

Executive Summary and Findings

Purpose and Study Area

Study Purpose

The Boundary Planning Study (BPS) is a high-level study of existing conditions, opportunities, and constraints which can inform future planning choices about the BPS Area and surroundings. It is not a plan proposal to change land uses, policies, or Urban Growth Area (UGA) boundaries. Rather, the study provides data and information that can be drawn from when considering alternatives for accommodating future growth and when reviewing