-use centers would work best if they straddled both sides of the highway in a traditional "main street" format, similar to the Taft or Ocean Lake Pearls. Steep slopes and wetlands in the study area pose challenges to achieving a two-sided main street.

The Nelscott Strip provides a unique alternative retail format with the narrow divider and on-street highway parking that is protected by the newly established side-median. This side "slip lane" is reminiscent of numerous multi-way boulevards in places like Berkley, CA, Willamette Drive in West Linn, OR, and Parisian boulevards. Slip lanes and multi-way boulevards enable higher speed traffic to move through a district where retail shops and residences can face directly onto the boulevard and feel protected along these more pedestrian-oriented edges. This slip lane frontage, which is already succeeding in Nelscott, could potentially be replicated along other portions of US 101 in the study area.


New York City


Washington, D.C.

On the east side of the highway, the Baldy Creek corridor at first appeared to pose some challenges and opportunities to the slip lane concept along US 101, but upon further inspection in the Design Week, the slip lane concept became increasingly supported by citizens, officials and the consulting team. The Creek runs close up along the eastern edge of the road in what appears to be an artificially excavated channel. Further east of the Creek is a small setback in front of several existing buildings. Further study, can determine whether a narrow slip lane could be "slipped" between Baldly Creek and those buildings, allowing for a parallel lane to the highway and additional opportunity for new mixed-use activity.

MARKET ANALYSIS

The following section provides a market overview and insight into existing supply and potential demand for different land uses. These findings reflect current development conditions, although further review of economic and demographic forecasts for the region may provide a better understanding of emerging trends.

Population Trends

From 2000 to 2014, Lincoln City and the Lincoln County region have experienced slower growth than the State of Oregon average. Combined with the recent recession, Lincoln City's population growth averaged 0.41 percent from 2000 to 2014, just more than Lincoln County's annual average growth of 0.37 percent. Coming out of the recession, the State of Oregon Office of Economic Analysis expects statewide annual growth of 1.11 percent. Lincoln City's Transportation System Plan also shows increased growth in Lincoln City and County-wide, with annual growth averaging 0.79 percent to year 2035 for the County and slightly higher for the City, as shown in Table 1 below.

Table 2. Historical, Estimated and Forecast Population: Lincoln City, Lincoln County, and State of Oregon, 2000-2035

	2000	2010	2014	AAC 2000-2014	2035	AAC 2014-2035
Lincoln City	7,590	7,930	8,036	0.41%	9,522	0.81%
Lincoln County	44,519	46,034	46,890	0.37%	55,364	0.79%
State of Oregon	3,431,100	3,831,074	3,962,710	1.03%	4,995,200	1.11%

Sources: U.S. Census SF 1 (2000 and 2010), Portland State Population Research Center (2014 estimates), Lincoln City Transportation System Plan, Technical Memo #3 (Lincoln City and Lincoln County Forecasts), and State of Oregon Office of Economic Analysis Long-Term Oregon State's County Population Forecast, 2010-2050 (State of Oregon).

Sources and Other Documents

This market analysis builds off several other analytic efforts in the area. The team reviewed the City's Economic Opportunities Analysis (EOA) and local population projections to understand the implications for commercial and residential development in Lincoln City and the Nelscott area. Population and employment growth will continue to drive development opportunities in the medium to long-term and the themes and findings of the 2006 EOA are still relevant today. One major theme of the EOA is the relative dependence of tourism for the local economy.

The Workforce Housing Needs Assessment for Lincoln County, prepared in 2011, provides an in-depth analysis relating to availability of housing for workforce households and housing cost burden of those households. This study uses a planning horizon of 2035 to coincide with the planning horizon for the Lincoln City Transportation System Plan (May 2015 draft).

Other sources of information include the US Census Bureau for data from the 2000 and 2010 censuses, the American Community Survey, Economic Census, and other census surveys and programs, the Portland State University Center for Population Research and Census for annual population estimates, the State of Oregon Office of Economic Analysis for long-range population forecasts, and the City's own data on building permits, business licenses, and other information.

Despite having a higher percentage of residents with a bachelor's degree or higher, the city has a lower median household income ($33,808) than Lincoln County ($42,365) or the State ($50,229). Both the city and county had a lower unemployment rate than the State in 2013.

Table 3. Employment, Education, and Median Household Income: Lincoln City, Lincoln County, and State of Oregon, 2013

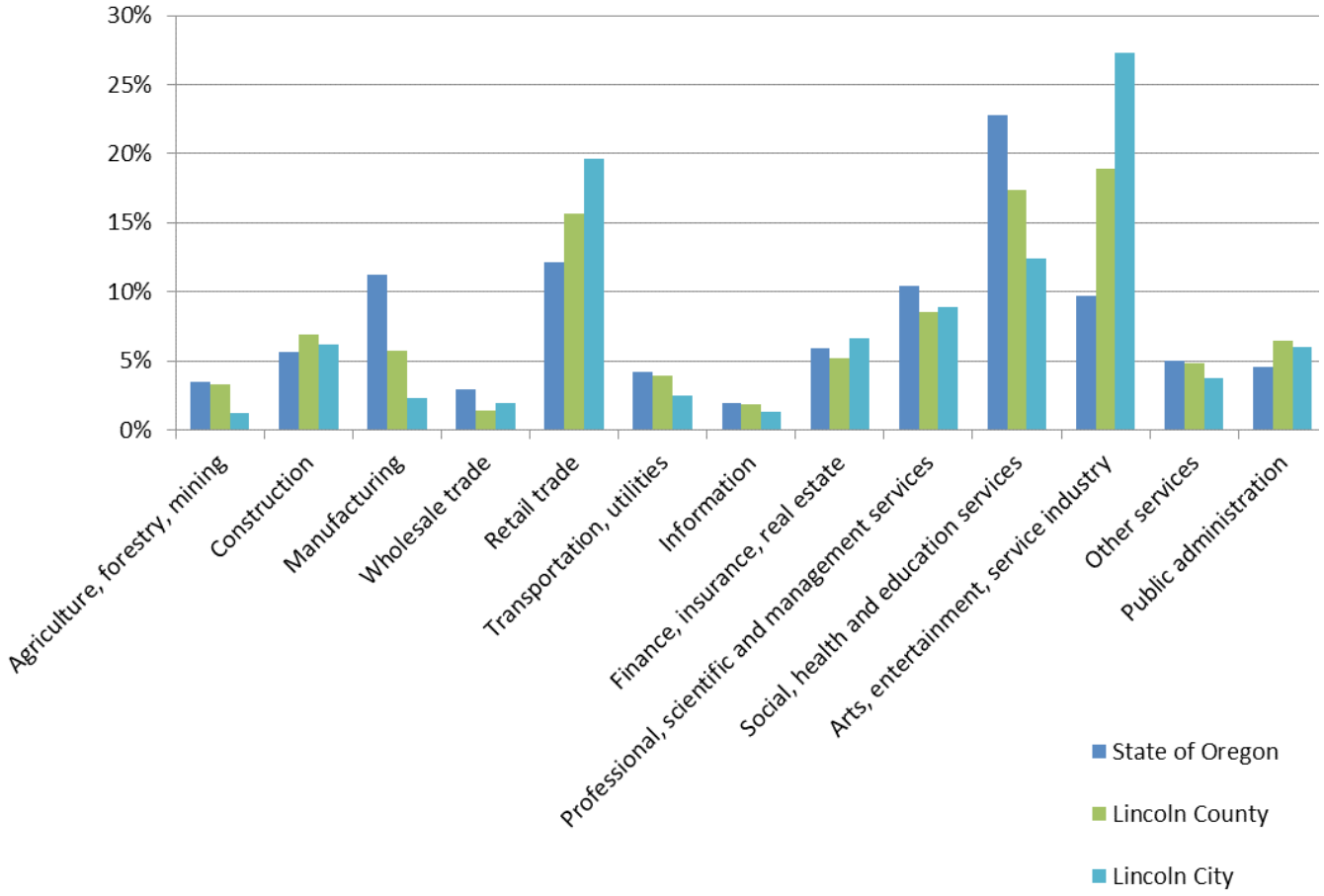
	Employed	Unemployment Rate	Population with Bachelor's Degree or Higher	Median HH Income
Lincoln City	3,564	6.88%	10.2%	$33,808
Lincoln County	19,870	5.82%	4.8%	$42,365
State of Oregon	1,736,894	7.12%	7.6%	$50,229

Source: 2009-2013 American Community Survey 5-Year Estimates, Table S1501

Part of the reason behind the lower household income is the industry distribution of employment in Lincoln City. A higher proportion of Lincoln City employees work in the lower-

paying industries of retail trade and arts, entertainment, and recreation, and accommodation and food services, whereas a smaller proportion work in the relatively higher-paying industries of manufacturing, finance and insurance, real estate, rental and leasing, educational services, and health care and social assistance (Figure 4).

Figure 4. Employment by Industry, 2013: Lincoln City, Lincoln County, and State of Oregon



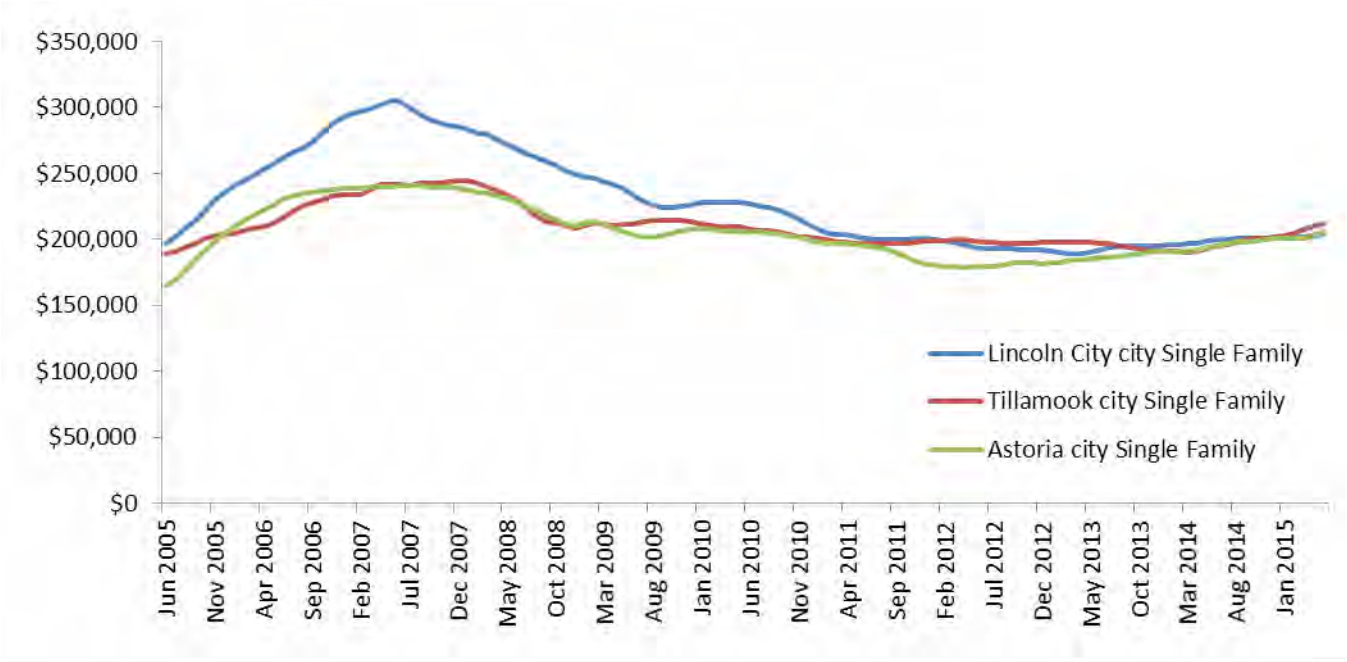
Source: 2009-2013 American Community Survey 5-Year Estimates, Table DP03

Housing

In most regions, population and employment growth drive development opportunities in the medium to long-term. The relative tourism-dependence of Lincoln City's economy creates additional challenges because of the prevalence of second homes, which affects the residential market as competition of second-home buyers can have inflationary price impacts on homes otherwise available to workforce households.

Figure 5 shows the median home prices of Lincoln City, Tillamook, and Astoria for June 2005 to May 2015. Each of the coastal communities experienced a sharp increase in prices between 2005 and mid-2007, with Lincoln City's median prices rising the highest among those communities. After declining from 2007 to 2010, all three coastal communities' median prices for single-family homes have stabilized at just over $200,000.

Figure 5. Median Single Family Home Prices: Lincoln City, Tillamook, and Astoria, 2005 to 2015



Source: http://www.zillow.com/lincoln-city-or/home-values/, http://www.zillow.com/tillamook-or/home-values/, http://www.zillow.com/astoria-or/home-values/, accessed June 30, 2015

As noted in the Workforce Housing Needs Analysis, a large proportion of total households and particularly renter households are cost burdened at the prevailing prices.

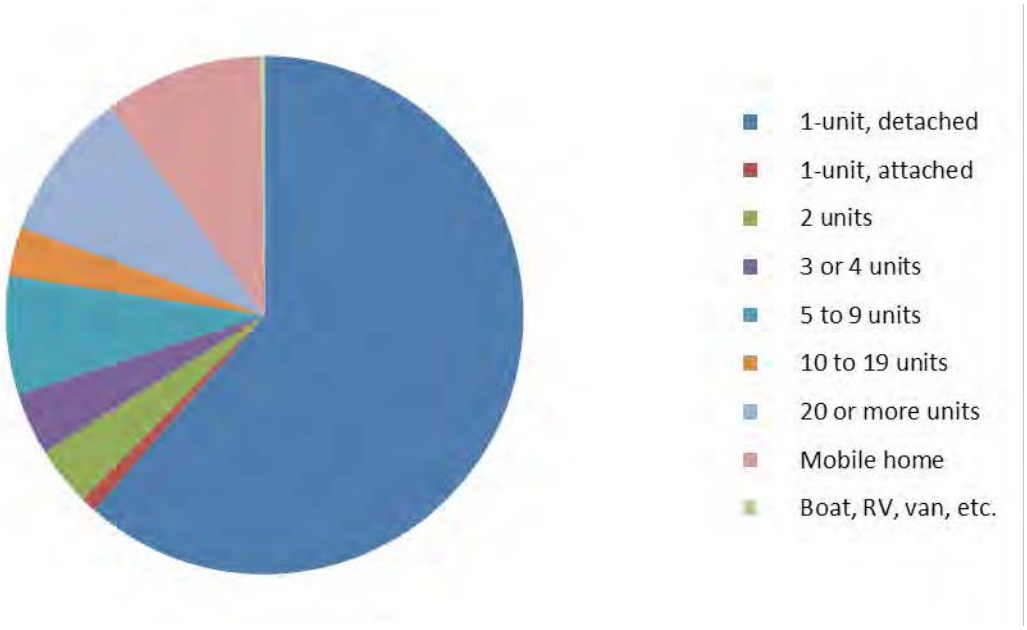
A greater proportion of occupied housing units are occupied by renters in Lincoln City than in Lincoln County or on average in the State of Oregon, as shown in Figure 6.

Figure 6. Housing Tenure: Lincoln City, Lincoln County, State of Oregon, 2013

Source: 2009-2013 American Community Survey 5-Year Estimates, Table DP04

Like the rest of Lincoln County and the State, most of the housing stock in Lincoln City is single-family, but also includes a range of attached and multi-family housing and mobile homes, as shown in Figure 7.

Figure 7. Housing Units in Structure, Lincoln City, 2013



Source: 2009-2013 American Community Survey 5-Year Estimates, Table DP04

From the 2009-2013 American Community Survey, the Census Bureau estimated 5,526 housing units in Lincoln City according to the Census Bureau's estimate. Since 2013, the City has issued permits for an additional 43 units, for an estimated total of 5,569 units, as shown in Table 4 below.

Table 4. Housing Units, Lincoln City, 2013

Units in structure	
1-unit, detached	3,396
1-unit, attached	52
2 units	207
3 or 4 units	216
5 to 9 units	409
10 to 19 units	168
20 or more units	516
Mobile home	549
Boat, RV, van, etc.	13
Total	**5,526**
2014 permits issued	31
2015 permits issued thru May	12
2015 Estimated Total Number of Housing Units	**5,569**

Source: 2009-2013 American Community Survey 5-Year Estimates, Table DP04

An estimated 1,864 (a third) of those housing units were vacant according to the census. A portion of those vacancies are likely second homes or vacation rentals. The City issued 486 permits for vacation rentals, plus an additional 151 as nightly rentals, and 483 permits as monthly rentals. In some cases, the permits are for multi-unit rentals.

Table 5. Housing Units Utilized for Transient Use

Category	Number
VACATION RENTALS	486
RESIDENTIAL MONTHLY RENTAL	483
NIGHTLY RENTAL IN COMMERCIAL ZONE	151

Source: City of Lincoln City Business Permit System, June 16, 2015.

A review of multifamily rental housing provided by Real Estate 100 revealed a wide range of rental units and rents, ranging from studio and one-bedroom apartments that rent for as low as $400 a month to three-, four-, and five-bedroom detached single-family homes that rent for as much as $1,600 a month. Very few rental properties are available near Nelscott. Real Estate 100 provided information on two vacant units, summarized in the table below.

Table 6. Apartments Near Study Area

Address	Units	Number of Units	Rents	Square Footage	$/Sq.Ft.	Year Built
SW 32nd	1-bedroom	2	$695	919	$0.76	1931
	2-bedroom	1	$770	919	$0.84	
	Total/Average		$720	919	$0.78	
SE Dune Ave	1-bedroom	1	$695	960	$0.72	1991
	3-bedroom	1	$1,025	1466	$0.70	
	Total/Average		$860	1213	$0.71	
Total/Average			$776	1,037	$0.75	

Source: Mark Neighorn, Real Estate 100, May 2015.

All these units were fully leased with no vacancies were noted in Real Estate 100's listings at the end of June 2015. According to the Census Bureau's American Community Survey estimates, overall vacancy rates were five to seven percent in 2013, which—as noted by the Workforce Housing Needs Assessment—may not be low enough to spur development of additional multi-family rental units without additional support or encouragement through city programs or policies.

Several strategies recommended in the 2006 Economic Opportunity Analysis and workforce housing needs assessment could help to provide adequate housing for Lincoln City residents. Some of those recommendations included:

- Increasing housing density through a range of strategies, including:
    - Reducing minimum lot sizes, which now are 5,000 – 7,500 square feet for a single-family and 1,200 – 2,250 square feet for apartments;
    - Allowing accessory dwelling units in single-family zones, which the code has done since 2014; and

- Increasing land zoned for multifamily residential development. In 2010, the city zoned 77 acres of property from county zoning to R-M, Residential Multi-family.

- Reducing system development charges (SDCs) for multifamily residential units.
- Fast-track permitting for affordable units.

Any policies under deliberation for the study area should consider the implication of the second-home market and strategies to ensure housing suitable for year-round households.

Commercial/Industrial

One challenge with assessing the commercial and industrial market in Lincoln City is the availability of data. A Buildable Land Inventory conducted with the Economic Opportunity Analysis (EOA) in 2006 has been updated by an Economic Opportunities Analysis, Housing Needs Analysis, and Buildable Lands Inventory, which the city council adopted in June of 2017. As of July 2017, it appears that current land availability is very similar to what was available at the time of this market analysis. Specifically, many small lots (274 lots of less than one acre aggregating a total of 47.7 acres), more limited medium lots (13 lots between one and five acres in size), and only one single large lot (larger than 5 acres).

City staff does maintain a current list of for-sale and for-rent commercial and industrial properties (Appendix 1). At this time, this list contains 26,570 square feet of commercial space for sale in six different properties, all on US 101. The properties range from a 2,360-square-foot retail/office space to an 8,200-square-foot restaurant. One listing includes a 4,000-square-foot warehouse space. The remainder is classified as restaurant or retail, with no listings classified as office-commercial or industrial/warehouse space. The rental listings include 29 properties totaling just over 88,000 square feet, with the bulk of the properties ranging on the small end, including many small (less than 1,000-square-foot) office spaces and a very small (224-square-foot) retail space. Only two of the properties listed are more than 6,000 square feet. Availability and adequacy should be confirmed by a qualified real estate professional.

According to the 2006 EOA, Lincoln City has very few buildable industrial acres. *The last EOA reports 8.9 net buildable industrial acres and 43.2 net buildable acres of commercial land inside the city, with an additional 41.12 acres of industrial land and no commercial land within the UGB.*

City staff provided business license information for a total of 2,436 licenses issued by the City in 114 city categories. This includes the "vacation rentals" (code 1111) with 486 licenses, and "residential monthly rentals" (code 7020) with 483 licenses, and "nightly rental in motel C [commercial]-zone" (code 7025) with 151 licenses. Excluding these residential and transient-residential categories, the city issued 1,316 business licenses for commercial activity, including 130 building contractors, 51 restaurants (plus another 26 classified as "food, drink, deli, bakery"), 51 commercial rentals, 46 property management operators (plus another 42 classified as "apartment/multi-unit complex"), 46 hotel/motel, with a wide range of retail and other building contractors also represented.

The 2006 EOA included an analysis of the workforce supply in the Lincoln City region. Workforce supply is a critical issue to commercial and industrial activity, because a vibrant economy needs workers to fill employment vacancies and new positions from an expanding economy, and those workers need to have the right skills, abilities, and knowledge for

those positions. The EOA found that the workforce supply in Lincoln County is in danger of experiencing notable deficiencies in experienced workers in their productive years. As an example, it cites a seven percent decrease in workers at their highest level of productivity and experience (35-54 years), and an expected increase in both inexperienced workers (25-34 years) and less productive, experienced workers (55+years) in Lincoln County. The seasonal nature of the economy relies on workers in the youngest cohort (15-24 years), which is declining. Indeed, the latest population estimates from PSU indicate a smaller proportion of young people in Lincoln County than most other Oregon counties.

Development Opportunities

The study area enjoys many strengths, including:

- Direct access to US 101
- Location central to existing tourist attractions and other development
    - Destination tourism, including the Chinook Winds Casino Resort and Siletz Indians events, outlet shopping, glass and pottery studios
    - Nature tourism, such as the ocean, beaches, lakes, national and state forests
- Abundant natural features that can lend to attractive development
- Proximity to schools

That said, the area also faces some unique challenges:

- A heavy reliance on a single economic base - tourism
- Seasonal fluctuations associated with the heavy reliance on tourism
- Housing affordability for workers; workforce is competing with second-home buyers for housing
- Attracting traffic off US 101 to patronize businesses without highway frontage and to see the rest of the city
- The area faces competition from the rest of the Oregon coast, which also has tourism opportunities.
- Without alternative routes to US 101, the city is vulnerable in emergency situations.

Recent trends and projects provide some unique opportunities for Lincoln City and study area at this time:

- ODOT improvements along US 101
- Opportunities for specialty manufacturing (food artisans, kites, aprons, etc.)
- New development offers opportunities for local retail and personal services
- Aging population requires increased services for seniors (medical, assisted living, AOA, continuum of care)

The City has an opportunity following ODOT's investments to the highway and pedestrian infrastructure in the area to leverage its next investments in this area. Given limited industrial and commercial land as well as rental housing, current market factors suggest development possibilities for the area with annexation and rezoning of this area. The City working in tandem with private development can create a new kind of neighborhood in the study area.

Potential Development

The general market for development in Lincoln City, combined with the competitive and comparative advantages of the study area, suggest the study area could support a mix of residential, industrial, and retail development.

Residential development appears supportable across a range of types and densities. Prices for single-family units have stabilized and are gradually regaining strength, suggesting moderate demand for single-family units. With the active market for second homes, the City might consider policies to preserve some housing for year-round residents, such as an overlay for recreation dwellings or other strategy. With the higher proportion of renters in the area, coupled with the relatively tight rental market, the market for workforce rental housing is particularly strong. A combination of single-family, duplex, townhouse, and other attached housing could combine with more standard multi-family units to create a mix of housing types with a variety of price points.

Similarly, with little commercial and industrial property available, the strengthening economy may support commercial and industrial development in the medium- and long-term. Retail/commercial in particular may be strong for local shopping and personal services. In addition to serving residents and visitors to the area, the new and existing businesses have the opportunity to leverage existing regional shopping attractions (outlets and other destination shopping in the area to create destination commercial in the study area. Industrial opportunities include smaller-scale specialty manufacturing. Additional opportunities may be revealed when findings from the City's Business Gap analysis become available. The City could assist these types of operations by supporting a shared or "incubator"-style development.

For the private sector, developers commit capital into real estate development for financial gain from rents paid by tenants. The city can influence several factors to affect those private real estate development decisions:

- **Market conditions:** While the public sector has little influence over factors such as rent levels, land values, or vacancy rates, the City can assist with the availability of financing, public investment in infrastructure, and other public investments;
- **Regulatory framework:** By annexing this area and creating this plan, the City is taking the critical first step toward implementing the type of development desired for the area. Next steps include designating land for its appropriate uses, planning the public infrastructure to shape development plans for the area, and marketing those plans and resulting development opportunities as the market continues to gain strength.
- **The availability/suitability of land**: Although the city is not able to influence the availability of private parcels, it is able to assist private landowners with baseline analysis of soil conditions, coordination among property owners, and other preliminary planning work, as is the case with this planning effort.

Actions the City might take to encourage redevelopment differ for various properties and projects and their relative feasibility. As rents increase relative to development costs, a project may gain feasibility, thereby allowing private investment and new construction to occur. As such, the City will need to work with the real estate investment and development community using its regulatory tools and incentives to improve development feasibility for the types of development desired for the study area.

TRANSPORTATION

This section summarizes the study area's multimodal transportation system, and includes an inventory of the existing transportation facilities and an operational analysis of study intersections.

Study Area

The study area includes land on both sides of US 101, and is generally bound by SE 19th Street to the north, the Urban Growth Boundary (UGB) to the east, SW 35th Street to the south, and SW Coast Avenue/ SW Dune Avenue to the west. It includes the following seven study US 101 intersections:

1. US 101/ SE 19th Street
2. US 101/ SW Bard Road
3. US 101/ SE 23rd Drive
4. US 101/ SE 27th Street
5. US 101/ SW 29th Street
6. US 101/ SE 32nd Street
7. US 101/ SW 32nd Stree

All intersections are currently unsignalized. The soon to be completed highway improvement project is realigning intersections with SE 32nd Street and SW 32nd Street to form one intersection and add a traffic signal.

Existing and Planned transportation infrastructure

As noted earlier, much of the land within the study area is located outside of city limits. As a result, some transportation facilities do exist but many are not constructed to urban standards. Evaluating the transportation impacts of rezoning the land requires an understanding of the current transportation facilities in this area. This section includes descriptions of existing and planned infrastructure to serve pedestrian, bicycle, transit and motor vehicle modes of travel in the study area.

Roadways

The only street providing for high capacity motor vehicle movement through the study area is the state-classified US 101. It runs north-to-south, connecting the study area to the rest of the city, areas further north and south along the Oregon coast. At the north end of the study area, between SE 19th Street to just north of SE 23rd Drive, the highway has a four-lane cross-

section (i.e., two southbound through lanes, one northbound through lane, and a center turn lane). The highway narrows to a three-lane cross-section just north of SE 23rd Drive (i.e., one through lane in each direction, and a center turn lane). The soon to be completed highway project is widening US 101 to three lanes through the study area, and will realign SE 32nd Street to connect with SW 32nd Street as a four-leg, signalized intersection.

Besides US 101, the area has limited north-to-south circulation options for local travel. Most of the local streets in the study area are non-through routes, connecting directly to US 101. These streets, including SE 19th Street, SW Bard Road, SE 23rd Drive, SW 29th Street, SE 32nd Street, and SW 32nd Street, provide east-to-west circulation between US 101 and the abutting land uses. They are all two lanes and have far less vehicle-carrying capacity than US 101.

The Draft 2015 Lincoln City Transportation System Plan (TSP) identifies a need for a parallel north-to-south route to the east of US 101 in this area. The TSP recommendation includes extending SE Lee Avenue south, and SE Fleet Avenue north to intersect at SE 23rd Drive[5] (see Figure 1). The TSP also recommends extensions of SE 27th Street, SE 28th Street, and SW 30th Street to provide additional east-to-west circulation between US 101 and the planned SE Fleet Avenue extension. The major characteristics of the roadways in the study area are summarized in Table 7, with lane configurations and traffic controls for study intersections (map included in Appendix 2).

Table 7: Study Area Roadway Characteristics

Roadway (limits)	Functional Classification	Cross section	Posted Speed	Area Type	Sidewalks	Bike Facilities
US 101 (SE 19th St to SE 23rd Drive)	Statewide Highway	3 to 4 lanes	35 mph	n/a	None	Shoulder
US 101 (SE 23rd Drive to SE 32nd St)	Statewide Highway	2 lanes*	30 mph	n/a	None**	Shoulder**
US 101 (SE 32nd St to SW 35th St)	Statewide Highway	3 lanes	30 mph	n/a	Sidewalks on west side**	Shoulder**
SE 19th Street (US 101 to SE Mast Ave)	Local Street	2 lanes	25 mph	High-Use	Intermittent sidewalks	None
SW Bard Road (US 101 to SW Coast Ave)	Collector Street	2 lanes	25 mph	Low-Use	None	None
SE 23rd Drive (US 101 to eastern terminus)	Collector Street	2 lanes	25 mph	Low-Use	None	None
SW 29th Street (US 101 to SW Coast Ave)	Local Street	2 lanes	25 mph	Medium-Use	None	None
SE 32nd Street (US 101 to SE Fleet Ave)	Local Street	2 lanes	25 mph	Medium-Use	Sidewalks on south side	None
SW 32nd Street (US 101 to SW Coast Ave)	Local Street	2 lanes	25 mph	Medium-Use	Sidewalks on south side	Bike Lanes

5 Draft 2015 Lincoln City TSP, Planned Driving Investments, Aspirational Plan.

Table 7: Study Area Roadway Characteristics

Roadway (limits)	Functional Classification	Cross section	Posted Speed	Area Type	Sidewalks	Bike Facilities

Source: Draft 2015 Lincoln City TSP

** This segment of US 101 is currently being improved to include 3 lanes (one through lane in each direction and a center turn lane).*

*** This segment of US 101 is currently being improved to include sidewalks on both sides, and a shared-use path on the west side.*

The highway project nearing completion will provide accommodation for bicycles and pedestrians through the study area. The local streets in the study area that have accommodation for bicycle or pedestrian users include a few segments with sidewalks along SE 19th Street, SE 32nd Street, and SW 32nd Street, and SE 32nd Street with continuous bike lanes between US 101 and SE Fleet Avenue.

In addition to functional classification, the TSP designates streets by area type (i.e., high, medium, and low use) to reflect the nature of the land uses the street serves and the number of anticipated pedestrians, bicyclists, and transit riders. The area type determines how users of a roadway interact with the surrounding land use and prescribes walking and biking accommodations for the street in a way that minimizes conflict with motor vehicles and maximizes safety for all users.

The area type for streets in the study area can be seen in Table 8. Several study area streets classified as medium-use or high-use streets include SE 19th Street (high-use), SW 29th Street (medium-use), SE 32nd Street (medium-use), and SW 32nd Street (medium-use). Because high-Use Streets have higher traffic volumes, they should provide facilities and amenities for pedestrians, bicycles and transit users to complement the private development along the street. High-use streets typically serve pedestrian-oriented land uses, so walking should receive the highest priority of all the travel modes. They should have wider sidewalks, pedestrian amenities, transit amenities, attractive landscaping, on-street parking, pedestrian crossing enhancements and buffered bicycle lanes.

Medium-Use Streets have moderate traffic volumes. They generally are surrounded by a mix of land uses, including residential and commercial. vThese streets provide secondary neighborhood connections to local parks, schools and mixed-use areas. Their design should emphasize walking, but accommodate the needs of bicyclists and motor vehicles. Prioritized design elements should include landscaped buffers, walkways/pathways/trails, on-street parking and pedestrian safety enhancements.

Low-Use Streets have low traffic volumes, and generally serve residential uses. Their design should slow travel speeds for the comfort and safety of pedestrians and bicyclists. Design elements such as traffic calming, and on-street parking should be a high priority. Design elements to accommodate specific modes may be necessary depending on expected use.

The Draft 2015 Lincoln City TSP proposes sidewalks and bike facilities along several existing and recommended streets in the study area, including SE 19th Street, SE 23rd Drive, and the extensions of SE 27th Street, SE 28th Street, SW 30th Street, SE Lee Avenue and SE Fleet Avenue.[6]

Transit

Lincoln County Transit provides transit service through the study area via two fixed bus routes

6 Draft 2015 Lincoln City TSP, Planned Walking and Biking Investments, Aspirational Plan.

(Figure 8) and an Americans with Disabilities Act (ADA) paratransit service.

The Lincoln City Loop (LINC) is an intra-city transit system that stretches seven miles from SW 62nd Street to the DMV (Department of Motor Vehicles) at NE West Devils Lake Road. Key destinations along this route include all of the city's major services, retail, and facilities. The LINC route operates from 7:30 a.m. to 6:00 p.m. Monday through Saturday with approximately one-hour headways.

The Lincoln County Newport-Rose Lodge route travels through Lincoln City three times daily, including two additional express routes from Newport City Hall to Rose Lodge Monday through Saturday. Transit service along this route is provided from 5:45 a.m. to 9:15 p.m. with headways typically between three to five hours. Key destinations along this route include Chinook Winds Casino, Samaritan North Lincoln Hospital, Tanger Outlets, Gleneden Beach, Depoe Bay, and Newport.

Figure 8: Existing Transit Routes

Transit users in the study area generally are more than a half-mile from the closest bus stop, which is near the US 101/SE 32nd Street intersection. The typical trip length for the average walking trip a quarter mile. Although Lincoln County Transit does not have a designated park and ride facility in the city, the public parking lot along NW 17th Street is located adjacent to a bus stop. This stop provides transit users access to the Lincoln City Loop and most major destinations in the city, and offers a shelter and bike parking. All Lincoln County buses are equipped with a lift to allow for wheelchair access and include bicycle racks.

Motor Vehicle Operations

Existing and forecasted 2035 motor vehicle operational results from the city's draft Transportation System Plan (TSP) provided analysis for the US 101/ SE 19th Street, US 101/ SW Bard Road, US 101/ SW 29th Street, US 101/ SE 32nd Street, and US 101/ SW 32nd Street study intersections within the study area. The Nelscott refinement study will analyze US 101/ SE 23rd Drive, and US 101/ SE 27th Street intersections under future scenarios that assume re-zoning SE 23rd Drive will be a primary motor vehicle access point for properties in the study area located east of US 101, and will require a supplemental operational analysis assessed at the US 101/ SE 23rd Drive intersection. SE 27th Street is currently a low volume, dead-end street serving only a few properties, but the TSP recommends its extension for east-to-west circulation between US 101 and the planned SE Fleet Avenue extension. These planned

street extensions will coincide with development or redevelopment of property within the study area.

Intersection Mobility Targets

Mobility targets for the study intersections are for the purpose of ensuring a minimum level of efficiency for motor vehicle travel. Two methods to gauge intersection operations include volume-to-capacity (v/c) ratios and level of service (LOS).

- Volume-to-capacity (V/C) ratio: A decimal representation (between 0.00 and 1.00) of the proportion of capacity in use at a turn movement, approach leg, or intersection. It is 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. A ratio greater than 1.00 indicates oversaturation of the turn movement, approach leg, or intersection, usually resulting in excessive queues and long delays. ODOT uses v/c ratios for mobility targets for intersections along US 101.
- Level of service (LOS): 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 longer delays. LOS F represents excessive delays for the average vehicle and highly congested traffic. Lincoln City mobility targets are based on LOS.

All of the study intersections are under the jurisdiction of the state. If they cannot operate at or below adopted performance measures, the state can require improvements to mitigate any future growth, to comply with the mobility targets included in the Oregon Highway Plan. Because physical and financial constraints make widening US 101 impractical, the city's Transportation System Plan (TSP) recommends that the Oregon Transportation Commission (OTC) adopt alternative mobility targets for the highway. For unsignalized study area intersections on US 101, the TSP recommends an alternative OHP mobility target v/c ratio of 0.95 during an average weekday for the major and minor street approaches. For the planned signalized study intersection at US 101 and SE/SW 32nd Street, the TSP recommends an alternative OHP mobility target v/c ratio of 1.0 (an "at full capacity" condition) for 8 hours per average weekday.

Motor Vehicle Volumes

The city's Transportation System Plan (TSP) is the source of existing and forecasted 2035 peak hour motor vehicle volumes for the US 101/ SE 19th Street, US 101/ SW Bard Road, US 101/ SW 29th Street, US 101/ SE 32nd Street, and US 101/ SW 32nd Street study intersections. The TSP count data shows that system-wide peak volumes along US 101 occur at most of the study intersections between 3 p.m. and 4 p.m.; consequently, that is the peak hour of traffic for comparison to ODOT mobility targets for current and future conditions. The existing peak hour volumes at the intersection were adjusted to represent average weekday conditions, based on the methodology applied to TSP study intersections[7]. Based on the methodology, data from the Automatic Traffic Recorder (ATR) station at D River was utilized to develop a seasonal factor to be applied to the count data. The factor resulted in a five percent increase to the May count to replicate average weekday traffic conditions.

7 Methodology Memorandum, Lincoln City TSP, October 26, 2012.

Future 2035 traffic volumes were forecasted at the US 101/ SE 23rd Drive study intersection based on the cumulative analysis approach utilized for the TSP[8]. The cumulative analysis approach is used to estimate new traffic growth, which when added to existing traffic volumes, provides estimates of future traffic demand. The final p.m. peak average weekday traffic volumes for the study intersections are displayed in Appendix 1.

Intersection Operations

During the evening peak hour under existing conditions, all study intersections operate within the mobility targets recommended for adoption by the OTC (see Table 3). With the forecasted increase in motor vehicle trips through 2035, however, all study intersection will approach the recommended mobility targets. The US 101/ SE 19th Street intersection will exceed the TSP's recommended mobility target, but only by 0.02, which is such a minor amount that it does not merit further adjustment.

Table 8: Study Intersection Traffic Operational Analysis (Average Weekday P.M. Peak Hour)

	Intersection	Traffic control	Mobility Target****	Existing Conditions			Forecasted Baseline 2035 Conditions		
				Volume/ Capacity*	Delay (seconds)*	Level of Service*	Volume/ Capacity*	Delay (seconds)*	Level of Service*
1	US 101/ SE 19th Street**	Unsignalized	0.95	0.54/ 0.30	22.6	C	**0.97**/ 0.82	121.7	F
2	US 101/ SW Bard Road**	Unsignalized	0.95	0.53/ 0.07	18.6	C	0.95/ 0.18	42.8	E
3	US 101/ SE 23rd Drive	Unsignalized	0.95	0.57/ 0.10	19.6	C	0.95/ 0.58	71.1	F
5	US 101/ SW 29th Street**	Unsignalized	0.95	0.55/ 0.08	34.7	D	0.94/ 0.34	91.0	F
6	US 101/ SE 32nd Street**	Unsignalized; Signalized***	0.95 (unsignalized)1.0 for 8 hrs. (signalized)	0.52/ 0.22	18.3	C	1.08	64.5	E
7	US 101/ SW 32nd Street**	Unsignalized; Signalized***	0.95 (unsignalized)1.0 for 8 hrs. (signalized)	0.49/ 0.12	17.2	C			

Bolded red values *indicate intersection exceeds v/c mobility target.*

*Note: * V/C ratio, LOS and delay reported as the intersection average at signalized locations. At unsignalized locations, the V/C ratio reported as the worst mainline/worst side street, and LOS and delay reported as worst stop controlled approach.*

*** Source: Draft 2015 Lincoln City TSP.*

**** SE 32nd Street is currently being realigned to connect with SW 32nd Street as a four-leg, signalized intersection. A traffic signal was assumed under the Future Baseline 2035 conditions.*

***** For unsignalized study intersections, an alternative OHP mobility target v/c ratio of 0.95 during an average weekday for the major and minor street approaches is recommended for adoption by the OTC. For the planned signalized study intersection at SE/SW 32nd Street intersection, an alternative OHP mobility target v/c ratio of 1.0 (an "at full capacity" condition) for 8 hours per average weekday is recommended for adoption by the OTC.*

8 Technical Memorandum #7, Traffic Growth Assumptions, Lincoln City TSP, May 29, 2013.

APPENDIX 1: 2015 Available Commercial Space Inventory: For Sale/Rent/Unknown

2015 Available Commercial Space Inventory - For Sale

No	PARCELID	SitusAdd	Price	Sq_Feet	Price/Sq. Ft.	Type	Comments	Contact Name	Contact Info.
1	07-11-22-DC-03400	3001/3 SW Hwy 101	$ 2,500	2821	$0.89	Commercial/Retail	Was "Oregon Surf Shop" and "Car Audio 101".	Dennis Regen	541-992-2177
2	07-11-22-AA-04300	1910 SE Hwy 101	$ 979,000	8194	$119.48	Restaurant	Was Hilltop Inn. Fully Equipped. 5,550sf on 1st level, 2500 on 2nd.	Jack Gallagher or Chris Schneider @ Norris, Beggs, & Simpson	503-273-0327 or 503-273-0367
3	07-11-15-DB-12900	412 SE Hwy 101	$ 349,900	2360	$148.26	Retail/Office	Lower level retail; 4 office units upstairs. Also available for lease. $900 for lower floor (1200sf) or $200 each for upstairs units, or $1600 for whole bldg	Leslie Roper Green @ John L. Scott	541-921-3151
4	07-11-34-DA-00600-00	6042 SE Hwy 101	$ 495,000	2853	$173.50	Restaurant	Was "Beach Dog", includes property w/ leased Coffee Kiosk	Diane Gettis	
5	07-11-22-DC-03400	3001 SW Hwy 101	$ 649,000	6300	$103.02	Warehouse/Retail	4,000sf warehouse, 1,800sf retail space, & 500sf retail space	Dennis Regen	541-992-2177
6	07-11-15-DB-00200	317 SW Hwy 101	$525,000.00	4,040	$129.95	Restaurant	Was "Shirley's at the Beach"	Sonja Lovas	541-961-3866

Total Sq. Ft. For Sale	26,568

2015 Available Commercial Space Inventory - Properties whose availability is unknown

No	PARCELID	SitusAdd	Sq_Feet	Type	Comments
1	07-11-34-AB-00300	1266 SW 50th St. - B	425	Office/Retail	
2	07-11-34-AA-02100	5024 SE Hwy 101	1,300	Retail	Center and south units
3	07-11-34-AA-03000	5053 SW Hwy 101	1,920	Retail	NW Corner of SW 51st & Hwy 101
4	07-11-10-DC-05300	1213 NW Hwy 101	1,200	Retail	Was 'Jabberwocky'
5	07-11-11-BC-04300	2020 NE 22nd St	27,374		Elks Lodge
6	07-11-34-AA-03101	5111 SW Hwy 101	3,500	Retail	Was 'Benjamin Moore Paints', owners still deciding what to do with bldg

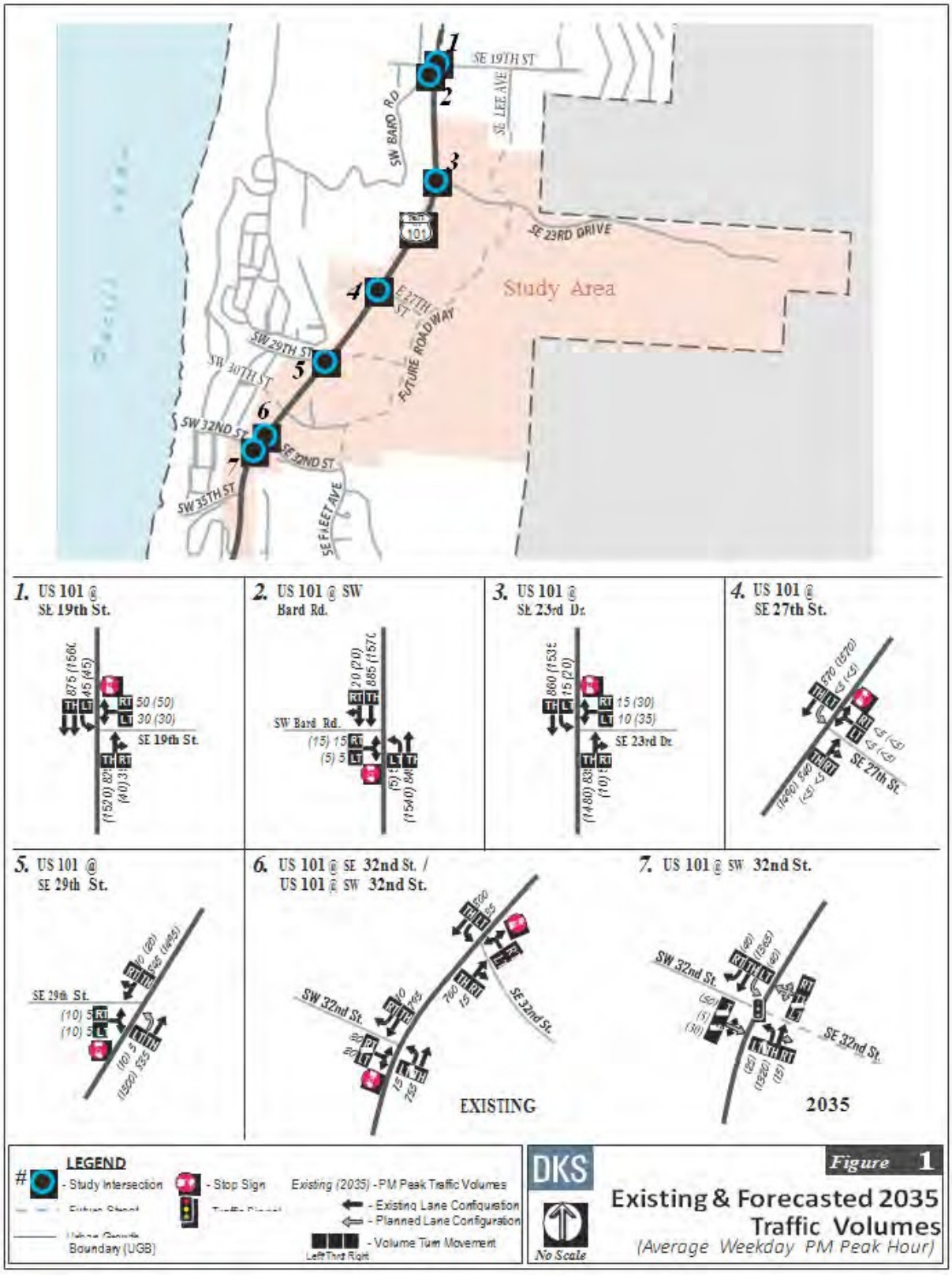
Total Sq. Ft.	35,719

2015 Available Commercial Space Inventory - For Rent

No	PARCELID	SitusAdd	Price/month	Sq_Feet	Price/Sq. Ft.	Type	Comments	Contact Name	Contact Info.
1	07-11-02-CB-06400	3484 NE Hwy 101	$875	850	$1.03	Retail/Service	Address # on unit is "3478". Water/Sewer Paid, Min 6 month lease	Real Estate 100	541-994-2100
2	07-11-11-BB-04200	2604 NE Hwy 101, Ste A	$850	850	$1.00	Office	hree offices, reception space and office support space. Water/Sewer Paid, Min 6 month leas	Real Estate 100	541-994-2100
3	07-11-11-BB-04200	2604 NE Hwy 101, Ste B	$500	450	$1.11	Office	hree offices, reception space and office support space. Water/Sewer Paid, Min 6 month leas	Real Estate 100	541-994-2100
4	07-11-11-BB-04200	2600 NE Hwy 101	$1,500	2,000	$0.75	Office	Water/Sewer Paid, Min 6 month lease	Real Estate 100	541-994-2100
5	07-11-11-BB-04200	2600 NE Hwy 101	$1,500	2,000	$0.75	Office	Water/Sewer Paid, Min 6 month lease	Real Estate 100	541-994-2100
6	07-11-27-DC-02604	4742 SW Hwy 101	$550	600	$0.92	Office	In building with Pacific Grind. Rent plus 25% CAM	Oregon Coast Property Mgmt	800-783-8150
7	07-11-02-CC-00700	3350 NE Hwy 101	$2,828	1,885	$1.50	Restaurant	Shares bldg with Starbucks, has drive-through windows	Oregon Coast Property Mgmt	800-783-8150
8	07-11-02-CB-01800	2015 NW 39th St, Suite 301	$900	950	$0.95	Office	Northwest Business Center", % CAM in addtion to monthly rent. 12-month lease.	Oregon Coast Property Mgmt	800-783-8150
9	07-11-02-CB-01800	2015 NW 39th St, Suite 201	$2,500	1,950	$1.28	Office	Northwest Business Center", % CAM in addtion to monthly rent. 12-month lease.	Oregon Coast Property Mgmt	800-783-8150
10	07-11-10-AD-03001	2137 B NW Hwy 101	$950	990	$0.96	Office	Incl. Water sewer garbage	Vickie Regen	541-994-9253
11	07-11-10-AD-03001	2152 A Mast Pl	$550	750	$0.73	Office	Incl. Water sewer garbage	Vickie Regen	541-994-9253
12	07-11-10-AD-03001	2152 B NW Mast Pl	$450	600	$0.75	Office	Incl. Water sewer garbage	Vickie Regen	541-994-9253
13	07-11-10-AD-03001	2154 A NW Mast Pl	$450	600	$0.75	Office	Incl. Water sewer garbage	Vickie Regen	541-994-9253
14	07-11-02-AB-00102	4488 NE WDL Blvd	$4,000	4,000	$1.00	Office	$1 sf, triple-net, minimum 1-year lease.	Vickie Regen	541-994-9253
15	07-11-34-AA-01300	1424 SE 51st St.		2,000	$0.00	Office/Retail	Zoned 'Taft Village Core'	Art Moore	541-921-1911
16	07-11-27-BA-11600	3219 SW Hwy 101	$1,400	1400	$1.00	Retail/office	Includes 650sf street level retail and 750sf upper level retail/office	Ron Rubin	503-720-5577
17	07-11-15-DB-12101	798 SE Hwy 101	$925	970	$0.95	Retail/office	Ground floor unit, hwy frontage, separate bathroom	Bruce Polvi	541-996-2288
18	07-11-22-DC-03600	3110 SE Hwy 101	$1,550	2000	$0.78	Retail		John Woodmark	541-765-2441
19	07-11-02-CC-02500	3026 NE Hwy 101		1,000	$0.00	Restaurant/Retail	Was "Rockfish Bakery", south unit	Jack Wilson	541-921-2325
20		3979 NE WDL Rd. Suite A	$550	788	$0.70	Office/Service		Jim McNeeley Property Mgmt	503-292-8125
21	07-11-02-B0-00701	4151 N Hwy 101	$31,047	31,047	$1.00	Retail	In Lighthouse Square. Was Bi-Mart. CAM not included in price.	David Emami	503-557-3350
22	07-11-02-B0-00701	4151 N Hwy 101	$14,500	14,500	$1.00	Retail	In Lighthouse Square. Was Bi-Mart. CAM not included in price.	David Emami	503-557-3350
23	07-11-02-B0-00701	4151 N Hwy 101	$5,700	5,700	$1.00	Retail	In Lighthouse Square. Was Bi-Mart. CAM not included in price.	David Emami	503-557-3350
24	07-11-02-B0-00701	4151 N Hwy 101	$1,275	1,275	$1.00	Retail	In Lighthouse Square. Was Bi-Mart. CAM not included in price.	David Emami	503-557-3350
25	07-11-02-B0-00701	4151 N Hwy 101	$4,600	4,600	$1.00	Retail	In Lighthouse Square. Was Bi-Mart. CAM not included in price.	David Emami	503-557-3350
26	07-11-02-B0-00701	4151 N Hwy 101	$1,200	1,200	$1.00	Retail	In Lighthouse Square. Was Bi-Mart. CAM not included in price.	David Emami	503-557-3350
27	07-11-02-B0-00701	4151 N Hwy 101	$1,200	1,200	$1.00	Retail	In Lighthouse Square. Was Bi-Mart. CAM not included in price.	David Emami	503-557-3350
28	07-11-27-DC-05800	4841 SW Hwy 101		224	$0.00	Retail	At hwy corner of Kenny's IGA south	Kenny Morgan	541-992-3224
29	07-11-02-B0-00603	4101 N Logan Rd	$1,800	1,800	$1.00	Retail/Service	Was "Coast Pet Center" in Lincoln City Plaza. Rent plus $2.50sf NNN	Alex MacLean, Commercial Real Estate Advisors NW	503-274-0211, ext. 120

Total Sq. Ft. For Rent	88,179

APPENDIX 2: Existing and Forecasted 2035 Traffic Volumes (Average Weekday P.M. Peak Hour)



APPENDIX D.

Transportation Analysis

Final Technical Memorandum #4

720 SW Washington St.
Suite 500
Portland, OR 97205
503.243.3500
www.dksassociates.com

DATE: June 30, 2017

TO: Nelscott Gap Neighborhood Plan Team

FROM: John Bosket, P.E.
Kevin Chewuk, PTP

SUBJECT: Lincoln City Nelscott Gap Neighborhood Plan
Revised Memorandum #4: Transportation Analysis P15100-000

This memorandum documents recommendations for the Lincoln City Nelscott Gap Neighborhood Plan transportation element. This transportation element refines the 2035 Transportation System Plan (TSP) based on the latest growth estimates and goals for the Nelscott Gap area. Recommendations include multi-modal transportation improvements and required amendments to the 2015 Transportation System Plan (TSP) to implement them.

INTRODUCTION

The TSP serves as a guide for transportation investments and City policies over the next 20 years. The TSP translates the vision of the community into a plan for an equitable and efficient transportation system. It evaluates the current transportation system and outlines policies and projects that are important to protecting and enhancing the quality of life in Lincoln City by balancing the needs of walking, bicycling, driving, transit and freight.

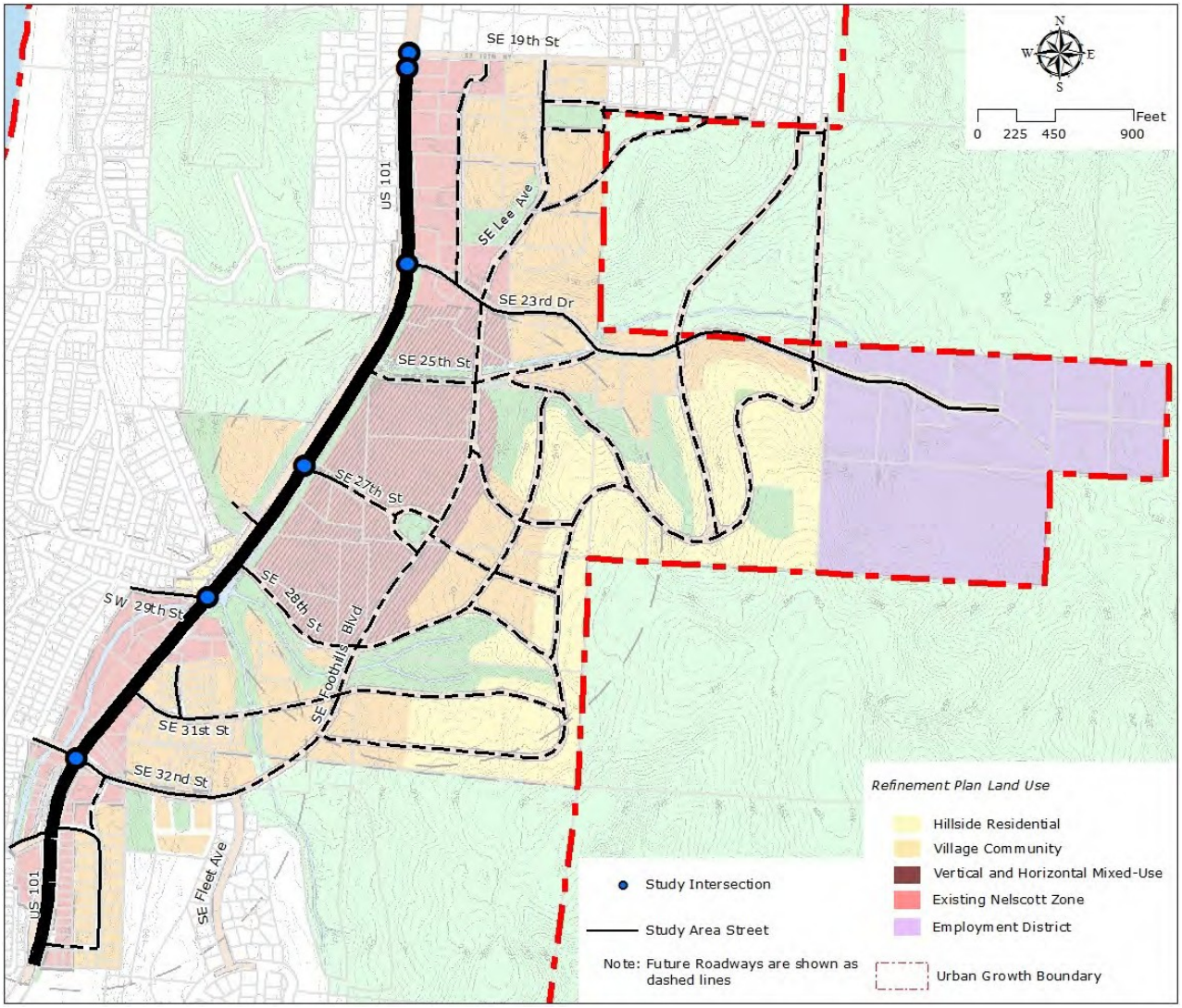
Since the adoption of the TSP, the City has been preparing a plan for the Nelscott Gap area that would include annexation and rezoning to accommodate future growth (see Figure 1). Much of the Nelscott Gap study area currently has Lincoln County zoning that allows for planned industrial uses[1]. Prior to rezoning, the City must update all public facilities plans, including the TSP. The final page of this memorandum identifies amendments to the TSP necessary for consistency with the proposed Nelscott Gap Neighborhood Plan.

Lincoln City has received a grant to complete an updated buildable lands inventory, housing needs analysis and economic opportunities analysis for the City's comprehensive plan. The results of the new buildable lands inventory, housing needs analysis and economic opportunities analysis may require refinement of the assumptions in the Nelscott Gap Neighborhood Plan and the TSP.

[1] Lincoln County Zoning. http://www.co.lincoln.or.us/planning/page/zoning-maps

DKS

Figure 1: Study Area



FUTURE GROWTH IN THE NELSCOTT GAP AREA

Land use is a key factor in developing a functional transportation system. The amount of land the City plans for development, the type of land uses, and how the land uses are mixed together has a direct relationship to the expected demands on the transportation system. Understanding the amount and type of land use is critical to maintaining or enhancing transportation system operations.

The proposed rezoning would create capacity for 1,633 new dwelling units and 634 new employees[2] within the Nelscott Gap study area[3]. For the recent TSP, the City assumed projections of 1,009 new dwelling units and 2,607 new employees in the entire urban growth boundary through 2035, using the Economic Opportunities Analysis completed for the City by Johnson Reid in 2005 and population forecasts based on the safe harbor approach[4]. The projections included 110 new dwelling units and 634 new employees in the next 20 years for the Nelscott Gap study area.

The City believes that the projections used for the TSP, including only 110 new dwelling units and 634 new employees, are still reasonable for the Nelscott Gap study area within the 20-year planning horizon, regardless of the potential increase in housing capacity the proposed rezoning will add. The assumption, therefore, is that the housing capacity of 1,523 dwelling units within the Nelscott Gap study area that would remain following the 20-year planning horizon would be built out after the year 2035.

Because of the potential for much more housing construction in the Nelscott Gap study area than anticipated over the 20-year planning horizon, this study takes a conservative approach for the transportation analysis of the proposed zone change, doubling the TSP projected Nelscott Gap study area dwelling units to 220. This assumes that a larger share of the projected citywide housing growth for the 20-year TSP horizon would occur within the Nelscott Gap study area. To compensate for this and remain within the citywide control total of 1,009 dwelling units, 110 units will be reallocated from transportation analysis zones (TAZs)[5] within the north end of the city, where most housing growth is projected.

Because the employment capacity of the Nelscott Gap study area matches the previously assumed employment growth, the study only required redistributions of employment between TAZs within the Nelscott Gap study area.

---

[2] This includes projected employment (280 employees) resulting from existing zoning that the proposed Comprehensive Plan amendment would not change within TAZs 33, 34, 37, and 38.
[3] Updated Density Assumptions for Transportation Analysis (Task 5.1) for Conference Call 2/11/16, Cogan Owens Greene
[4] Population and Employment Forecasts, Angelo Planning Group, June 2, 2012.
[5] Transportation Analysis Zones (TAZs) divide the Lincoln City Urban Growth Boundary (UGB) into areas that represent sources of vehicle trip generation within the city, based on a combination of the existing roadway network, land use data, UGB, zoning, and comprehensive plan designations.

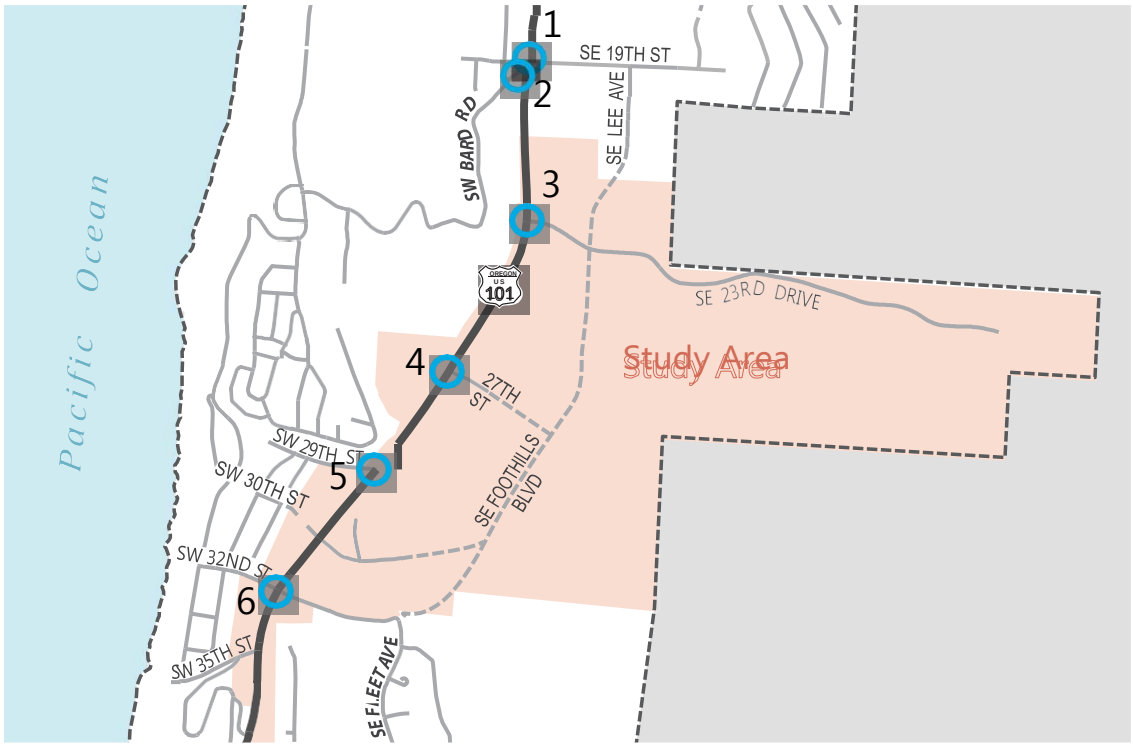
The study analyzed the impact of the increased vehicle trip generation through year 2035 on the surrounding transportation system. The new information obtained from this system analysis refined the recommendations contained in the TSP. The result is a set of transportation improvements and standards that update the Lincoln City TSP for the Nelscott Gap area.

TRAFFIC FORECASTING

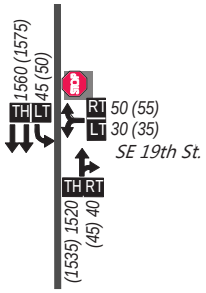
Future traffic forecasts prepared for 2035 for two major scenarios include:

- **2035 Lincoln City TSP** – This scenario assumes the continuation of existing land uses in the Nelscott Gap area and includes 110 new households and 634 new employees in the Nelscott Gap area, matching the forecast of the 2015 Lincoln City TSP. It includes the improvement projects listed in the "Baseline Transportation System Improvements" section and the traffic volumes shown in Figure 2 that are not in parentheses.

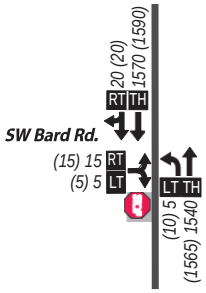
- **2035 Nelscott Gap Update** – This scenario assumes the proposed land uses for the Nelscott Gap area (220 households and 634 employees). It also includes the improvement projects listed in the "Baseline Transportation System Improvements" section and the traffic volumes shown in parentheses in Figure 2.



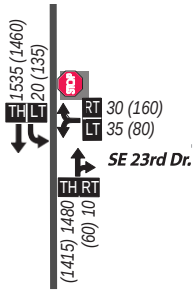
1. *US 101 @ SE 19th St.*



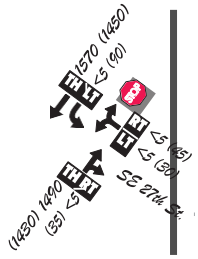
2. *US 101 @ SW Bard Rd.*



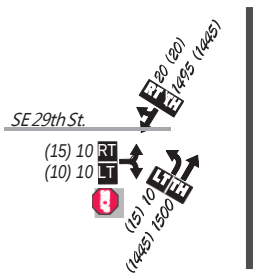
3. *US 101 @ SE 23rd Dr.*



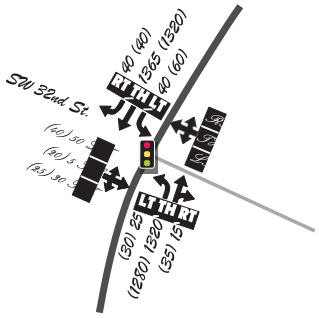
4. *US 101 @ SE 27th St.*



5. *US 101 @ SE 29th St.*



6. *US 101 @ SW 32nd St.*



LEGEND

- # - Study Intersection
- Future Street
- Urban Growth Boundary (UGB)
- Traffic Signal
- Stop Sign
- Lane Configuration
- LT TH RT (Left, Thru, Right) - Volume Turn Movement

2035 Lincoln City TSP (2035 Nelscott Gap Update) - Peak Hour Traffic Volumes

DKS

Figure 2

Forecasted 2035 Traffic Volumes

(Average Weekday PM Peak Hour)

No Scale

Baseline Transportation System Improvements

The starting point for the 2035 system analysis was the TSP's list of street system improvement projects located in the study area. The baseline traffic analysis assumes street extensions envisioned in the TSP and needed to support development of the area (despite no identified funding source at this time). The baseline traffic analysis did not assume additional transportation projects (e.g., intersection improvements) needed to support growth in the Nelscott Gap study area, if not previously identified as needs in a planning document. The 2015 Lincoln City TSP identifies a need for a parallel north-to-south route to the east of US 101. The TSP recommendation includes extending SE Lee Avenue south, and SE Fleet Avenue north to intersect at SE 23rd Drive[6], hereby referred to as SE Foothills Boulevard. The TSP also recommends extensions of SE 27th Street, SE 28th Street, and SE 31st Street to provide additional east-to-west circulation between US 101 and the planned SE Foothills Boulevard extension.

Estimating Driving Trips

A determination of future street network needs requires the ability to accurately forecast travel demand using estimates of future population and employment in the Nelscott Gap study area and the rest of the city. The objective of the transportation planning process is to provide the information necessary for making decisions about how and where improvements should be made to create a safe and efficient transportation system.

The methodology for estimating traffic volumes associated with the proposed Nelscott Gap Update scenario land uses was the same cumulative analysis approach applied for the 2015 Lincoln City TSP[7]. It includes the trip generation, trip distribution, and trip assignment assumptions for all trips resulting from future growth.

Land Use and Motor Vehicle Trip Assumptions

To convert concept plans of land uses into motor vehicle trips, the analysis first converts estimates of land use acreage in the proposed Nelscott Gap plan into housing and employment figures (i.e., number of single-family dwelling units, and retail employees). The proposed land use areas would accommodate about 220 housing units and a neighborhood commercial/mixed-use area and employment district with approximately 634 employees. Table 1 describes the assumptions.

Estimates of future vehicle trips generated by the Nelscott Gap area were determined by applying trip generation rates to land use types. Overall, by 2035 the Nelscott Gap Neighborhood Plan area is likely to generate about 615 motor vehicle trips during the weekday p.m. peak hour, or roughly 125 more than what the TSP currently assumed (i.e., 615 vs. 488 trips as shown in Table 1).

[6] 2015 Lincoln City TSP, Planned Driving Investments, Aspirational Plan.
[7] Technical Memorandum #7, Traffic Growth Assumptions, Lincoln City TSP, May 29, 2013.

Table 1: Land Use Assumptions for Nelscott Gap

Scenario	New Housing Units	New Employees	Forecasted Weekday PM Peak Hour Vehicle Trip End Growth
Within the Lincoln City Urban Growth Boundary			
2035 Lincoln City TSP *	1,009	2,607	2,878
2035 Nelscott Gap Update	1,009	2,607	2,987 [8]
Within the Nelscott Gap Study Area			
2035 Lincoln City TSP *	110	634	488
2035 Nelscott Gap Update	220	634	615

Note: * Based on the Lincoln City Transportation System Plan, Adopted November 2015

2035 Motor Vehicle Operations

Motor vehicle conditions evaluated during the 2035 weekday p.m. peak hour at the six study intersections utilized 2000 Highway Capacity Manual methodology for signalized and un-signalized intersections[9]. Mobility targets for study intersections along US 101 for this analysis are consistent with the alternative mobility targets recommended for adoption by the Oregon Transportation Commission (OTC) as part of the TSP process.

Assuming the recommended street extensions in the TSP, three intersections will exceed mobility targets under the "2035 Nelscott Gap Update" scenario (see Table 2). The intersection on US 101 at SE 19th Street previously was forecast to exceed the mobility target in the TSP. The results in Table 2 show that under the "2035 Nelscott Gap Update" scenario, intersections between SE 23rd Drive and SE/SW 32nd Street have slightly better operations along US 101 approaches than reported in the Lincoln City TSP. This is because the street extensions associated with the Nelscott Gap Neighborhood Plan would provide attractive travel alternatives to US 101 for local trips and encourage more drivers to access and circulate through the area via SE 23rd Drive or SE 32nd Street. The mainline approaches (those on US 101) at study intersections along this segment, however, will approach mobility targets, despite the slightly lower volumes (generally 4 percent below the mobility targets).

[8] The forecasted weekday p.m. peak hour vehicle trip end growth is higher in the 2035 Nelscott Gap Update scenario despite the total housing unit and employment assumptions being the same as the 2035 Lincoln City TSP due to a change in the employment types assumed for the study area.

[9] 2000 Highway Capacity Manual methodology was used for un-signalized intersections to compare results to the TSP (which used 2000 HCM).

Tab e 2: 2035 Motor Vehicle Operations (Average Weekday P.M. Peak Hour)

ID	Intersection	Mobility Target**	2035 Lincoln City TSP			2035 Nelscott Gap Update		
			Volume/ Capacity*	Delay (seconds)*	Level of Service (LOS)*	Volume/ Capacity*	Delay (seconds)*	Level of Service (LOS)*
1	US 101/ SE 19th Street	0.95 v/c / 0.95 v/c	**0.97**/ 0.82	121.7	F	**0.98**/ 0.95	>150.0	F
2	US 101/ SW Bard Road	0.95 v/c / 0.95 v/c	0.95/ 0.18	42.8	E	**0.97**/ 0.19	44.8	E
3	US 101/ SE 23rd Drive	0.95 v/c / 0.95 v/c	0.95/ 0.58	71.1	F	0.91/ **>1.50**	>150.0	F
4	US 101/ SE 27th Street	0.95 v/c / 0.95 v/c	n/a	n/a	n/a	0.91/ 0.64	76.3	F
5	US 101/ SW 29th Street	0.95 v/c / 0.95 v/c	0.94/ 0.34	91.0	F	0.91/ 0.40	91.6	F
6	US 101/ SE-SW 32nd Street	1.0 v/c for 8 hours	1.08	64.5	E	1.08	59.2	E

Bolded red values indicate intersection exceeds v/c mobility target.
Note: * volume/capacity (v/c) ratio, Level Of Service (LOS) and delay reported as the intersection average at signalized locations. At un-signalized locations, the reported v/c ratio is the worst mainline/worst side street, and LOS and delay are the worst stop-controlled approach. See the Lincoln City TSP for more explanation of these measures.
** For un-signalized study intersections, an alternative Oregon Highway Plan (OHP) mobility target v/c ratio of 0.95 during an average weekday for the major and minor street approaches has been recommended for adoption by the Oregon Transportation Commission (OTC). For the planned signalized study intersection at SE/SW 32nd Street, an alternative OHP mobility target v/c ratio of 1.0 (an "at full capacity" condition) for 8 hours per average weekday has been recommended for adoption by the OTC.

Table 3 shows the recommended improvements for the intersections that are not expected to meet mobility targets, summarized below.

US 101/ SE 19th Street and US 101/ SW Bard Road intersections

The overall impact to these intersections is very small. Although they fail to meet the mobility target, the volume to capacity (v/c) ratios are only 0.01 and 0.02 worse than previously projected for the TSP. The mixed-use nature of the proposed zoning in the Nelscott Gap area likely will produce more "internal" trips than this analysis assumed. These internal trips between the residential and employment/retail uses on the streets within the Gap area would not continue on to US 101 or the local transportation system beyond the Gap area. Even a small increase in such internal trips would be enough to mitigate the additional impacts to the US 101/ SE 19th Street and US 101/ SW Bard Road intersections. Therefore, no mitigation is recommended for these intersections.

US 101/ SE 23rd Drive intersection

The Lincoln City TSP identified SE 23rd Drive as a collector street. Therefore, the analysis results shown in Table 2 assume SE 23rd Drive is the main route running east to west through the Gap area and serving the industrial district further east.

A traffic signal warrant analysis was performed for the US 101/ SE 23rd Drive intersection to determine if side-street volumes would be high enough to justify (i.e., warrant) the construction of a traffic signal by 2035. This intersection would be approximately 0.54 miles from the nearest traffic signal, which would meet ODOT signal spacing standards (0.5 miles).

This analysis used the ODOT Transportation Planning and Analysis Unit (TPAU) preliminary traffic signal warrant analysis form. TPAU uses the MUTCD Signal Warrants 1, Case A and Case B, which deal primarily with high volumes on the intersecting minor street and high volumes on the major street. Preliminary signal warrants for long-range planning purposes identify where signals may be needed in the future. Meeting preliminary signal warrants does not guarantee installation of a signal. If a field warrant analysis conducted by the Region finds warrants are met, the State Traffic Engineer will make the final decision on the installation of a signal.

Analysis found the US 101/SE 23rd Drive intersection would meet the peak hour warrant based on the 2035 Nelscott Gap Update peak hour volumes (see Figure 2). Installation of a traffic signal at the US 101/ SE 23rd Drive intersection would likely attract even more drivers than anticipated from adjacent un-signalized locations, because it would be easier to turn out onto the highway. This would be especially true during the summer months, when delays for drivers attempting to turn left onto the highway can be very high. Even with a traffic signal in place, the US 101/ SE 23rd Drive intersection would fail to meet mobility targets. This is similar to the TSP finding for the newly signalized intersection on US 101 at SW 32nd Street; therefore, the city may choose to adopt the same alternative mobility target that has been used for the US 101/ SW 32nd Street intersection for the US 101/ SE 23rd Drive intersection. This alternative mobility target would allow for a v/c ratio of 1.0 (an “at full capacity” condition) for 8 hours per average weekday.

Adopting this alternative mobility target for the intersection of US 101/SE 23rd Drive serves as an acknowledgement between ODOT and the City of Lincoln City that severe congestion will occur on the highway from SE 23rd Drive to SW 32nd Street for as many as 8 hours of an average weekday. This level of congestion was effectively accepted when ODOT and the City recently agreed to limit the capacity of the highway in this segment to three lanes (one travel lane in each direction and a center turn lane) instead of five lanes (two travel lanes in each direction and a center turn lane). The adoption of the alternative mobility target merely formalizes this decision so future development is not held to an unachievable standard.

With the recommended improvements in place and adoption of the recommended alternative mobility targets, the zone change proposed for the Nelscott Gap area would not significantly impact the transportation system

Table 3: Recommended Intersection Improvements

ID	Intersection	Mobility Target	2035 with Recommended Intersection Improvements			Recommended Intersection Improvements
			Volume/ Capacity	Delay (seconds)	Level of Service	
1	US 101/ SE 19th Street	0.95 v/c / 0.95 v/c	*	*	*	N/A; The mixed-use nature of the proposed land uses may result in more internal trips than forecasted, and fewer along US 101. Therefore, it is reasonable to assume that the mobility target would be met.
2	US 101/ SW Bard Road	0.95 v/c / 0.95 v/c	*	*	*	N/A; The mixed-use nature of the proposed land uses may result in more internal trips than forecasted, and fewer along US 101. Therefore, it is reasonable to assume that the mobility target would be met.
3	US 101/ SE 23rd Drive	0.95 v/c / 0.95 v/c	1.22**	86.8	F	Traffic signal; left turn lane on SE 23rd Drive at US 101; adoption of alternative mobility target.

Note: * Due to the mixed-use nature of the proposed Nelscott Gap zoning, a greater amount of internal trips could be internal to the neighborhood, which would result in fewer trips on the highway than forecasted. Therefore, no mitigation at this location is recommended.
** Similar to the nearby US 101/ SW 32nd Street intersection, the mainline volumes (along US 101) are too high for a single travel lane at a traffic signal. Therefore, the same alternative OHP mobility target v/c ratio of 1.0 (an "at full capacity" condition) for eight hours per average weekday may be required for this intersection.

Sensitivity Analysis for Full Build-out of the Nelscott Gap Study Area

The 2035 motor vehicle operations summarized in Table 2 were used for the 20-year analysis needed for Transportation Planning Rule (TPR) findings. With a significant amount of additional growth expected in the Nelscott Gap study area beyond the year 2035, however, supplemental analysis reflecting the full build-out is necessary to ensure correct design of the collector streets within the study area. To satisfy this need, a sensitivity analysis of what full build-out would look like beyond the 20-year horizon revealed that the Nelscott Gap Neighborhood Plan area is expected to generate about 1,037 motor vehicle trips during the weekday p.m. peak hour, or about 422 more than what is assumed for the area through the 20-year horizon. This amounts to expected two-way average daily traffic demand of 2,000 to 3,000 vehicles along the SE Foothills Boulevard extension (identified as the north to south collector street), and 3,500 to 5,500 vehicles along SE 23rd Drive (identified as the east to west collector street). Local streets in the study area will see expected two-way average daily traffic demand of less than 2,000 vehicles.

STREET FUNCTIONAL CLASSIFICATION

Functional classification of streets in the Nelscott Gap Neighborhood Plan area based on a hierarchy according to the intended purpose of each street, (from highest to lowest intended usage) includes: principal arterial, minor arterial, collector, and local streets. Roadways 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.

Given the City's standards, the projection of traffic volumes on area streets (at full build out), and overall circulation needs, recommended classification/reclassification is as follows:

- Maintain classification of SE 23rd Drive from US 101 to the entrance to the industrial area as a collector
- Reclassify SE 23rd Drive within the industrial area east as a local street
- Classify SE Foothills Boulevard (connecting SE 32nd Street to SE 23rd Drive) as a collector
- Classify SE 32nd Street from US 101 to SE Fleet Avenue as a collector
- Design all remaining streets in the Nelscott Gap area as local streets

WALKING AND BIKING

Residents in the Nelscott Gap area will be able to travel safely and efficiently between destinations via active transportation modes, such as walking and biking. A system of sidewalks, bikeways, and trails will provide access to key destinations such as parks and commercial areas—improving the overall health and livability of the neighborhood.

In addition to functional classification, the TSP (based on the 2012 Walking and Biking Plan) designates streets by area type (i.e., high, medium, and low use) to reflect the nature of the land uses the street serves and the number of pedestrians, bicyclists, and transit riders. The area type determines how users of a roadway interact with the surrounding land use and prescribes walking and biking accommodations for the street in a way that minimizes conflict with motor vehicles and maximizes safety for all users.

During the Nelscott Gap Neighborhood Plan process, transportation consultants compared the recommended street type designations with the City's standards and the updated system analysis information in the Lincoln City TSP. Based on the overall circulation needs, recommended modifications in the designations for the following streets are to:

- Change SE 28th Street to low-use street from medium-use street between US 101 and the SE Foothills Boulevard extension

- Change SE 23rd Drive to medium-use street from US 101 to the entrance of the industrial area
- Design all remaining streets in the Nelscott Gap area as low-use streets, unless shown as otherwise in the TSP.

Sidewalks and Bikeways

Most of the existing streets in the Nelscott Gap area are not improved to urban standards and lack facilities for pedestrian and bicycle users. Recent improvements to US 101 through the study area include sidewalks between SE 23rd Drive and SW 32nd Street; however, the segments of US 101 north and south of the Nelscott Gap area currently lack adequate pedestrian and bicycle accommodations. The Lincoln City TSP recommended sidewalk and bike lane improvement projects along these segments, but these projects are not funded.

The Nelscott Gap study area has many stream corridors and the potential for many neighborhood and community parks. To facilitate future residents' travel to these scenic, natural, and recreational areas, the plan envisions a high-quality network of low-stress pedestrian and bicycle facilities. All future streets will have sidewalks. Dedicated bicycle facilities will vary based on the street classification. Collector streets will have either bike lanes or shared use paths. Wayfinding signage should direct travelers to key destinations, such as parks and shopping. These signs would improve destination and route finding for both residents and visitors, encouraging exploration and activity.

In addition to meeting the community's desire (expressed in the recently adopted Walking and Biking Plan and TSP) to have increased opportunities for walking and biking, the pedestrian and bicycle facilities in the Nelscott Gap area should integrate with the existing trail and bikeway network, including bike lanes along SE 32nd Street, and existing trails in the Agnes Creek Open Space and Spyglass Ridge Open Space. These measures help ensure that future Nelscott Gap study area residents will be able to access goods and services without the need for an automobile, both within and outside of the area.

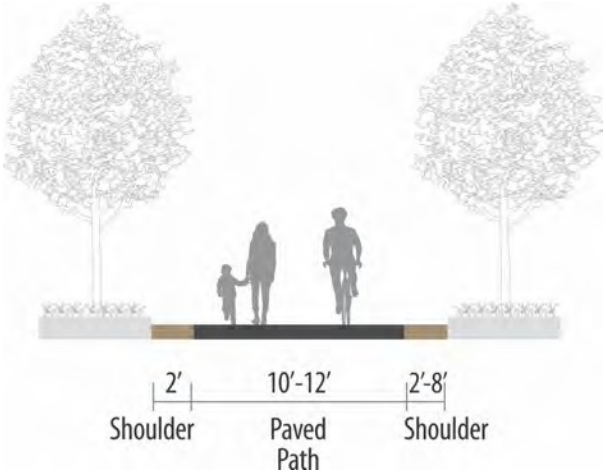
Trails

The trail network should connect residents to existing and future trails, as well as key destinations within and near to the Nelscott Gap Neighborhood Plan area, including the mixed-use area and employment district.

The TSP envisions a shared use path parallel to the new north to south collector, SE Foothills Boulevard, and an extension of SE Lee Avenue. This path would connect SE 19th Street to SE 32nd Street, providing an alternate walking and biking route to US 101 to the west. The TSP also recommends an east to west trail corridor, connecting the new enhanced pedestrian crossing of US 101 at SW 29th Street with the north to south trail along SE Foothills Boulevard.

The Baldy Creek corridor, adjacent to US 101, would connect existing trails in the Agnes Creek Open Space and Spyglass Ridge Open Space. This will include a landscaped greenway adjoining Baldy Creek with a shared-use path for pedestrians and bicycles. The shared-use path would also function as an emergency access lane when needed by the fire department. A minimum 20-foot roadway width is required to function as an emergency access lane and comply with the fire code. However, the extra width could be provided intermittently as needed for code compliance without widening the entire length of the path (see variable east side shoulder width in Figure 3).

Figure 3: Baldy Creek Shared-use Path and Emergency Access Lane Typical Cross-section



Street Crossings

As a major street connection through the Nelscott Gap area, US 101 should be an asset to the neighborhood rather than a barrier. Recent improvements to US 101 added a third lane. Posted speeds are between 30 and 35 miles per hour. Pedestrians and bicyclists need safe and comfortable crossings in convenient areas for ease of access between the neighborhoods, public facilities, amenities, and commercial areas on both sides of the highway.

The traffic signal recommended for the US 101 intersection with SE 23rd Drive, and pedestrian crossings available at the SE 32nd Street (traffic signal), SW 29th Street (flashing beacon), and proposed in the TSP at SE 19th Street (crosswalk with median island), would provide sufficient crossing opportunities. No additional crossings of US 101 are recommended.

TRANSIT

The Nelscott Gap Neighborhood Plan sets the stage for future transit, recognizing that the type and extent of service improvements will evolve over time. Specifics of transit service will depend on the actual rate and type of development, City and County resources and policies, and consideration of local options. The land use designations in the Nelscott Gap Neighborhood Plan area make transit a viable option in the future, and the walking and biking accommodations and connections will enhance and support transit service along study area streets.

STREET DESIGN

The Lincoln City TSP includes the typical street cross sections for the Nelscott Gap Neighborhood Plan area. The City may choose to adopt different street standards for select streets within the area where they would better fit the vision for this community. Although the application of typical street cross sections will work in many situations,

several future streets in the Nelscott Gap area are in need of additional design treatments or are envisioned to be different from the typical cross sections. They are as follows:

The main north to south collector, SE Foothills Boulevard, which is parallel to and east of US 101, is envisioned as a street that seamlessly integrates a street-side trail into its design (as recommended in the Lincoln City TSP), provides safe and comfortable multi-modal travel options, and includes high-quality pedestrian-scale design treatments that defines it as a neighborhood street (see Technical Memorandum #6 for the proposed street cross section). In order to balance mobility with safety and comfort, controlling speeds along this street will be important. A variety of design approaches can facilitate through travel, but not attract cut-through traffic. Stop control, however, should be limited along the route, with minimum spacing of 1,000 feet between stop signs.

The overall design of the street should serve to enhance the neighborhood and the adjacent residences and not serve as a barrier to those who will live on either side of it. The design process should carefully consider residential parking and access needs, including, at a minimum, an evaluation of how any proposed parking and access would impact trail users, and vehicular travel speeds and volumes. Lastly, it will be important to allow the alignment to shift in response to topography and stream crossings, as necessary.

The east to west collector, SE 23rd Drive, travels through a portion of the mixed-use area in the Nelscott Gap area, but also supports heavy vehicle movement to the proposed employment district at the east end of the study area. As such, it will be important to control speeds along this street to make it comfortable for pedestrians and bicyclists, and accommodate heavy vehicle movement. The street may need wider lanes (12 feet) for the short distances where trucks must negotiate right turns without encroaching into adjacent or opposing travel lanes.

SUMMARY OF TRANSPORTATION SYSTEM RECOMMENDATIONS

Table 4 and Figure 4 summarize transportation improvements to support future growth and new development within the Nelscott Gap Neighborhood Plan area, including projects previously identified in the TSP. They include a mix of projects funded by a combination of sources such as the City, ODOT, and developers.

Not all recommended improvements need to be in place prior to developing land within the Nelscott Gap Neighborhood Plan area. Upgrade of the existing streets will be driven by the multi-modal access needs of the adjacent properties. Many of the street extensions, such as the SE 27th and SE 28th Street extensions, will be dependent on new development.

Table 4: Recommended Transportation System Improvements in the Nelscott Gap Area

Project ID	Project Description	Project Summary	Primary Funding Source	Project Source
Projects Constructing or Improving Streets within the Plan area				
1	US 101 Improvements	Improve US 101 from SE 23rd Drive to SE 19th Street to include sidewalks and bike lanes.	ODOT	Lincoln City TSP Project P39
2	SE Lee Avenue Extension	Extend SE Lee Ave to SE 23rd Drive as a medium-use local street; install sidewalks along the west side and a shared use-path along the east side.	Developer/ City	Lincoln City TSP Project D14
3	SE Foothills Boulevard Extension	Extend SE Foothills Boulevard from SE 32nd Street to SE 23rd Drive as a medium-use collector street, and connect to stub streets east of US 101; improvement includes pedestrian and bike facilities.	Developer/ City	Modified version Lincoln City TSP Project D15 (modified project description)
4	SE 23rd Drive Upgrade to urban standards, segment 1	Improve SE 23rd Drive from US 101 to the entrance of the employment district as a medium-use collector street; improvement includes sidewalks and bike facilities; project should accommodate heavy vehicles.	Developer/ City	Modified version of Lincoln City TSP Project P41 (Change from low-use collector to medium-use collector)
5	SE 23rd Drive Upgrade to urban standards, segment 2	Improve the east portion of SE 23rd Drive within the employment district as a low-use local street; improvement includes sidewalks.	Developer	Modified version of Lincoln City TSP Project P41 (Change from low-use collector to low-use local)
6	SE 25th Street Extension	Extend SE 25th Street east from US 101 to SE 23rd Drive as a low-use local street; improvement includes sidewalks.	Developer/ City	New Project
7	SE 27th Street Extension	Extend SE 27th Street east to the proposed SE Foothills Boulevard extension as a low-use local street, and upgrade existing facility; improvement includes sidewalks.	Developer	Lincoln City TSP Project D16
8	Baldy Creek Path	Create a shared-use path along Baldy Creek.	ODOT	New Project
9	SE 28th Street Extension	Extend SE 28th Street east to the proposed SE Foothills Boulevard extension as a low-use local street, and upgrade existing facility; improvement includes sidewalks.	Developer	Modified version of Lincoln City TSP Project D17 (Change from medium-use local to low-use local)

Table 4: Recommended Transportation System Improvements in the Nelscott Gap Area

Project ID	Project Description	Project Summary	Primary Funding Source	Project Source
10	SE 31st Street Extension	Extend SE 31st Street east to the proposed SE Foothills Boulevard extension as a low-use local street, and upgrade existing facility; improvement includes sidewalks.	Developer	New Project
Projects Improving Existing Intersections				
11	US 101/ SE 23rd Drive Intersection Improvement	Install a traffic signal; include a left turn lane on the SE 23rd Drive approach to US 101.	Developer/ ODOT	New Project

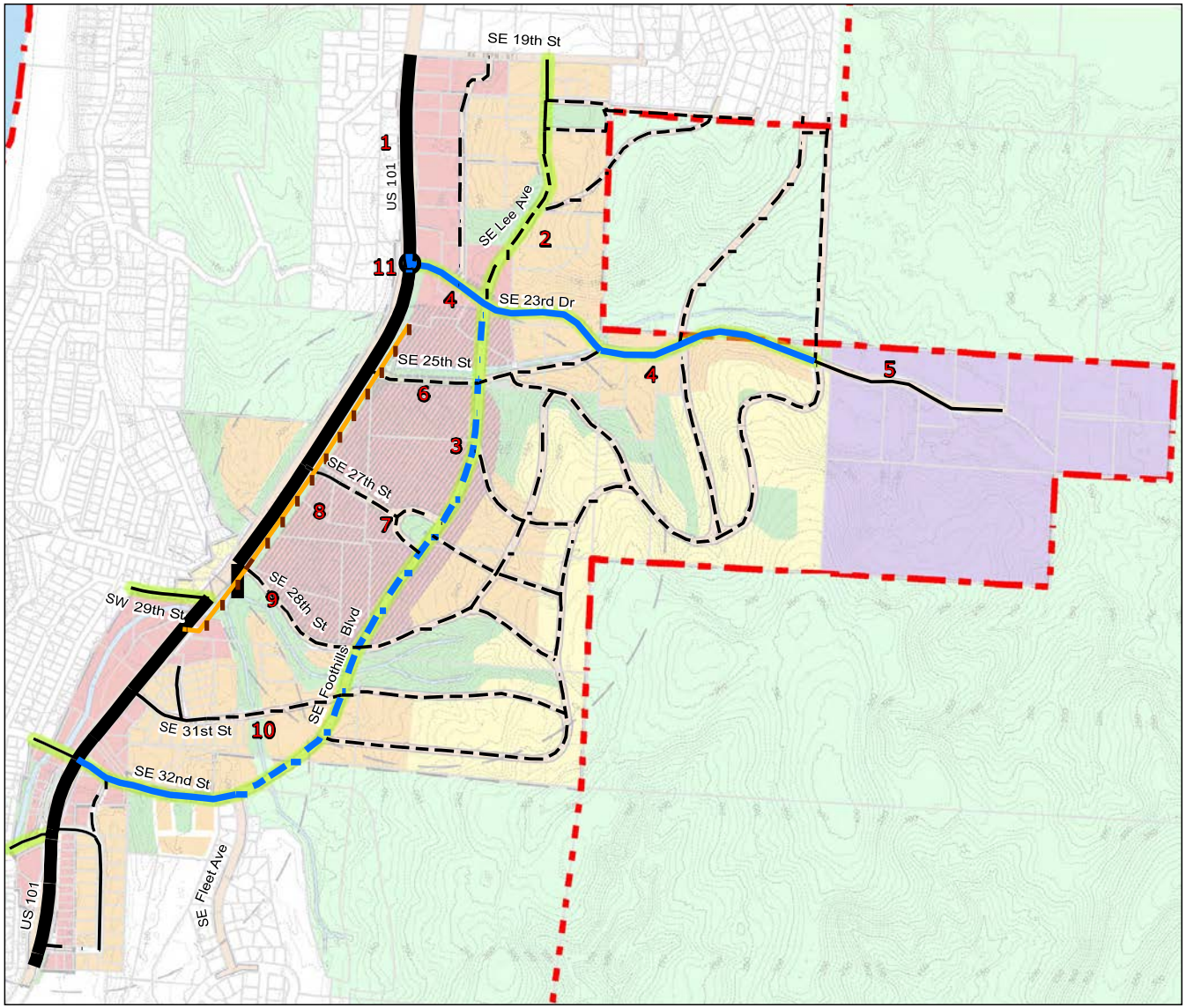


Figure : Recommended Transportation System Improvements in the Nelscott Gap Area

Nelscott Gap Street Functional Classifications

- Principal Arterial
- Collector
- Local Street
- Shared-use Path

Note: Future Roadways and Paths are shown as dashed lines

Nelscott Gap Area Type Designations

- Medium-Use Street
- Planned Intersection Improvement
- Project # (See Table 4)

Refinement Plan Land Use

- Hillside Residential
- Village Community
- Vertical and Horizontal Mixed-Use
- Existing Nelscott Zone
- Employment District
- Urban Growth Boundary

μ

Feet

0 225 450 900

17

TSP Amendments

The following provides a summary of the recommended amendments to the Lincoln City TSP to implement the Nelscott Gap Neighborhood Plan. The City should amend the TSP as soon as feasible to ensure recommendations are included in an adopted plan before future land use actions in the Gap area are proposed.

- The City should add the modified or new transportation system improvements in Table 4 to the TSP Aspirational Project List.
- These recommended street functional classifications for the Nelscott Gap area should update the classifications shown in Figure 12 of the TSP:
  - Maintain classification of SE 23rd Drive from US 101 to the entrance to the industrial area as a collector
  - Reclassify SE 23rd Drive within the industrial area as a local street
  - Classify SE Foothills Boulevard (connecting SE 32nd Street to SE 23rd Drive) as a collector
  - Classify SE 32nd Street from US 101 to SE Fleet Avenue as a collector
- These recommended street type designations for the Nelscott Gap area should update the classifications in Figure 12 of the TSP:
  - SE 28th Street changed to low-use street from medium-use street between US 101 and the SE Foothills Boulevard extension
  - SE 23rd Drive changed to medium-use street from US 101 to the entrance of the industrial area
- Use the same alternative mobility target recommended for adoption for the US 101/ SW 32nd Street intersection for the US 101/ SE 23rd Drive intersection. This alternative mobility target would allow for a volume to capacity (v/c) ratio of 1.0 (an "at full capacity" condition) for eight hours per average weekday.
- The City may choose to adopt new designs for the future streets in the Nelscott Gap study area that differ from the TSP optimum designs, including for SE Foothills Boulevard and SE 23rd Drive. This would require an amendment to the City's street design standards included in the TSP.
- The City should modify typical street cross sections to include a caveat that the side of the street adjacent to a trail may not need walking and biking facilities in addition to the trail. In such cases, the trail should generally be no more than 30 feet from the street, with no development between the trail and street.

APPENDIX E.

Infrastructure and Financing

Final Technical Memorandum #5

Cogan Owens Greene

Engaging people to create and sustain great communities.

600 STEVENS BUILDING
812 SW WASHINGTON STREET
PORTLAND, OREGON 97205
503.225.0192
FAX: 503.225.0224
www.coganowens.com

Integrated Services in Planning, Sustainability and Community Engagement

DATE: July 7, 2017

TO: Deb Nicholson, City of Lincoln City
David Helton, Oregon Department of Transportation

FROM: DJ Heffernan, Daniel Heffernan Company
Rich Catlin, Reece & Associates
Kirstin Greene and Elise Scolnick, Cogan Owens Greene

CC: John Bosket, DKS Associates

SUBJECT: Lincoln City Nelscott Gap Neighborhood Plan
Final Technical Memorandum #5: Costs and Funding Sources

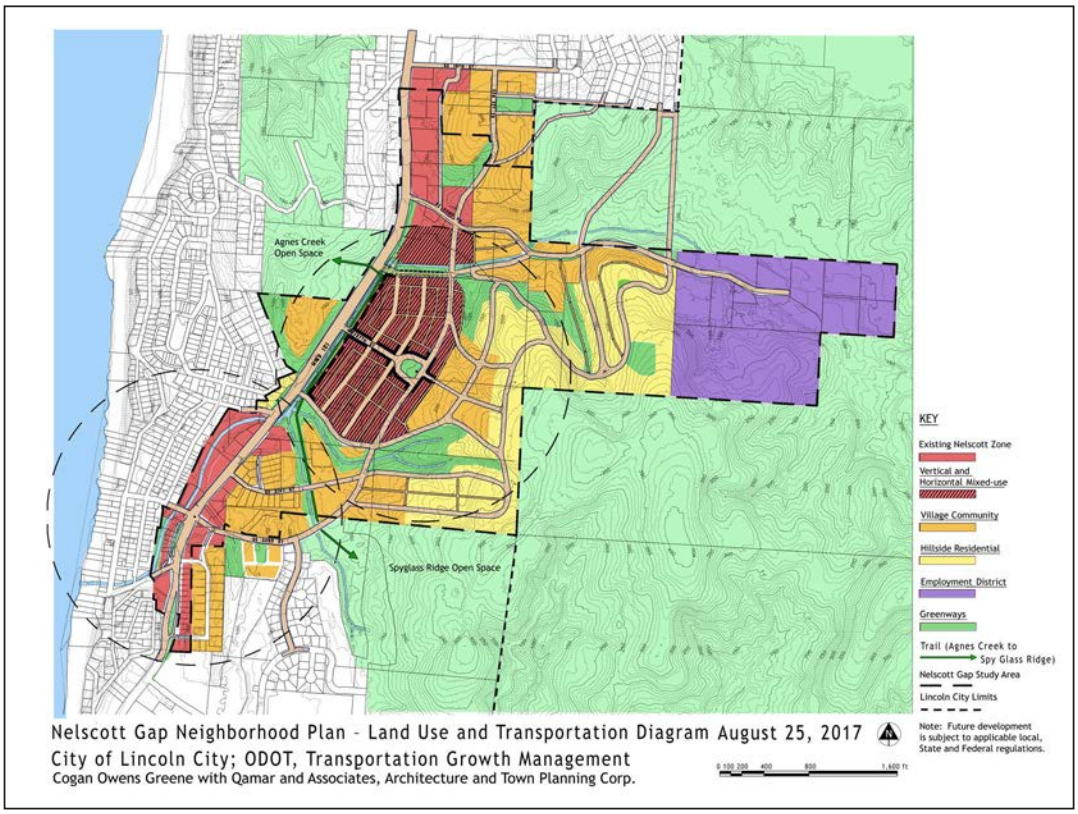
INTRODUCTION

This memorandum includes projects, costs, and a range of possible funding sources and financing methods that the City can use to implement the Draft Land Use and Transportation Diagram presented in Memorandum #3 (see Figure 1 on the next page). The diagram shows a concept for mixed use development of the Lincoln City Nelscott Gap Neighborhood Plan (plan) area. The development timeline is well over 20 years. Although the projects covered in this memo are expansive and the costs are substantial, we believe they are realistic and necessary to accommodate the growth anticipated in this long-range plan.

By planning for the entire area, rather than reacting to piecemeal development, the City can better ensure development outcomes in keeping with demand and community vision. Most of the improvements will be development-driven and financed. If a large employer or retailer decides to locate in the area, however, the development may accelerate other build out of portions of the Nelscott Gap Neighborhood Plan (plan) area.

Cogan Owens Greene is a limited liability company

Figure 1 – Land Use and Transportation Diagram



A. Public Facility Improvements and Costs

Working with the City's project management team, the consulting team identified the following projects deemed necessary to support redevelopment and new development in the plan area. The following narrative describes each project, its purpose, timing, and estimated cost. These improvements are summarized in Table 2 at the end of this section.

1. Transportation

1.a: Baldy Creek Trail and Emergency Access Lane

Purpose: Memo #3 describes Baldy Creek Trail as a segment of the Head to Bay Trail, a significant pedestrian corridor through the City. Located on the east side of US 101, it will serve the proposed mixed-use community area that stretches between SE 19th Street and SE 28th Street. Next to the trail would be an emergency access corridor. The design is expected to vary in its cross-section, depending on built and natural constraints. A landscaped greenway adjoining Baldy Creek with a shared path for pedestrians and

bicycles will separate the emergency access lane from the main highway. Separation between the creek and pedestrians will consist of rails, retaining walls and other landscaping features. Buildings that are set back from the emergency access lane could set up outdoor seating in this open space. Property owners east of the highway that front the access lane will be responsible for improving the emergency lane as a Fire and Life Safety requirement of their building permit. The cost to property owners will be comparable to the cost to improve the road frontage in other commercial districts.

The Oregon Department of Transportation (ODOT) has made significant investment in this part of the highway corridor, including a retaining wall in the vicinity of US 101 and 23rd Street. ODOT intends to build retaining walls between the highway and Baldy Creek to protect the highway and the creek. In addition, the available right of way for the emergency access lane (east of Baldy Creek) varies in width. The final design for the emergency access lane may include segments that are lower cost, wider, with more ecological treatment. Other sections may be narrower with a more 'hardscape' appearance and guard rails. Local access and utility connections constructed through the access lane will serve resident businesses in the interior of the plan area.

Timing: Development driven.

Construction Cost: $ Design dependent (NIC ROW Costs)

1.b: SE 23rd Drive

Purpose: The primary east/west collector road serving the north end of the plan area and connecting the Industrial Employment District with US 101. This road is classified as a *Collector* in the Lincoln City Transportation System Plan (TSP). The urban upgrade improvements to this road may include right-of-way dedication, pavement widening, and bike/pedestrian facilities to meet collector roadway standards. The construction cost estimate is for a full width collector over the entire length of SE 23rd Drive. The portion of this transportation system improvement that serves future development is eligible for financing with system development charges (SDCs). Additional funding could come from developer contributions, urban renewal, a street improvement bond, a Local Improvement District (LID), or other local transportation funds. Improvements will be incremental, concurrent with development and redevelopment.

Timing: This area contains some of the City's most level land, which makes it the most desirable for many types of employers and large retailers. Developers will drive the development of the infrastructure investments.

Construction Cost: $7,400,000 (~ $10.5 million/mile)

1.c: Foothills Boulevard Neighborhood Connector

Purpose: The primary north/south connector road through the plan area east of US 101. Foothills Boulevard is the roadway name used for convenience in the plan.

Incrementally, sections of Foothills Boulevard may have different names, including SE 32nd at the south end, SE Lee at the north end, and one or two other names between. This road is classified as a Collector in the City's TSP. The improvement must include travel lanes for vehicles and bike/pedestrian facilities to meet City collector roadway standards. The City will select the type of cross-section based on a travel demand forecast for the 20-year horizon and build-out. As a collector street, this transportation system improvement would be eligible for financing with system development charges (SDC). Additional funding could come from local sources, including tax increment financing (TIF), street improvement bond, local improvement districts (LIDs), the street fund, or other local funds. Incremental development likely will affect the timing of upgrades.

Timing: Development will drive the timing and sequence street.

Construction Cost: $6,000,000 (~ $5.8 million/mile)

2. Public Works Improvements

2.a: Water System Improvements

Purpose: Provide potable and emergency water service to support planned development. The current water system plan identifies no major water improvements in the Nelscott plan area. The plan area includes two water service zones, as shown in Figure 1 at the end of this section. The 19th Street Reservoir serves pressure Zone 2, which is below the elevation at 131 feet. The Zone 2 water service level eventually will extend along the US 101 and SE 23rd Street corridors. Existing mains in US 101 provide the backbone for the Zone 2 distribution system in the plan area. Improvements made to these water lines prior to recent ODOT US 101 enhancements ensure adequate service delivery well into the future. Additional extensions to the Zone 2 water distribution system would be concurrent with development and at developer expense.

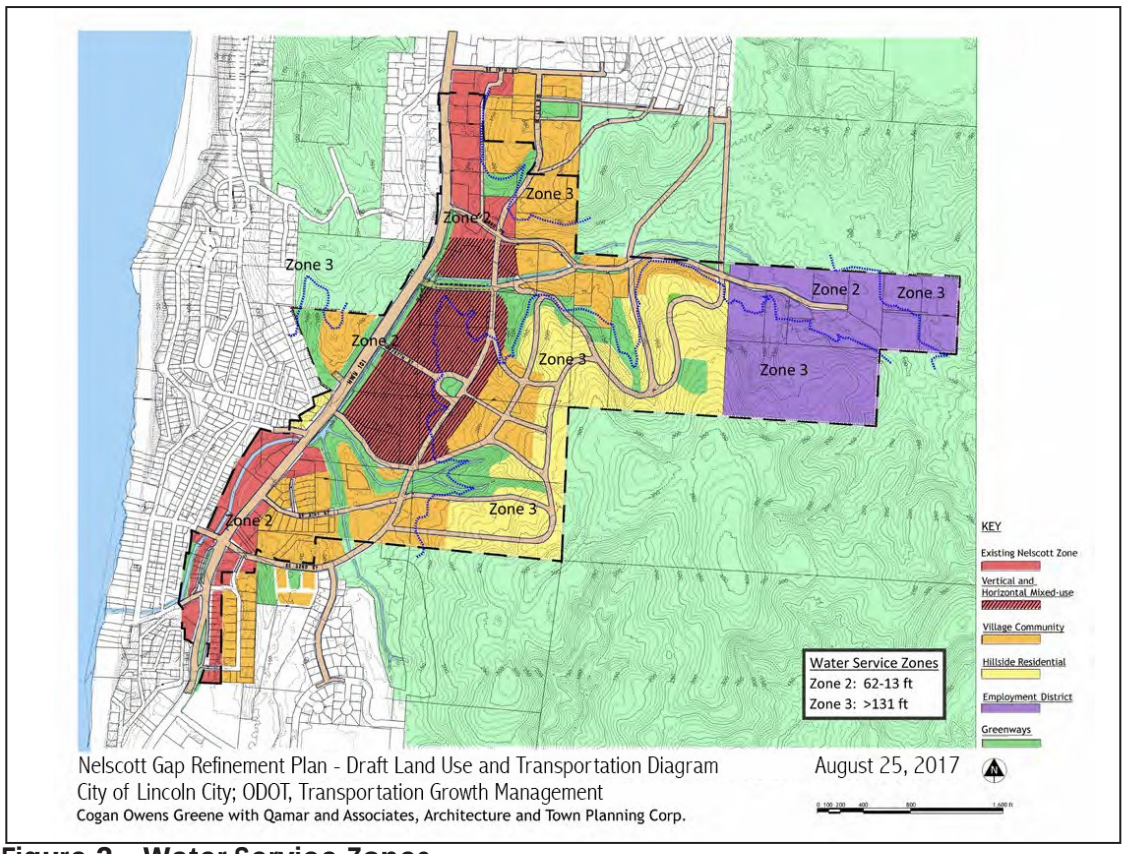


Figure 2 – Water Service Zones

Water pressure Zone 3 includes more than 100 acres south of SE 23rd Street and east of US 101. Zone 3 also extends outside the plan area to the north, northeast, and south. Zone 3 is above the 131-foot elevation limit for pressure Zone 2. The City's Water Capital Improvement Plan for Fiscal Years 2016-2026 proposed no projects in the Zone 3 area. A refinement plan/master plan update must establish a service solution for the land in water service Zone 3. The area likely will need a new water reservoir, a pump station, and transmission system investments.

An estimated 220 new dwelling units are forecast in the plan area during the 20-year planning period. The portion of the plan area that lies in the Zone 2 pressure zone has capacity for more than 600 dwelling units, as summarized in Table 1. The development potential in Zone 3 is greater still.

Table 1 – Summary of Dwelling Unit Capacity by Zoning Designation in Water Zone 2

Land Use Zone *	Acres	Average Density	# Dwelling Units
Vertical & Horizontal Mixed Use	17.6	22 Dwelling Units/ Acre	388
Village Community	15.5	15 Dwelling Units/ Acre	233
Totals	33.1		621

On this basis, the Zone 2 water service level has more than enough land available for residential use to meet forecast land needs for the next 20 years. Development of the area will not require Zone 3 water service until well beyond the 20-year planning horizon. Development on a case-by-case basis above the Zone 2 service boundary is possible, however, with the installation of special infrastructure to meet domestic consumption and fire flow demand.

Timing for system improvements: capital project or development-driven.

Cost: Paid by development

2.b: Water Master Plan Update

The City may wish to update the Water System Master Plan to establish the location and sizing for water storage, transmission, and distribution lines in the plan area, particularly for Zone 3. When the City updates the 2004 Master Plan, a comprehensive, City-wide review also would identify need for pressure regulating or other extraordinary measures to serve Zone 3, and would provide guidance to developers for system extensions that may be eligible for SDC credit. The cost to prepare an addendum to the master plan is nominal and would be eligible for funding with SDC funds. Alternatively, the next update of the citywide water distribution model could include this analysis.

Timing: Next five years.

Cost: $30,000-50,000

2.c: Planned Sanitary Sewer Capital Improvements

Purpose: Provide sanitary sewer service to the plan area. Most of the "backbone" sanitary sewer system elements to serve the Nelscott area are in place or planned. For properties in the plan area that abut US 101, a gravity sewer is in place along the highway between the 3rd Street pump station and the Nelscott Pump Station at SE 35th

Street. This major interceptor sewer line is part of the citywide backbone sanitary sewer system that is critical to the function of the wastewater system. In 2006, the City upgraded the US 101 trunk sewer to a 24-inch line. The sewer now has capacity to convey wastewater flows at build-out conditions throughout this part of the city.

In the part of the plan area west of US 101, an existing gravity collection system conveys wastewater in a southwesterly direction to the Ester Lee North (EL-N) pump station located at SW 37th Street and Anchor Avenue, which is outside the plan area. Infill development on the west side of US 101 will tie into this existing wastewater collection system at developer expense. Planned upgrades to the EL-N pump station will eliminate the need for the Ester Lee South pump station, which will be phased out of service after the EL-N improvements have been made. The EL-N project is scheduled for 2021 in the Sewer Capital Improvement Plan (CIP).

Ester Lee North Pump Station
Timing: 2021.

Cost: $1,350,000

The Nelscott Pump Station at 35th Street near the highway diverts sewerage from this area to the sewerage treatment plant in Taft via the Nelscott force main. Planned improvements totaling $2.9M at the Nelscott Pump Station will increase pumping capacity and to add a second force main pipe. These improvements are scheduled for the year 2026 in the sewer capital improvements plan (CIP). They provide capacity to convey all sanitary sewage the plan area east of the highway to the treatment plant.

Nelscott Pump Station
Timing: 2026.

Cost: $2,900,000

2.d: Other Sanitary Sewer System Improvements

Most properties in the plan area that are east of US 101 are not served by City sewer. The US 101 Trunk Sewer has capacity to intercept gravity sewers that are extended from the highway to the east. Most of this gravity sewer collection system would be extended on an incremental basis at developer expense. Because of a need to install oversized pipes at the lower end of the sub-basins that serve the upper part of the plan area, over-sizing credits financed with system development charge (SDC) funds or through development agreements may be necessary to incentivize development near Highway 101.

Timing: Development-driven.

Cost: N/A

2.e: Sanitary Sewer Refinement Plan

We recommend the City prepare a sub-basin analysis for the plan area east of the highway when it next updates the sewer collection model or as a standalone spreadsheet analysis. The cost to prepare the refinement plan as well as the sewer mains that may be added to the City's capital improvement program based on the plan are eligible use of system development charge (SDC) funds, but should not have a significant influence on current SDC rates. At the margin, the refinement plan represents a nominal coast compared with the overall sewer system capital planning and investment program financed with SDCs. Likewise, the service mains and collectors serving the sub-basins east of the highway should not have a significant impact on SDC rates, as these projects would be in line with current per-capita fees that finance sewer mains in other parts of the city.

Nelscott Sewer Refinement Plan

Timing: Next five years.

Cost: $10-30,000 depending on project scope

2.f: Stormwater Facilities

Purpose: The plan area lies in the Baldy Creek drainage basin. In its current underdeveloped condition, stormwater is conveyed in open channels and occasional culverts that discharge to Baldy Creek. Lincoln City's development regulations require that runoff from private development be managed in privately-owned and maintained detention facilities for release at pre-development rate. The storm water may be released to public storm drains constructed at the developer's expense.

Lincoln City recently updated its Stormwater Management (SWM) Master Plan. The plan includes capital improvement program projects to be funded with utility fees and system development charges (SDCs). There are no projects in the SWM plan for the Nelscott area. Planned development may result in water quantity, water quality, and fish passage issues in the plan area. For example, a segment of Baldy Creek east of US 101 flows through a buried culvert. Funding to improve this facility could come from utility fees, SDCs, developer contributions, or from a watershed enhancement grant. At this time, however, no adopted stormwater management capital projects are in the plan area. Further study is needed to establish a solution for Baldy Creek and the other drainage systems in the plan area. The greatest impact on the natural drainage ways in the plan area will be from runoff from new public roads.

Timing: Developer-driven.

Cost: To be calculated at the time of development

3. Park and Open Space Improvements

3.a: City Parks

Purpose: To ensure the plan area vision for access to parks and nature in future neighborhoods. The concept plan for the Nelscott Mixed Use Area shows two small neighborhood-scale parks. One is about a half-acre in the middle of the plan area near the intersection of Foothills Boulevard and 27th Street. The plan envisions that it will be an urban plaza/central green type of park. Another is approximately 1.5 acres south of SE 23rd Street and west of the Employment District. The location could change depending on the future development pattern. These parks are not called out specifically in the City's current Park System Master Plan, but small pocket parks within walking distance of neighborhoods in general are a priority. The 2016 Park Master Plan does specify new neighborhood parks near the Agnes Creek Open Space and in coordination and near the Taft schools.

The land use planning analysis assumed that the cost to develop these parks will be similar to the cost for developing other neighborhood parks. As such, these facilities are not expected to have an impact on park system development charges (SDC). The City may wish to acquire property for these facilities to ensure that land for them is available. Land acquisition could be financed either using Park SDC or could rely on the 35% open space requirement for large scale mixed use planned unit developments (PUDs).

Additionally, financing some park improvements using Urban Renewal funds) is possible, if a new Nelscott Urban Renewal District is formed.

Timing: The 2016 update to the Parks System Master Plan will set priorities and identify funding sources to serve existing neighborhoods and visitors. Development may deliver parks ahead of the parks system plan schedule.

Cost: Depends on types of park facilities and landscaping.

3.b: Open Spaces

Purpose: To plan for preservation of open space in the plan area. The Land Use and Transportation Diagram in Memo 3 shows a number of undeveloped open space areas many of which include tributaries to Baldy Creek and/or have steep slopes. One of these may include part of the Head to Bay Trail (see Segment 3 below). Private development in these open space areas may be constrained, especially if subject to flooding or slope stability hazards. The City may wish to consider density transfers or an open space acquisition bank to ensure preservation of these spaces.

Timing: With development.

Cost: Provided with development

3.c: Head to Bay Trail (multiple segments)

Purpose: A series of interconnected trail improvements are envisioned in the plan area as part of (or linked to) the Head to Bay Trail system. A variety of funding sources may to fund these improvements, including system development charges (SDC), state grants, urban renewal funds, public-private partnerships. The following summary describes three trail segments that have been identified within the plan area, beginning in the northwest and working southeast.

Segment 1- Northwest

The first segment involves an extension from the Agnes Creek Open Space trail system to US 101 at the City's new parking lot at SW 29th Street, where the plan envisions an interpretive kiosk and pedestrian crossing to the east side of the highway.

Timing: Dependent on funding.

Cost: Design-dependent

Segment 2 – US 101

A highly visible section of trail would begin at the east side of the Segment 1 highway crossing and extend south along US 101 for over a mile (approximately 6,000 feet). This trail would run along the top of bank of Baldy Creek next to the emergency access lane. Improvements may include paved and soft pathway, removal of non-native vegetation, native plantings, and pedestrian amenities. The design of this trail segment needs to coordinate with the emergency frontage access lane design at points where vehicles cross the trail alignment to access the highway. The improvement may be eligible for state and federal transportation grants.

Timing: The Head to Bay Trail is a priority in the 2016 Parks and Recreation System Plan, which could allow construction in the plan area prior to other development.

Cost: Design-dependent

Segment 3 – Southeast

This trail segment would begin at the south end of the emergency frontage access lane and extend southeasterly approximately 3,800 feet to connect with the Spyglass Hill Open Space trail system, which connects with the high school trail and the Taft trail.

Parts of this trail may be on-street to reduce costs. It may include a section through an open space corridor along a Baldy Creek tributary, if the City is able to obtain a dedicated public access easement when development occurs, or acquire. This trail may be a tsunami evacuation route, if it provides the most direct access to high ground.

Timing: Dependent on funding, as a tsunami and seismic lifeline route, the City may push to develop this segment sooner.

Cost: Design-dependent

Financing for these trail improvements may include system development charges (SDCs) either from park system fees or from transportation system fees, depending on how these trail segments are portrayed in those system plans and on the related SDC fee methodologies. Other potential funding sources for trail improvements include public-private initiatives, state grants, developer contributions/exactions, and open space acquisition/banking programs.

3.d: Baldy Creek Enhancements (multiple segments)

Purpose: These improvements would enhance stormwater conveyance, fish passage, and habitat in the creek and its major tributaries. A watershed enhancement plan could guide and prioritize this work. Funding for enhancements may come from ODOT mitigation, developer contributions, stormwater management funding, and Oregon Watershed Enhancement Grants sponsored by the Salmon-Drift Creek Watershed Council.

Timing: Dependent on sponsorship and development patterns.

Cost: Design-dependent

Table 2 - Nelscott Plan Area Public Facility Investment Summary

	Project	Type	Cost (000s)	Timing *	Funding Sources
1	Emergency Access Lane	Transportation	TBD	Incremental	Developer
2	SE 23rd Drive - Collector	Transportation	$7,370	Incremental	SDCs, private contributions, other
3	SE Foothills Blvd - Collector	Transportation	$5,984	Incremental	SDCs, private contributions, ODOT, other
4	Head to Bay Trail – Agnes Creek link	Transportation	TBD	Incremental	SDCs, grants, private contributions, other
5	Head to Bay Trail – US 101 link	Transportation	TBD	Phase 1	SDC, ODOT, other
6	Head to Bay Trail – 101 to Spyglass link	Transportation	TBD	Incremental	SDCs, grants, private contributions, other
7	Water System Refinement Plan	Water	$30-50	Within 5 years	SDCs, utility funds
8	Sewer System Refinement Plan	Sewer	$10-30	Within 5 years	SDCs, utility funds
9	Ester Lee N. Pump Station	Sewer	$1,350	2021	Sewer bonds/utility rates
10	Nelscott P.S./2nd Force Main	Sewer	$1,370	2017	Sewer bonds/utility rates
11	Nelscott P.S. /Force Main	Sewer	$2,900	2026	Sewer bonds/utility rates
12	Nelscott East Sewer Mains (interceptor link)	Sewer	TBD	Phase 1	SDCs, Developer contributions, bonds,
13	Foothills *Central Green* Mini- Park (Foothills and NE 27th)	Parks	$100	Development driven	SDCs, development agreement, other

	Project	Type	Cost (000s)	Timing *	Funding Sources
14	Foothills Neighborhood Park (no location)	Parks	$200	Development driven	SDCs, developer agreement, exactions
15	Open Space Areas (various)	Parks	TBD	Incremental	Private contributions, TDR, development limitations, other
16	Baldy Creek Enhancements	Parks	TBD	Incremental	ODOT mitigation, Watershed Enhancement Grants, other

* Phase 1 means during the current 20-year comprehensive plan horizon that ends in 2035

Phase 2 is expected to be after 2035

B. Existing and Prospective Funding Sources

This section includes a summary of existing and potential sources of financing for public facilities and other plan area investments.

1. Existing City Tools and Resources

A. Systems Development Charges (SDCs)

SDCs are one of the most important funding tools in Oregon used to finance public facilities that need to be constructed or expanded to accommodate demand imposed on systems as a result of growth. SDCs differ from impact fees in the way they are established. SDC fees are based on system-wide cost projections to offset demand that growth will have on public facilities. Impact fees typically assess system impacts on a project by project basis.

In general, Lincoln City's existing SDC rates should be able to finance the public infrastructure needed to support development in the plan area. We base this assessment on the following assumptions.

- The ability of existing transportation SDCs to finance the two collector streets that will serve the area depends on the cost and timing of these projects. We have assumed their cost is comparable with the cost to build typical collector streets elsewhere in the city, and therefore the existing SDCs should be sufficient to cover their cost. The amount of growth forecast in the 20-year timeframe would not necessitate building these collector streets at a full collector street standard, especially for Foothills Boulevard. An alternative solution would be to require full right of way for planned collector facilities, but only require frontage improvements that meet a local street standard. The full-collector cross section improvement would be made later when the higher functional capacity is needed.
- The cost to build water and sewer utility improvements for the plan area either is programmed into the existing SDC rates or is comparable with the cost to build similar SDC eligible projects serving other undeveloped parts of the city. On a dwelling unit basis, the marginal cost of utility improvements in the plan area should be in line with the existing rate structure. Most utility improvements will be extended on an incremental basis as development occurs. As noted in Section A, however, the City should prepare refinement plans for both water and sewer to

establish which improvements in the plan area may be eligible for SDC credits and which simply involve smaller-scale extensions of the system to serve individual properties.

- The City has planned no major stormwater improvements for the area. The City's stormwater SDC fees, which finance drainage improvements to convey runoff from public street, were recently updated. By statute the new rate cannot be changed unless the City updates its Stormwater Management Plan (SWM), or updates the SWM related capital improvement plan, or modifies its stormwater SDC rate methodology.
- The City recently revised its park system SDCs to be consistent with the updated 2016 Parks and Recreation Park System Plan Master Plan. Since neighborhood parks envisioned for the plan area are typical of neighborhood parks elsewhere in the city, the updated park SDC fees should be sufficient to finance these new parks.

The City may wish to consider policy amendments to its SDC program to reduce the burden that SDC fees impose on certain development projects. Options to consider include:

- Offer City financing for SDCs to certain types of projects, such as affordable housing or employment developments above a threshold value.
- Collect the SDCs at the time of occupancy rather than when the building permit is issued. This shifts the financing burden to the project's permanent financing basis rather than as part of construction financing.
- Defer collection of SDCs on certain types of projects, such as affordable housing projects. The city currently defers SDCs for affordable housing.

The City is updating its SDC methodologies in light of the completion of a variety of infrastructure improvements that provide capacity to serve future development.

The water and sewer system improvements in US 101 that were oversized to meet future demand are examples. The result shifts the cost recovery methodology for these system improvements from an improvement fee to a reimbursement fee. The SDC statute is less restrictive on the use of reimbursement fee revenue, which provides more flexibility to the City for using these funds. The City may wish to consider targeting/programming reimbursement fee revenue to projects in the Nelscott Plan Area. This could accelerate the construction of key projects and spur private development.

B. Inter-fund Lending: Enterprise Funds and General Fund

Lincoln City has successfully used the bonding authority for its enterprise funds, such as the water and sewer utility funds and its full faith credit authority backed by the general fund to finance public facility investments. It has made creative use of favorable fund balances to finance projects internally and to reduce financing charges and surety costs. The City may use its financial strength within these funds to target specific projects in the plan area and front-load infrastructure investment that is essential to private development; for example, the gravity sewer lines that will extend through the emergency access lane and under (or over) Baldy Creek before connecting into the US 101 interceptor. They need to be oversized to serve many properties in addition to those in the immediate vicinity. The City could issue revenue bonds or full-faith credit bonds to build these oversized sewer connections. Repayment could come from utility payments, an LID or Developer Agreements, or SDCs. A sewer refinement study should establish the location and design for these connections. SDC funds may pay for the study.

C. Urban Renewal/Tax Increment Financing (TIF)

Lincoln City has operated a very successful TIF program since 1988. The Lincoln City Urban Renewal District (District) boundary takes in properties on either side of US 101 and a sizable area outside the highway corridor in the north at Roads End and in the south near Siletz Bay. The original vision for the District focused on investments to remedy blighted conditions in six nodes (pearls in the "String of Pearls"). Nelscott is one of these nodes.

In 2006, the District prepared the Nelscott Community Vision Plan to guide investment of urban renewal resources in this area. It included many improvements in the US 101 corridor, but did not include any of the public facility improvements recommended in the new area plan, such as the emergency access lane, parks and trails, or infrastructure improvements.

In 2014, the City authorized a 10-year extension to the District. The District agreed to tap only 20% of its TIF authority and would release the other 80% to taxing districts. It was also agreed at the time that the District would sunset in 2024. The extension has allowed the City to program most of its available TIF authority to retire debt, such as for sanitary sewer bonds in Roads End, and to complete programmed capital improvements. The adopted 2015 Urban Renewal Plan is consistent with the agreement.

Under this arrangement, the City cannot make use of the existing urban renewal district in the plan area because it will reach its maximum indebtedness by 2024. The City would need to form a new Nelscott Urban Renewal District. This approach would

involve developing an urban renewal plan specifically for the Nelscott area with projects tailored to advancing the new land use plan. The new district would start with its own basis, which means that 10 to 15 years would pass before it could generate enough revenue to underwrite bonds and finance projects.

The City cannot implement a new urban renewal district until the existing Lincoln City Urban Renewal District sunsets in 2024. In addition, the land to the east that would benefit from TIF investment should be annexed to the city so that development in this area contributes TIF assessment revenue to the approved improvements. Planning for the new district, however, may begin prior to that. The City should consider initiating the planning process in the near future, so it is prepared to take advantage of this option with the current district sunsets. The city should annex the land to the east that would benefit from TIF investment, so that development in this area contributes to the system improvements.

2. Prospective City Financing Sources

A. New Enterprise Funds

Lincoln City has authority under state law to establish utilities and collect service fees for more than just water and sewer systems. Many cities in Oregon also operate stormwater and transportation utilities. Some Oregon cities collect service fees for park maintenance and operations. These funds are held in special enterprise funds that are dedicated to improving and maintaining these systems.

A transportation utility, for example, could finance street maintenance and free up some of the state-shared gas tax revenue that the City receives for capital projects. A local motor fuel excise tax also could be used as part of this strategy. Transportation utility revenues also could be used to cover the local share of capital improvement projects that is not eligible for SDC funding.

Lincoln City's stormwater system, which primarily conveys runoff from public streets to local drainages, does not have a secure funding source. The city could choose to establish a stormwater utility for this system. Another option would be to combine care for the stormwater system as part of a transportation utility, which would simplify administration.

An analysis of the rate impact of such a utility is beyond the scope of this review. Service fees in other Oregon cities that have been enacted for transportation and stormwater systems typically range between $1 and $5 per month per household

depending on the scope of the program. Refer to several publications by the League of Oregon Cities on these programs at: http://www.orcities.org/Publications/Library/tabid/6518/language/en-US/Default.aspx.

B. Local/Regional Excise Taxes

Workforce housing is an explicit objective for the plan area. Service sector wages generally are insufficient to allow workers to purchase market-rate housing in Lincoln City. A number of initiatives are emerging in the current state legislative session on affordable housing that may provide new sources of revenue to subsidize development of affordable housing Lincoln City. The City may wish to consider existing financing tools in developing a strategy for addressing this issue. The City may wish to set this issue aside for the Nelscott plan area for now and develop a city-wide strategy as part of its comprehensive plan update, based on a recently completed housing land needs analysis. Local excise taxes, however, should be considered as part of the strategy.

Transient Room (Hotel/Motel) Tax – Oregon collects a one percent transient room tax to promote tourism and allows local governments to impose a local tax, which Lincoln City does, without regulation or a cap. The law allows discretionary use of 30% of the local tax revenue with the balance restricted to uses that promote and serve tourism. Coastal cities and counties that collect transient room taxes may target the discretionary share of their local room tax revenue for affordable housing. For more information, see Oregon Local Hotel/Motel Lodging Taxes: http://www.orcities.org/portals/17/AZ/HB2267Summary.pdf

Special Excise Taxes - With voter approval, cities and counties also may collect an excise tax (i.e., sales tax) on goods and services. Unlike a general sales tax, an excise tax is limited to a specific activity or good, such as a local tax on motor vehicle fuel sales. There generally is a link or nexus between the enterprise being taxed and the beneficial use of tax proceeds. Ashland, Oregon, for example, taxes prepared food and beverage sales receipts to offset the added cost that tourism has on its sewerage treatment system and parks.

In coastal areas, seasonal visitors limit the supply of housing available for service workers and burden public facilities with unusually high peak use. An excise tax program on restaurant food and beverage sales, or on fuel purchases for example, could offset the added demands on these systems related to seasonal visitors. Lincoln City could target excise tax receipts for affordable housing subsidies in the form of system development charges offset payments and tax abatement offsets, or to finance sewer and water system infrastructure oversized to meet tourism needs, or to provide housing for service workers.

Enacting a local excise tax requires voter approval, but once approved would provide a stable source of revenue to the city. If individual cities find this approach puts its tourism trade at a competitive disadvantage, they may find a regional approach (i.e., county-wide) more acceptable. The regional tax would need to address revenue sharing among participating jurisdictions.

Steps for implementing an excise tax program:

a. Regional dialog about such a program is important regardless the outcome. Local governments should consider using county-wide or regional government forums to host early discussions on the issue.

b. As with all rate-based tax programs, an analysis is needed of the annual revenue goal, the characteristics of the market (i.e., the vacation rental market), and the rate basis (i.e., fixed or percentage basis) as well as the cost to collect and enforce the program. We recommend indexing the rate, which adjusts the fee or tax amount to keep pace with inflation.

c. A significant community engagement effort needs to be included alongside the analysis. It is often useful to appoint an ad-hoc committee that includes representation from stakeholders and interest groups so that details of the program can be reviewed by those most impacted by the program. Frequent feedback briefings with the elected officials that will refer the measure to the ballot and to the community at-large will benefit the dialogue overall.

d. Once a rate proposal has been agreed to, the matter needs to be referred to the voters. Oregon law specifies when and how such matters may be voted on. Legal advice is critically important when preparing the ballot measure. The measure needs to be written so that the intent of the program is not diluted by ambiguous language. The language in the ballot measure must be clear enough that funds are used only as intended but not so tightly that the program is unable to take advantage of new technologies and priorities.

e. Once approved, local budgets need to account for collection and use of tax revenue, typically by establishing "Special Revenue Funds".

Local Improvement District (LID) – Oregon law allows cities and counties to issue debt on behalf of private property owners to build necessary public improvements. The debt is retired through assessment collected from those benefitting. The assessment need not be ad valorem (i.e., a rate applied to the property's assessed value). It can be based on the length of property fronting public right of way, the area of benefitting

properties, or the prospective density of the property. The majority of the benefitting properties must be willing to participate and the local government must be willing to sponsor the LID.

Assessments generally are collected annually, but the law allows for more frequent collection if voters and the sponsoring municipality agree. The City may contract with the County Assessor to collect, but that arrangement is optional. With the advent of stronger development codes that exact public improvements from developers and the use of SDC programs for capacity-related financing, LIDs are used less frequently to finance infrastructure improvements, but they can be useful where property owners are motivated to help finance the improvement in question.

LIDs take significant time and effort to initiate and implement; hence, many jurisdictions in Oregon have become reluctant to sponsor them. The League of Oregon Cities has resources that can help guide sponsors through the LID creation steps. In summary:

a. Property owners meet with the jurisdiction and propose an LID to address a specific need.

b. The sponsoring jurisdiction obtains an "engineer's report" that details the estimated cost of the public improvements, establishes a clear pathway to public ownership for the improvements after construction, and recommends a formula for allocating costs to the benefitting properties. The latter may require frequent meetings with the benefitting property owners, the majority of whom must approve the assessment methodology.

c. The sponsoring jurisdiction either obtains letters of consent from benefitting properties or schedules a vote to secure approval for the district.

d. If approved, the City initiates the requisite legal process for selling bonds and collecting assessment. This can be time consuming, especially if a buyer for the bonds is not known in advance.

C. Grants

ODOT and Oregon Parks have grant programs that may be applicable for segments of the Head to Bay Trail system. ODOT also offers safety and operational enhancement program grants that may be beneficial to both the City and the department by reducing local traffic on the highway. ODOT and the Oregon Watershed Enhancement Board may be able to provide funding for fish passage up Baldy Creek through the frontage access lane area. The Salmon Drift Creek Watershed Council has expressed interest in enhancements to Baldy Creek.

Other state/federal grant programs to consider include Oregon Community Development Block Grants (CDBG), which can be used for projects that benefit low and moderate-income households. For example, Oregon CDBG funds could pay SDCs or purchase land for affordable housing projects. Private community-based sources include the Meyer Memorial Trust, Oregon Community Foundation, and the Ford Foundation.

Given limited staff resources, the City may want to consider making using the grant writing expertise at Cascade West Council of Governments (COG) to pursue funding from these sources. Securing funds from ODOT will necessitate coordination through the Region 2 project development advisory committee and STIP development process. Cascade West COG staff may be helpful in this regard.

D. Open Space/Hazard Area Bank

The plan area diagram shows a number of open space areas, some of which may include developable property in addition to land in designated hazard areas. The City may wish to consider establishing a program that creates opportunities for the exchange of development rights from open space areas to other properties. The program would target land currently zoned for development that more recent scientific analysis has shown is in a hazard area. Examples could include properties subject to tsunami inundation, land within mapped landslide hazard areas, or land subject to protective stream side buffers.

The City may limit its role to being a clearinghouse for these private transactions rather than buying and selling development rights. The City would serve as an information agent and clearinghouse for property owners looking to exchange development rights. To get the program started, however, the City may need to play a more active role in the process. For this to work, property owners in areas with 'upside' development potential need incentives to acquire development rights from areas that are constrained. The City can use its land use regulatory authority to create these incentives. For example, the zoning ordinance could grant parking, building height, or density bonuses to projects that acquire development rights from designated hazard areas. The City need not get involved in pricing the exchange; it only needs to establish the credit basis for the exchange and facilitate the recording process (i.e., rezone or record use restrictions on land that sells its development rights). The credits need to be generous enough that developers will want to seek out and purchase them.

Cogan Owens Greene

Engaging people to create and sustain great communities.

600 STEVENS BUILDING
812 SW WASHINGTON STREET
PORTLAND, OREGON 97205
503.225.0192
FAX: 503.225.0224
www.coganowens.com

Integrated Services in Planning, Sustainability and Community Engagement

APPENDIX F.

Implementation Strategy and Action Plan

Final Technical Memorandum #6

DATE: July 6, 2017

TO: Deb Nicholson, City of Lincoln City David Helton, ODOT

FROM: Kirstin Greene, Elise Scolnick, Cogan Owens Greene Laurence Qamar, Qamar Town Planning

Rich Catlin, Reece & Associates

DJ Heffernan, Daniel Heffernan Company

CC: John Bosket, DKS Associates

SUBJECT: Lincoln City Nelscott Gap Neighborhood Plan: Final Technical Memorandum #6: Implementation Strategy & Action Plan

This project is partially funded by a grant from the Transportation and Growth Management (TGM) Program, a joint program of the Oregon Department of Transportation and the Oregon Department of Land Conservation and Development. This TGM grant is financed, in part, by federal Moving Ahead for Progress in the 21st Century (MAP-21), local government, and the State of Oregon funds.

Cogan Owens Greene is a limited liability company

INTRODUCTION

The purpose of this memo is to identify a range of land use and transportation policy and code implementation measures the City of Lincoln City can use to achieve the Nelscott Gap Neighborhood Plan area vision, goals and land use and transportation system elements identified in the Land Use and Transportation Diagram in Figure 1.

Figure 1 reflects a new street and block pattern to fit environmental and topographic constraints, avoid impacts on US101 from an operational and safety perspective. Access is now perpendicular to US 101, allowing for better access. The new design still affords protection to, and a vision for, restoration of Baldy Creek, which continues to be an amenity and focus of the plan.

Specific finance and infrastructure improvements are in Technical Memorandum #5: Cost and Funding Sources. Those funding estimates build on Memorandum #4: Transportation Analysis.

This memo recommends planning policies, concepts for development code regulations and street design guidelines for development in the plan area over the coming decades. With these measures, Lincoln City can address development pressures in the Nelscott Gap in an organized, smart and efficient manner.

Some measures and recommendations included in this memo are traditional. Others, including form-based code techniques, are more innovative. We also have included a qualitative assessment of the acceptability and effectiveness of each potential implementation measure and suggestions for packaging implementation measures and phasing public improvements.

Figure 1 – Land Use and Transportation Diagram

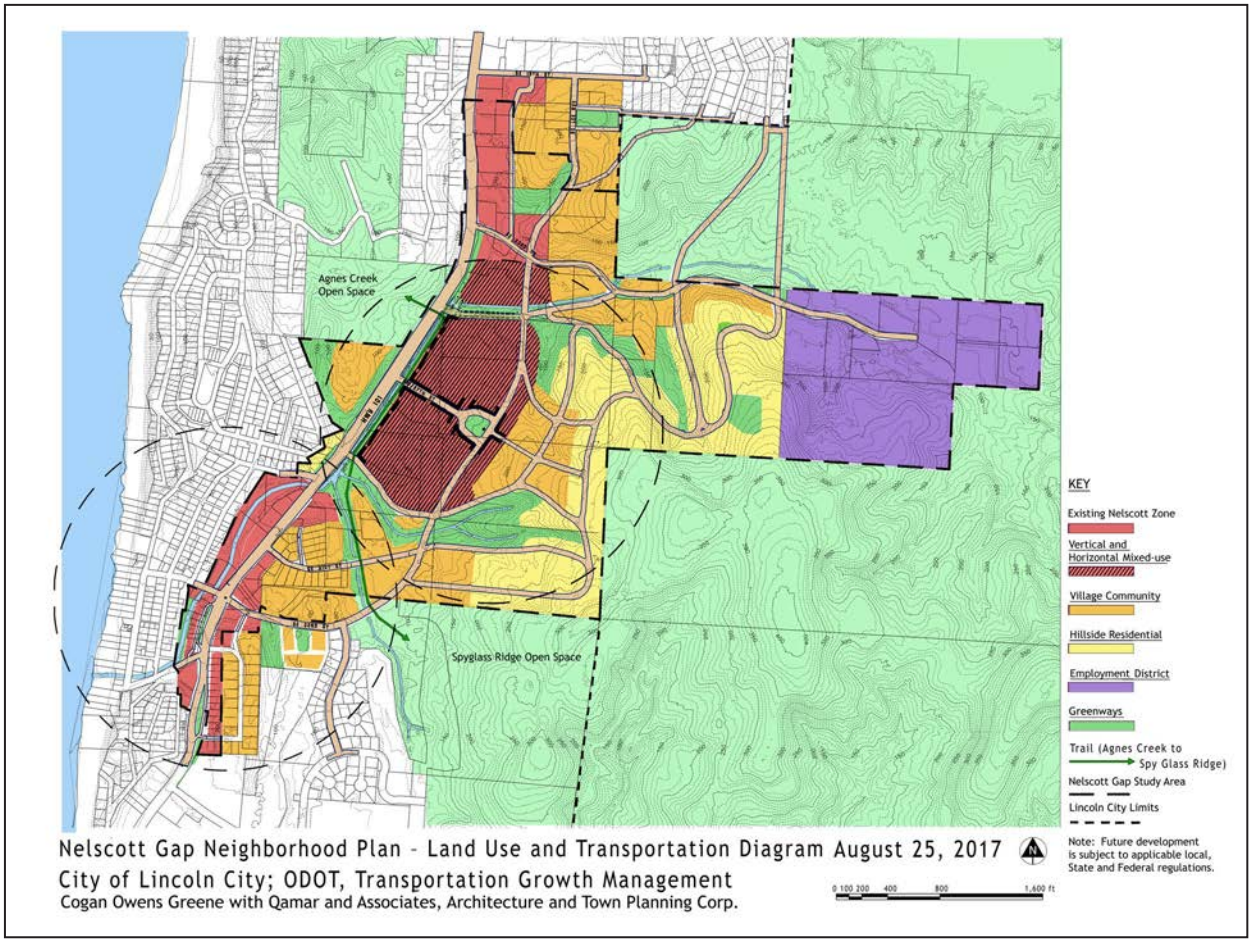


Figure 1 builds upon discussions with the Project Advisory Committee, City Council and Planning Commission through May 2017. It reflects a new street and block configuration the project team created to respond to discussions with ODOT in December 2016.

VISION

Project Advisory Committee members guided the development of the following Vision Statement for this walkable mixed-use area.

Nelscott Gap Neighborhood Plan Vision

In 2045, Nelscott is developing both east and west of the highway in a neighborhood that is well connected, economically vibrant and attractive. It is a welcoming tourist environment and a pleasant home for year-round residents. Development honors the natural assets of the area, and builds off them to create value for property owners and tenants. Residents enjoy opportunities for lifelong learning at the Oregon Coast Community College and Lincoln City public schools. Students are able to walk, bike and take transit or drive safely to the campuses.

GOALS

Livability and Housing Families and people of all ages are able to find attractive affordable housing in comfortable mixed-use communities in the beautiful natural setting of Nelscott – proximate to both the forest and the sea. Communities are walkable, interesting, well-planned and maintained.

Recreation and Health Residents of the Nelscott area live within walking distance to parks, trails and recreations that enhance quality of life for all ages, and contribute to a healthy lifestyle. Arts and recreational programs provide a range of options for visitors and residents.

Heritage and Economy Native American Siletz Tribal history, European colonial heritage and early settlement patterns are recognized and valued parts of the Nelscott community culture. Residents from all backgrounds are welcome. Employment opportunities in Nelscott represent a diversified economy and provide jobs for area residents. Nelscott residents enjoy working from home and in the City's nearby industries. The tourism economy continues to sustain the local economic vitality, of which the natural environment is the prime asset.

Transportation Choice Residents and visitors walk, bike, drive and ride transit through Nelscott and to Taft and other Lincoln City neighborhoods. Safe transportation routes connect the neighborhoods physically, economically and socially.

Lifelong Learning Mid-coast residents travel to Nelscott to take advantage of the educational opportunities at the Oregon Coast Community College (OCCC) campus. OCCC, elementary and high school students and activities are central to the neighborhood's identity and community life.

Ecology and Natural Resources Nelscott residents and visitors appreciate the sensitivity of development in the Nelscott area that optimizes property values by mitigating geologic hazards, protecting streams, wetlands and forest canopy, and connecting to the Pacific Ocean with views and paths.

MARKET ANALYSIS SUMMARY

The goals stated here are based in part on the market analysis summarized below and available in its entirety in Technical Memorandum (TM) #2. It builds off several other analytic efforts in the area including the City's 2006 Economic Opportunities Analysis (EOA), local population projections, the 2011 Workforce Housing Needs Assessment for Lincoln County, and the 2015 draft Lincoln City Transportation System Plan.

A new Economic Opportunities Analysis and Buildable Lands Inventory (EOA/BLI) was adopted in 2017, but was not included in this analysis, as market analysis was done over a year prior to the EOA/BLI.

- Overall, Lincoln City and the Lincoln County region have experienced slower growth than the State of Oregon average. Though forecasts are cautiously optimistic with higher rates of annual growth forecast for the city and county areas, projections anticipate growth rates below that of state averages.
- The region does enjoy a relatively educated population and low unemployment rate. However, despite having a higher percentage of residents with a bachelor's degree or higher, the city has a lower median household income than Lincoln County or the State in part because of the industry distribution of employment in Lincoln City, skewed more toward the lower-paying industries of retail trade and arts, entertainment, and recreation, and accommodation and food services, rather than the relatively higher-paying industries of manufacturing, finance and insurance, real estate, rental and leasing, educational services, health care and social assistance.
- The dependence on tourism of Lincoln City's economy creates a challenge because of the prevalence of second homes, which affects the housing market as competition of second-home buyers can have inflationary price impacts on homes otherwise available to workforce households.
- As noted in the Workforce Housing Needs Analysis, a large proportion of total households, particularly renter households, are cost burdened at the prevailing prices. A greater proportion of housing units are occupied by renters in Lincoln City than in Lincoln County or on average in the State of Oregon.
- The 2006 EOA included an analysis of the workforce supply in the Lincoln City region. The EOA found that the workforce supply in Lincoln County is in danger of experiencing notable deficiencies in experienced workers in their productive years. Combined with the lack of workforce housing, workforce supply issues will continue to be a challenge for the region.
- According to the 2006 EOA, Lincoln City had very few buildable industrial acres at the time of the last inventory. *The proposed development program will allow*

the planning area to help provide land for some of the employment uses in the region though the upcoming EOA will analyze the current situation.

- The general market for development in Lincoln City suggests the study area could support a mix of residential and retail development.
    - A combination of single-family, duplex, townhouse, and other attached housing could combine with more standard multi-family units to create a mix of housing types with a variety of price points, enabling the planning area to help satisfy the region's need for workforce housing.
    - Similarly, with little commercial and industrial property available, the strengthening economy may support commercial and industrial development in the medium- and long-term. The City could assist these types of operations by supporting a shared or "incubator"-style development.

PLANNING POLICIES

In comparison to the City's existing Comprehensive Plan policies, we offer the following suggestions for policies specific to the Nelscott Gap Area, organized by goal:

Livability and Housing (LH) *[Note: in general, we recommend using the more general term "residents" instead of "citizens" as in the City's existing Comprehensive Plan.]*

LH1: Create walkable, mixed-use districts that offer a range of housing types for Nelscott residents and visitors.

LH2: Create architectural and design standards that reflect and build upon the Nelscott Plan (NP) District zoning.

LH3: Encourage traditional Nelscott character architectural design elements from the Nelscott Community Vision Plan for roofs, facades, chimneys, textures, landscape materials, design elements and commercial buildings.

LH4: Prioritize and incentivize construction of workforce housing for individuals and families.

[Note: these build upon the City's existing Housing Policies to:

- *Increase the amount of decent and affordable housing, especially rentals available to lower income households.*
- *Increase the amount of lower cost rental housing available to theelderly.*
- *Decrease the proportion of income which the elderly spends onhousing.]*

LH5: East of Hwy 101, prohibit vacation rentals or limit them to owner occupied or to units near where the owner lives, and limit to accessory use.

LH6: Allocate land uses and development densities based on an urban to rural (highway to hills) transect-based pattern.

Recreation and Health (RH)

RH1: Create and maintain open spaces, parks and paths throughout the plan area for residents and visitors.

RH2: Develop and implement standards for streets that accommodate automobile traffic and parking, as well as safe routes to schools, parks and other amenities for pedestrians and bicyclists of all ages and abilities.

RH3: Through shared use paths, sidewalks, bicycle lanes, and north-south routes off US 101, connect Nelscott Gap neighborhoods with safe transportation routes to Taft Elementary and High School and the Oregon Coast Community College campus.

RH4: Provide clear demarcation for Tsunami evacuation routes, Seismic Lifeline Routes and emergency gathering places.

Heritage (HE)

HE1: Extend and build upon unique Nelscott historic, cultural and artistic assets.

HE2: Create formal and informal places in the project area for learning and discovery of, for example, Siletz and Lincoln County history.

HE3: Celebrate Lincoln City's growing diversity, and specifically Latino community with culturally relevant arts and culture.

Economy (EC)

EC1: Create opportunities for limited, but essential basic goods within ¼ mile and ½ mile distance of most residences.

EC 2: Create a specific area, implementation strategies and spaces to promote innovation, light manufacturing and employment in Nelscott.

EC 3: Provide "makers spaces" for residents and tourists to engage in creative work.

[Note: Refine this strategy with findings from the upcoming Economic Opportunities Analysis.]

Transportation Choice (TC)

TC1: Design streets for people as well as for automobiles. Pay particular attention to design for vulnerable populations, including seniors and people with disabilities.

TC2: Design streets with the minimum lanes, and lane widths necessary to minimize costs and to encourage slower speeds.

TC 3: Disperse auto traffic by creating more connections through local streets, rather than concentrating traffic onto collectors and arterials.

TC4: Implement dedicated on-street parking on all streets as a means of both slowing driving speeds and reducing on-site parking demand.

TC5: Improve automobile, bicycling and walking connections north and south parallel to US 101, reducing reliance on US 101 for local trips.

TC6: Require clear wayfinding signage for pedestrians and bicyclists, connecting them to bus stops, the historic Nelscott Business District, "Innovation and Employment District" and the local schools and housing, other neighborhoods, parks and open spaces, and the ocean.

TC7: Create street design standards for the neighborhood connector, queuing streets and the Baldy Creek frontage access lane. *[Note: see descriptions of these streets and the intended functionality later in this memo.]*

TC8: Improve pedestrian safety and comfort by separating all sidewalks from driving and parking lanes with tree wells or planting strips.

TC9: Support further development and expansion of transit service to address unmet needs.

Lifelong Learning (LL)

LL1: Support opportunities for passive and active learning in the Nelscott District as a whole.

LL2: Connect residents to artistic and theater assets in historic Nelscott and Lincoln City.

Ecology and Natural Resources (ENR)

ENR1: Protect and restore ecological assets including but not limited to natural creeks and drainageways, viewsheds, steep slopes, and wetlands.

ENR2: Incorporate drainage corridors, viewpoints, and scenic vistas in a network of publicly-accessible open spaces as the dominant development pattern.

ENR3: Restore and daylight Baldy Creek during development and redevelopment.

ENR4: Improve the ecological condition of Baldy Creek and associated wetlands during development and redevelopment over time.

ENR5: Design houses with coastal ecology in mind: topography, street frontage, wind, sun, solar access and rain.

ENR6: Require development to accommodate all storm water on site with green infrastructure design.

ENR7: Orient building fronts to face natural amenities such as stream corridors, wetlands and the ocean across streets and pathways in order to make those amenities publicly visible and accessible.

ENR8: Recognize and enhance the natural progression, or transect, from more urban to forest inherent in the coastal ecology from the beach to the hills and highlands.

CODE AND IMPLEMENTATION MEASURES

Annexation and Possible Amendment of Urban Growth Boundary

The City's 2006 buildable lands inventory identified a need for 11.3 acres of buildable industrially zoned land; the City had only 5.3 acres in the city limits, but 41.12 vacant buildable industrial acres in the Urban Growth Boundary. The Nelscott Refinement Plan indicates a portion of the currently zoned industrial land may develop as mixed use, including commercial and residential, as well as industrial. The results of the new buildable lands inventory, housing needs analysis and economic opportunities analysis may require refinement of the assumptions in the Nelscott Gap Neighborhood Plan and the TSP and possible indicate the need to amend the Urban Growth Boundary.

The study area for the Nelscott Gap Neighborhood Plan extends to the Urban Growth Boundary (UGB). No land use changes are proposed outside the UGB, but it was acknowledged throughout the process that one or more transportation connections across resource land outside the UGB could provide convenient and alternative local connectivity. These could serve as additional evacuation routes to enhance emergency preparedness. The process to create public roads across resource land is well-defined in state law and would be administered by Lincoln County. No service connections are proposed outside the UGB.

Traditional Implementation Measures - Context

Since the mid-20th century, most conventional urban and suburban codes have been based on the Euclidean system, which aims to segregate the activities in people's daily lives as a goal for organizing neighborhoods. This typically resulted in the segregation of workplaces, stores, residents and even different types of housing and incomes into discrete zones. To this day, Euclidean zoning continues to result in concentrations of big box retail and commercial highway strips, single family subdivisions, apartment complexes and business parks in increasingly remote zones. This dispersal of uses requires longer travel distances, which creates increasing reliance on automobile travel over time, with associated health and environmental effects.

A hierarchical system of limited arterials, collectors and locals, known as the functional classification system, replaced the more convenient grid network street system that allowed variety and options in routes.

Innovative Implementation Measures: Form- based Coding for Nelscott Gap

Since the late 20th century, form-based codes (FBCs) are becoming increasingly effective tools for communities to achieve their desired patterns of neighborhood development by guiding the design and placement of public places and buildings,

rather than by separating uses or zones. Form- based codes acknowledge that some freedom and creativity in design brings diversity and character to a community. The most revered communities throughout the US developed based on a common urban and architectural language, either by design or circumstances. By tailoring a form-based code to its particular local climate, culture and economy, a community can achieve diversity and variation within a consistent and patterned neighborhood context.

Lincoln City already has incorporated into its zoning code some very effective form-based elements in the Taft Village Core (TVC) zone, specifically in Code Section 17.45. Similar code provisions for the Nelscott Gap modified to reflect the unique aspects of Nelscott and the new neighborhoods can implement the envisioned plan. A key component of the TVC zone is the concept of edge treatments or frontage types, meaning the pattern of elements between the public sidewalk and the private building interior. The TVC only presents commercial edge treatments: the Nelscott Gap will need the addition of a variety of residential treatments, such as front porches, stoop, and door yards for the residential part of the community to aesthetically develop and redevelop over time.

This section is an outline and introduction of some of the characteristics and components to tailor and further develop through a formal public participation process with Lincoln City residents and business owners.

Function of a Form-Based Code (FBC)

Form- based codes enable a community to advance physical design characteristics of their community in line with stated performance goals and objectives. FBCs focus more on the way that buildings "form" or shape and enliven the public realm of streets, rather than focusing on the uses within buildings. This allows buildings to be easily renovated into different uses over time, while continuing to fit harmoniously within a larger community pattern. FBCs allow people to live, work, shop and recreate within the same neighborhood, street, or even the same building in ways not possible with traditional Euclidean based codes.

A form- based code encourages a much finer grained mixing of work places, shops, residences, and various densities of homes. They allow residences above or beside stores and work places in mixed-use buildings. More variety of housing types can encourage greater affordability and mix of income ranges.

Instead of designing buildings to look unique for each function, form-based codes encourage buildings to fit within a more cohesive and common urban character in which they share a common formal language facing each other across the street. Instead of office, industrial and apartment buildings each looking distinct and being segregated into remote districts based on their uses, FBCs mix them in the same downtown. For instance, a small apartment building with a cafe in the ground floor can be about the same size as a large house, and sit side-by-side as long as the

character and proportions are similar. Perhaps the apartment becomes a small office building with retail ground floor, while the single-family house is divided into a duplex. The forms on the exterior can remain the same, but the uses within are flexible.

Transect

The concept of a transect follows and transitions urban to rural character from neighborhood center to edge. Focusing first on the form of buildings and public spaces, and less on segregating uses does not imply a free-for-all in randomly mixing any building type and use through a neighborhood. Modeled after the way all great urban neighborhoods evolved throughout history, FBCs organize the blending of uses and building types in a patterned manner called a transect.

Following is a matrix allocating different standards for each zone in the Nelscott Gap Land Use and Transportation Diagram, also called a regulating plan. These zones are a gradation of urban to more rural, referred to as a transect, which is a term from the analysis of natural habitats in ecology. Applied to an urban neighborhood such as the new Nelscott neighborhood, a transect helps us organize similar types of buildings, landscapes, and architectural characteristics in common street spaces. From the center to the edge of a neighborhood, each zone becomes progressively more rural.

In the plan area, the topography from the lowland along US 101 and Baldy Creek up the hills to the east provides a sensible and comprehensive urban to rural transect.

Near the highway, opportunities for new retail shops will generate more flow, interaction and movement of people in the new neighborhoods. As streets make their way uphill toward the forested city edges, house lots will be more spacious and wooded, and retail will not be as viable.

Along the Baldy Creek frontage access lane, buildings may be one to four stories, built close to the sidewalks with shops on the ground and apartments or offices above. They could have relatively simple, flat fronts with either a cornice or simple pitched roof.

Street trees in sidewalk tree-wells complement sidewalk cafe seating that is covered by retail awnings.

Rain happens...especially on the Oregon Coast. Even during summertime, steady winds tends to blow in from the northwest, so there is a need to design buildings that provide flexible wind and rain protection to enable outdoor living when the weather is fair, and indoors shelter when the heaviest rain and wind arrives. Light fabric awnings are not sufficient in high winds, but solid metal awnings work. Gutters and downspouts need to be carefully designed to not spill rainwater directly on storefront sidewalks. Retractable awnings are effective for letting the sun in when the rains dissipate. Translucent awnings can provide both daylight and rain protection without needing to be retractable.

One or two blocks east of the frontage access lane along the new Foothills Boulevard, the character could change gradually to fewer retail stores, more connected townhouses with front stoops, and apartment buildings. The homes in this semi-urban street would be close to the sidewalk, with cars parked parallel along the street, or discreetly behind on rear alleyways in detached garages with accessory dwelling units (ADUs) above. Instead of trees planted in sidewalk tree-wells, these streets would have more landscaping, including continuous curb-side planting strips with larger trees.

Continuing the transect a couple of streets up the hill into the Hillside Residential, the townhouses give way to duplexes mixed with four-plex buildings that appear to be big houses. The street trees are in wider continual planting strips between the sidewalk and the curb. The houses are set back a little further from the front property line. The materials and style of the houses become less urban and more rustic than the stores and apartments in the core of the neighborhood.

Toward the top of the hills in the Hillside District, buildings can be even more rural and casual as single-family houses mix with a few duplexes that have broader porches and deeper setbacks from the sidewalks. Highland Avenue would have no retail shops, since there is not enough traffic or nearby residents to fully support retail. Some blocks may have alleys for rear service access. Where lots are wide enough (60' minimum) to accommodate a front entry driveway and garage, the face of the garage door must be a minimum 10' back from the front of the main body of the house. This, along with no more than a two-car garage, helps reduce the impact of garage doors and cars parked in the driveway.

An un-named creek runs through future housing blocks. Trails should follow along both sides of the creek along the edges of the wetland boundaries, rather than houses backing up to them. Houses should face their front doors, windows, patios, plazas, and gardens onto the creek and its adjacent pathways. This will enliven the creekside as a popular off-street, garden pathway for people to take through the neighborhood.

In form-based code terminology, the Land Use and Transportation Diagram (Figure 1) is the regulation plan. It identifies four distinct zones in the plan area (in addition to parks and the Nelscott Business District), as follows:

1. Horizontal and Vertical Mixed-Use
2. Village Community
3. Hillside Residential
4. Employment District

Three fundamental standard elements define each zone:

A. Building Types
B. Architectural Standards
C. Landscape Standards

The following table presents an overview of the key elements in the zones. In it are standards with guidelines aimed to establish the transect-based character of each zone.

Table 1 – Implementation Measures and Standards

Packages of Implementation Measures	Building Standards	Architectural Standards	Landscape Standards
Horizontal and Vertical Mixed-Use	could have apartments and row houses set back 4'-8' with door stoops and entry vestibules. **Use:** Retail should be on several specific street corners along the Baldy Creek frontage access lane as a minimum requirement. Standards should set a maximum big box retail building floor area. Large parking lots for big box retail must be hidden from street view by retail liner buildings. This zone permits residential, office, retail and clean light manufacturing. **Height:** 1-4 stories. **Parking:** On-street parallel or diagonal, on-site parking access from rear shared alley only. **Frontage Types**: Storefront, front cafe seating, upper balconies, stoops and dooryards for residential.	gabled roofs. **Windows and doors**: Storefront windows on ground floors can be broad horizontal fixed storefront, roll up glass garage doors, awning, double hung windows, etc. All upper floor windows shall be vertically proportioned so that the overall window height is twice the width. Windows shall be generally aligned vertically, not randomly staggered. Shudders shall be of a size that appears to properly fit the window. **Materials**: Hardiplank permitted with extra space under each course; vertical or horizontal cedar siding, corrugated metal in wave pattern. Not permitted: Vinyl siding, glass curtain walls.	spaces and along Baldy Creek. **Yard enclosure**: Wood fences with vertical pickets or trimmed hedges required: maximum 36" high on front, sides and rear of lots with allowance for 50% trellis screening up to 72"at sides and back. Trimmed hedges also permitted with chain link fences embedded in hedge at the same heights as above.
Village Community	depths must wrap around street corners. Porches (8' minimum depth), stoops (3' minimum depth), decks,	duplexes can appear as large single homes. Individual cottages grouped in clusters surrounding a	indigenous plant materials. Limit use of grass lawn on private lots. Lawn provided in common park spaces.

Packages of Implementation Measures	Building Standards	Architectural Standards	Landscape Standards
	paved patio door yards are all permitted and encouraged.	common cottage court or green can be an alternative affordable type. **Roof Forms**: Simple equal gable roofs, sloped and sized gable roofs with dormers are permitted. Small scaled dormers in roofs can provide windows for living spaces. Multiple complex roof forms and non-functional gables are discouraged. **Windows and doors**: Tall vertically proportioned doors and windows that are aligned vertically and horizontally as double hung windows or casements are encouraged; awning or slider windows are discouraged.	**Yard enclosure**: Wood fences with vertical or horizontal pickets or trimmed hedges required: maximum 36" high on front, sides and rear of lots with allowance for 50% trellis screening up to 72" on sides and back. Trimmed hedges (with or without embedded chain link fence) are permitted at same heights as fences.
Hillside Residential	**Placement:** The building type is predominantly residential as either detached single family or duplexes. The front setbacks can vary between 10'-20'. Side setbacks	**General notes**: This more rural, single family area of the neighborhood allows more freedom of architectural expression, compared to the	**General notes:** Much higher required landscaping in Hillside Residential zone on private parcels in order blend with the surrounding rural forests and provide a

Packages of Implementation Measures	Building Standards	Architectural Standards	Landscape Standards
	can be 0' for attached duplexes, or minimum 7' for detached. Rear garages must be set up to the alleyway with maximum 6' setback from 20' alley right-of-way, and a 26' back up space across the alley. If an alleyway is indicated in the regulating plan, it must be built and parking must be accessed by such. If no alley is provided, front access for on-site parking is permitted, but garage doors must be set back 10' from primary house face for a single car garage, or 20' for a two car. **Use:** Residential, limited office. **Height:** 1-3.5 stories. **Parking:** On-street parallel; access from rear shared alley only, if alley is provided. **Frontage Types:** All frontage depths must wrap around street corners. Porches (8' minimum depth, stoops (3' minimum	core of the neighborhood. Greater individuality and custom design in single family homes is appropriate for this zone.	more rural neighborhood character. Only indigenous planting materials permitted that would commonly be in the surrounding forests. **Street Trees**: Trees planted in continuous, wider planting strip between the sidewalk and street. Curbs in this zone are eliminated, allowing stormwater to infiltrate directly into planting strips. Closer spacing of street trees to create a lush canopy. More integration of conifers to blend with surrounding forest habitat. **Yard Surfaces**: Limited hardscape surfaces. Compacted gravel and wood chips for pathways and edges to provide less hardscape and more opportunities for rainwater infiltration. Grass lawns are not permitted on private

Packages of Implementation Measures	Building Standards	Architectural Standards	Landscape Standards
	depth), decks, paved patio door yards are all permitted and encouraged.		lots. Lawn provided in common park spaces. **Yard enclosure**: Fences are not permitted except for chain link that is completely obscured by untrimmed hedges: maximum 36" high on front, sides and rear of lots.
Employment District	**Placement:** The main entrance to the building must be oriented to the entry street with no parking between building and sidewalk on the street. **Use: Employment** **Height**: Maximum 4 stories. **Parking**: Must be located between or behind buildings, but not between street and primary building entrance. **Frontage Type**: None.	**General notes:** Since this Employment District is relatively remotely located, it can be a free design zone with limited requirements for architectural character. Simple corrugated metal siding is encouraged for both affordability and durability, as well as being a material that can create a consistent character. **Roof Forms**: Simple sheds vaulted, or flat roofs are encouraged. Gable roofs that appear residential are discouraged. **Windows and doors**: A minimum of 25% of a facade	**General notes:** Edges and borders between parcels shall be landscaped with natural indigenous materials aligned in loose heed-like format, and can contain chain link fencing that is completely obscured by hedges: maximum 36" high on front, sides and rear of lots.

Packages of Implementation Measures	Building Standards	Architectural Standards	Landscape Standards
		facing a street should be glazed with windows and doors. Instead of grouping the glazing in limited areas, these windows should be dispersed into simple, equally spaced, and vertically proportioned windows.	

Signage

Retail signage greatly affects the character, quality and ambience of a neighborhood or district. Tall pole signs are necessary if each separate business must compete for customers driving swiftly by on a highway and looking for a quick in-and-out retail service. Free standing pole signs should not be permitted in the Gap since they typically denote a highway-oriented commercial strip aesthetic. Instead, the Gap is conceived as a neighborhood with an internal retail main street to serve local walk-in residents as well as drive-by customers on US 101 looking for a main street to park once, then walk to shops and restaurants. Signage should be designed to present the entirety of the main street retail district, rather than Individual businesses calling out to highway passersby. The character of the buildings and the presence of people actively walking on main street are signs in themselves that businesses and eateries can be found in the Nelscott Gap.

Signs on the fronts of stores should be relatively small and scaled to the passing pedestrian, cyclist and slow driver. Signs are either flat to the wall, fin signs projected from the wall, or awning signs. Maximum size of signs should be about 6 square feet. No internally lighted signs should be permitted in the Gap. Hand painted signs are encouraged.

Street Design

The goal in designing the plan area network and street cross sections is to keep drivers moving at a slow and steady pace that prioritizes the quality of life for residents living, working, shopping and recreating in the district. The streets in Nelscott are first and

foremost places for civic and community engagement, and secondarily thoroughfares for driving between destinations.

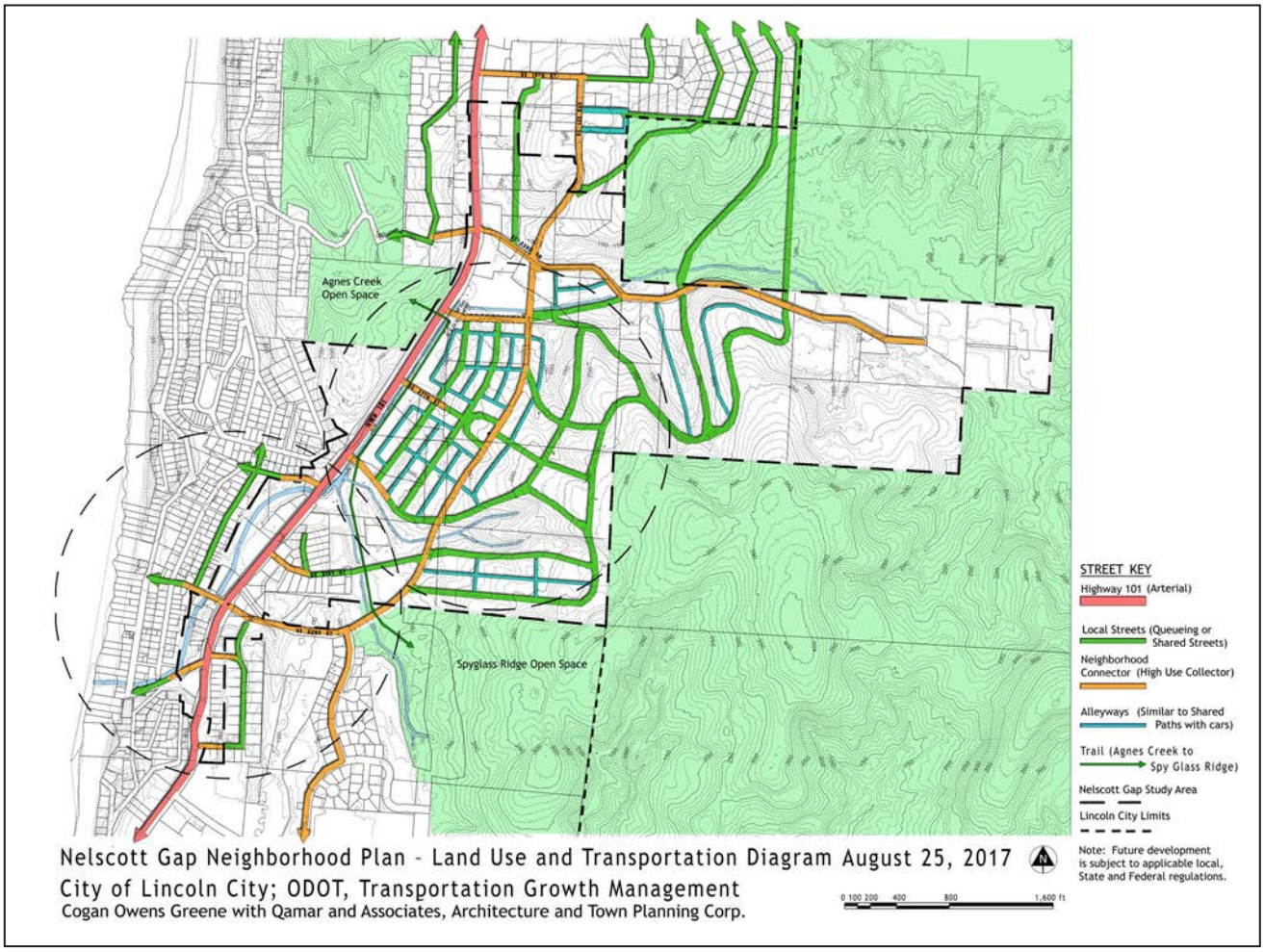
Prior to the advent of the automobile, streets in the United States were public spaces where citizens gathered, celebrated, and generally met their neighbors. Much of that public engagement has been lost in modern society, and to a good extent due to the way we design streets for speed and efficiency.

Connectivity and small blocks are a hallmark of the Nelscott neighborhood plan with the intent that residents and visitors can drive in the most direct manner to their destinations. In this plan, speed is the determining factor. While US 101 provides a more efficient route for longer distance regional travel, all other streets in the new Nelscott Gap, including Foothill Boulevard, should be designed for no more than 20 miles per hour. We aim to design streets with a maximum limit of 20 MPH, and call upon the phrase "twenty is plenty". To achieve a reduction in actual driving speed, instead of merely a posting of an unrealistic speed limit on a road that drivers can travel on much faster, street design that compels drivers to slow down by narrowing the overall lane widths from conventional street standards and including on-street parking lanes. Drivers naturally react to the presence of parked cars close beside the travel lanes and slow down.

Following are some fundamentals to consider from a fire and emergency access viewpoint. All planned street sections for the plan area are suitable for fire and other emergency access. The minimum 20' width for fire truck access should not be mistaken for needing to provide a full 20' continual open driving surface for all streets and building access fire lanes. The 20' is necessary for the firefighters to spread their outriggers and hoses and freely move around the vehicle while deploying their equipment. Roadways narrower than 20' are suitable if fire-fighting deployment point are within a maximum of 150' of the furthest extent of any building. Typically, intersections of street to street, streets to alleyways, and driveways to streets provide such access points.

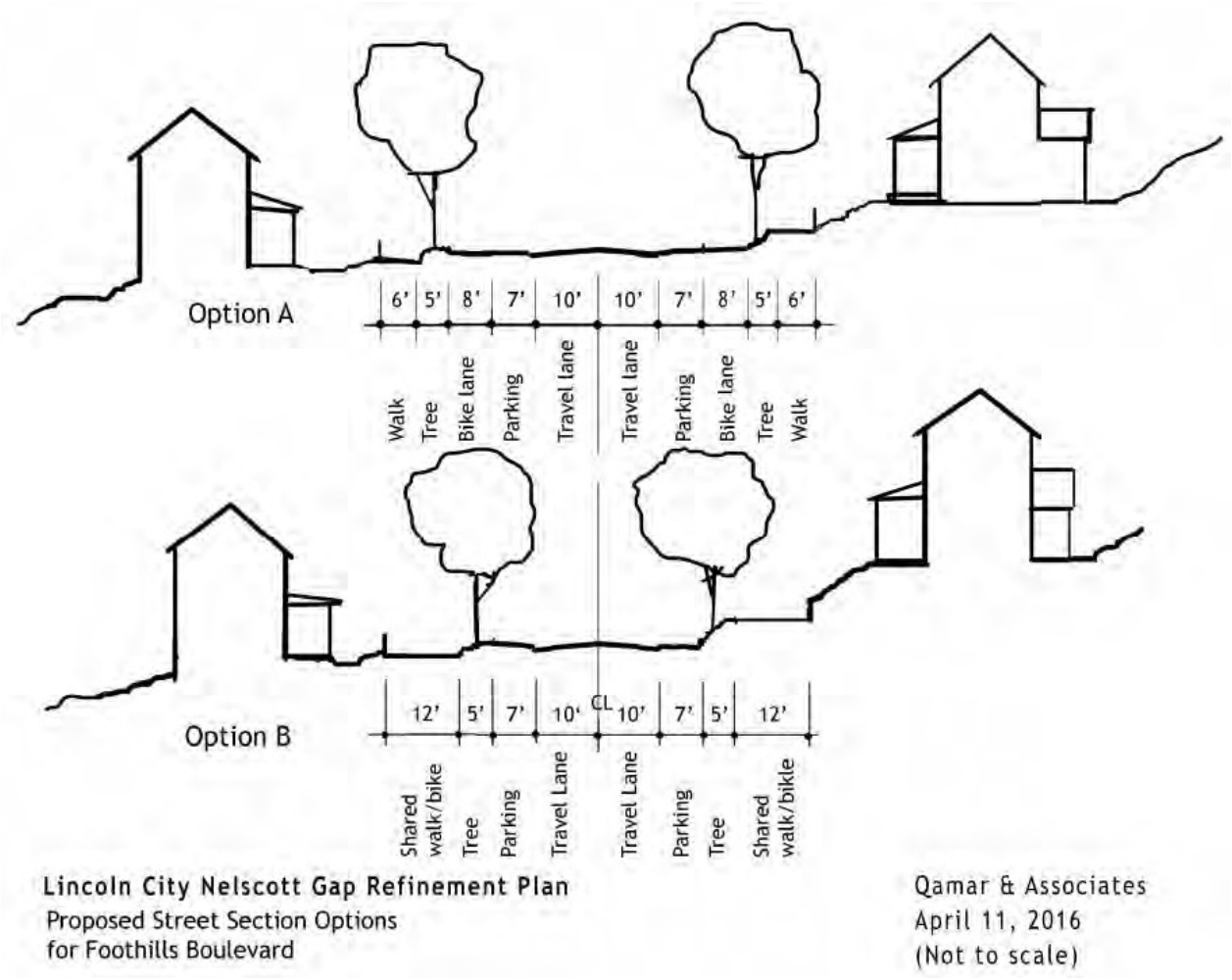
Following pages give descriptions of the four basic street types identified for the Nelscott Gap Plan Area in Figure 2.

Figure 2 – Street Diagram



1. **Neighborhood Connectors (NC)**-extend through the neighborhoods generally parallel to US 101, and serve as a slow speed way that locals can move between neighborhoods, home and school, work and shopping without relying only on US 101. The street section consists of two 10-foot travel lanes and two seven-foot' parallel parking lanes with tree lined medians beside the parking lanes, and minimum five- foot sidewalks along the edges of the right of way. Two options for street sections for Foothill Boulevard (Figure 3 below) include bike ways separated from the travel lanes and either between the parked cars and tree median, or combined with the sidewalks for an extra wide shared walkway. Placing parallel parked cars on a different paving surface from the travel lanes and on a slightly elevated rolled or flush angled curb gives a visual impression of a narrower roadway even when no cars are in the parking lanes. Where side slopes constrain the right-of-way, the street design could eliminate bikeways. Alternatively, the design could eliminate the street trees, which are not essential to this neighborhood connector.

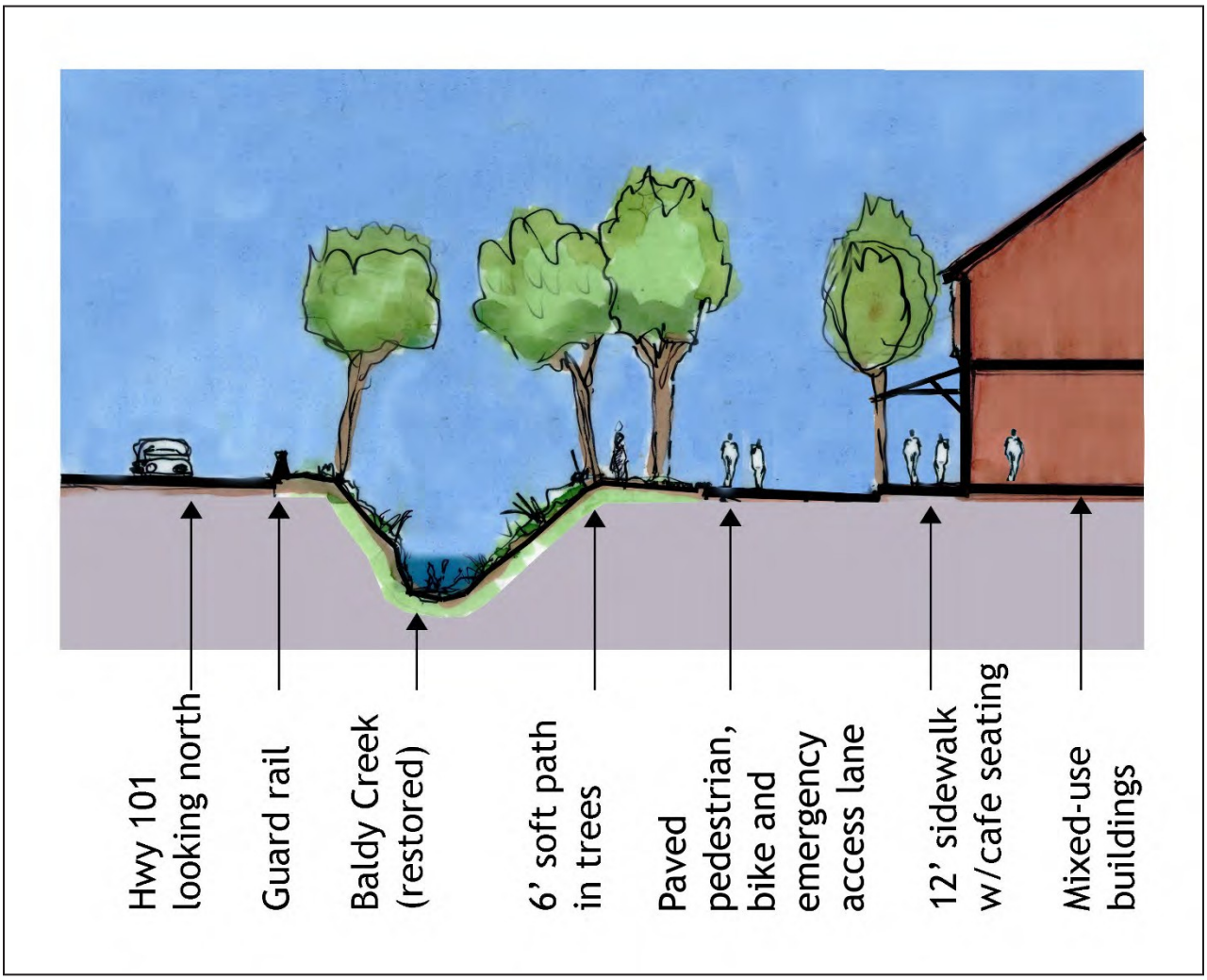
Figure 3 – Proposed Neighborhood Connector Street Sections



2. **Queuing Streets (QS)** - Queuing Streets are skinny compared to standard widths, and should be used primarily for local residential access. They should not dead-end in cul-de-sacs to ensure a way out in case of a blockage. Queuing streets are typically between 24'-28' width with two seven-foot' parallel parking lanes and two-way travel on a shared drive between 10 feet and14 feet wide. Two cars cannot pass in a space that narrow, but on queuing streets, one car pulls to the side into a parking lane or intersection and allows the oncoming car to pass. This common street type works throughout cities that typically have a lot more traffic than the quiet neighborhoods of Nelscott.

3. **Baldy Creek Trail and Emergency Access Lane (AL) -** Access lanes along Baldy Creek and around the central triangular park in the new neighborhood provide for emergency access. The design could incorporate elements of the pedestrian infrastructure to achieve the design standard for fire access (20 feet wide, 70,000- pound load rating). For example, the first several feet of the park's edge can be of compacted subsurface gravel for outrigger placement and operational space. For Baldy Creek, design could reduce pavement along the edge of Baldy Creek, or could include a short retaining wall with a hand rail for a more established pedestrian sidewalk overlooking the creek. The emergency access lane need not be continuous. Depending on the actual development plans, one or more on-site corridors may provide alternate access to the creek side of buildings. The Baldy Creek Trail is a segment of the Head to Bay Trail. A cross-section is included in Figure 4.

Figure 4 – Baldy Creek Trail and Emergency Access Lane Section



4. **Alleyways** are mid-block service lanes that provide access to the backs of retail, commercial, and residential lots. They should be at a slightly higher elevation than connecting streets, detailed with a ramp up at intersections to differentiate the two. The right-of-way (ROW) is no more than 20' which again is the minimum fire access width. The fire district should approve the use of alleyways for emergency access since they are full driving surfaces across 20'. Only 12 feet needs to be paved in the middle of the alley with a four-foot wide compacted gravel surfaces on each side. A 26-foot minimum back up space is all cars need to enter and exit garages doors; setting the garage doors back six feet from the right of way will achieve that depth.

   In historic as well as new neighborhoods alleys add intrinsic as well as real fiscal value to homes and retail shops. They provide a place to screen the visual clutter of on-site parking, garbage, electrical transformers, and utilities, away from building fronts along streets. As a result, streets with rear alleyways tend to be more attractive and valuable streets. These streets can have continuous tree planting strips and uninterrupted pedestrian sidewalks. Street with rear alleyways have no need for driveway curb cuts, front facing garage doors (known as snout houses) or up-front commercial parking lots.

   Since streets with rear alleyways have no driveway cuts, the building fronts come closer to the sidewalks. Retail main street building fronts are uninterrupted and continuous, allowing their shop fronts to spill out and enliven the sidewalks facing the street. House fronts also can be lined by porches, and balconies that bring residents out to the street front. As a result, street with rear alleys tend to be more neighborly, and better watched over.

   Are alleyways too expensive? Why build two streets instead of one?' If the alleyway is a simple 20' right of way, it can have as little as a 12' center paved drive with compacted gravel shoulders for a rural feel. The alley pavement does not need to be much thicker than driveway section, but not a full road thickness. Instead of placing long and wide driveways on the fronts of house, and alleyway is effectively a narrow, shared driveway for all the houses within a block. Especially if the front street is designed as a narrow and less expensive queueing or shared street, the alleyway is a very economical, and valuable component of a vibrant neighborhood.

Financing Incentives

The following section addresses System Development Charges (SDC) and other financial incentives for the City to consider for advancing implementation of the vision, goals and objectives of the Nelscott Plan area.

SDC Financing and Administrative Changes for Affordable and Workforce Housing – The City could offer local financing for system development charges on residential projects that include a minimum percentage set aside for affordable housing.

The City also could provide financing for employment projects over a certain value that provide a minimum number of family wage jobs. SDCs for qualifying projects are collected when an occupancy permit is granted. Program administration details, application requirements, and eligibility criteria will be established by the City Administrator.

a. **Inclusionary Overlay Zoning Program for Affordable Workforce Housing** – Lincoln City could establish an inclusionary zoning program to boost development of affordable workforce housing in the plan area. The program would provide subsidies to developers of affordable housing projects subject to transferable contract obligation to maintain property rents within established affordable rent margins for the duration of the incentive term. Subsidies may be in the form of system development charge payment deferral or credits, property tax abatement, and mortgage subsidies. Revenue to finance subsidies may be from dedicated excise taxes, state and federal grants, and other local resources. Implementation of this program should follow completion of the 2016 Lincoln City Housing Land Needs Analysis.

b. **Development Rights Transfer Program –** This City administered program would allow property owners to sell development rights from within designated hazard areas to property owners in non-hazardous locations. Hazard areas include mapped landslide hazards and tsunami inundation per the Department of Geology and Mineral Industries (DOGAMI), to mapped flood hazard areas per FEMA 100-year flood hazard maps, and land with steep slopes previously not mapped as a development hazard. The city administration will establish program administration details, application requirements, and eligibility criteria. Implementation of this program should follow completion of the 2016 Lincoln City Housing Land Needs Analysis.

Investments

Public Facility Improvements

The following public facility improvements provide infrastructure that is essential to development in the plan area. These improvements involve system investments that will enable and support private investment in the plan area. Because they are expensive and difficult for the private sector to finance through more conventional approaches (e.g., like a developer agreement or a reimbursement district), the public bearing the cost to finance these projects at the 'front-end' reduces uncertainty and risk to private investment and should accelerate investment in the area.

Nelscott Water System Refinement Plan – This plan will establish the location and sizing for water transmission and distribution lines in the plan area. Adopted as an update to the Water Master Plan, it will identify needed pressure regulating or other extraordinary measures and provide guidance regarding system improvements that would be system development charge (SDC) credit- eligible.

It also would provide specific guidance for system improvements that would allow development within Water Service Zone 3 (see Figure 5). Service to all of Zone 3 will require construction of a new water reservoir. Feasible interim solutions, such as a neighborhood scale stand pipe and pump station, would enable development of properties that are 'primed' for development, but currently are outside the City's water service boundaries. Water SDC funds could pay for the refinement plan. The plan would add new improvements to the list of SDC eligible capital improvements, and assess implications for SDC rates.

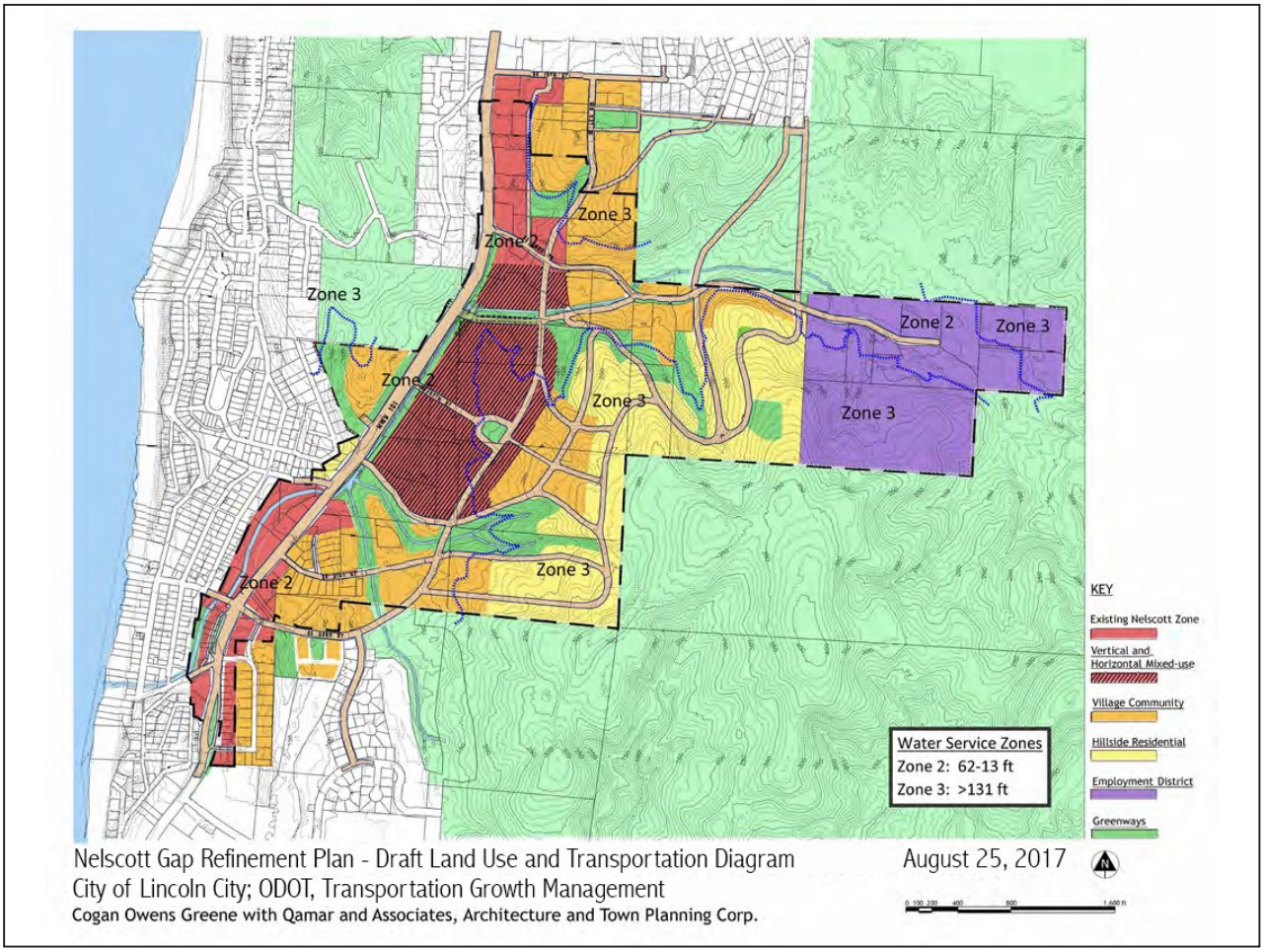


Figure 5 – Water Services Zones

Nelscott Sewer System Refinement Plan – The city needs an updated plan to provide guidance for the location and design parameters of gravity sewers that will serve the plan area east of US 101. As an addendum to the Sewer Master Plan, it would establish cost estimates for system improvements that are SDC credit-eligible. Of particular importance are the locations and design concepts for tie-ins to the US 101 Trunk Sewer. These tie-ins need to extend under Baldy Creek, which may present design challenges depending on elevations of the interceptor sewer, the road, and the creek. Fish passage is a recognized issue

and opportunity. Solutions could involve the use of siphons, wet wells, and pumps.

Figure 6 – Sewer Tie-Ins

to convey sewerage through this zone. The City may wish to bear the cost to build these interceptor tie-ins and recover the cost through SDCs, utility rates or other sources to reduce risk and provide certainty for future development. The City can pay for the plan using Sewer SDC funds. The improvements it identifies would become part of the list of SDC eligible capital projects. The plan would assess implications for SDC rates.

Head to Bay Trail / Emergency Access Lane Design Plan – The design and construction of the emergency access lane and trail poses several design challenges, including safe-passage for emergency vehicles, pedestrians, and bikes using these facilities. Integrating Baldy Creek and fish passage into the design will be important. Financing for these improvements may involve several sources including Oregon Department of Transportation (ODOT) grants and program funds, Tax Increment Finance (TIF) funding, SDCs, and other local funds. The transportation improvements must be concurrent with the design and timing of sanitary sewer improvements. Funding for the design plan may come from various local and state sources.

Assessment

This summary table of implementation measures includes subjective assessment of acceptability and effectiveness, according to consultants' best professional judgment. The table does not include measures that would not be politically acceptable or

Table 2 – Acceptability and Effectiveness of Measures

Measure	Acceptability	Effectiveness
Create Nelscott Gap Plan District standards using form-based code suggestions	Medium (change is difficult; will take considerable public discussion)	High
SDC deferrals	Medium (SDC reductions for providing certain number of units at a certain range of median family income)	Medium
Development Rights Transfer (TDR) program	Medium	Medium

Packages of Implementation Measures

For the plan area, the highest priority appears to be the provision of workforce housing. If the City can buy down the cost of either the transportation (i.e., Foothills Boulevard), sewer (i.e., the upgrade in pipe size, crossing Baldy Creek, connection to the trunk line Highway 101) or water (i.e., Zone 3 improvements) in exchange for a certain number of units in a defined affordability range, the likelihood of more modestly priced workforce housing will increase. In addition, the discussion of form-based code techniques identify packages of implementation measures by zoning type.

Table 3-Packages of Implementation Measures

Measure	Acceptability	Effectiveness
Inclusionary zoning overlay	Medium	High
Public facility investments; neighborhood scale stand pipe and pump station	Low	Medium
Sewer Master Plan Refinement for crossing Baldy Creek	Medium	High
Head to Bay Trail/emergency access lane design	High	High
Plan Area specific street cross sections	Medium	High

Phasing of Implementation

Infrastructure extensions: One of the most significant constraints to development in the area will be water service to Zone 3, as identified in Figure 3. One way to jump start that

development is for this City to expedite the construction of the new reservoir to serve Zone 3. Another would be for the City to advance the construction of the sewer line extensions from the trunk line in Highway 101 across Baldy Creek.

Easy access to US 101: The recently installed traffic control light at 32nd and US 101 may prompt new development northeast of the realigned intersection. A logical expansion from this existing and enhanced "pearl" village center could spread northward along the new Foothill Boulevard. At the same time, a different growth strategy could initiate around a newly established formalized intersection at 23rd with the redevelopment of the sand and gravel operation. Eventually, a signal at this location could further incite development.

The Baldy Creek Trail /Emergency Access Lane and Foothills Boulevard: If property owners in conjunction with some public funding resources could jump-start

these parallel corridors to the highway, they would promote a gradual development of the hills from the lower elevations. If Foothills Boulevard is built as a pleasant, local neighborhood connector (not a fast-moving, city-wide collector or arterial), it will be a game changer in facilitating new development. As an attractive

and compatible street connecting community centers, it will be a catalyst for phasing in the new neighborhood.

Phasing in small and complete increments will encourage subsequent phases and market interest to buy into the new community. Concentrating on finishing both sides of a street space is critical to illustrating early how the whole community will focus on the renewed amenities of public space, and community building. Building out all the houses around a park or street, for example, before moving onto the next street is a sound phasing strategy that helps propel each new phase.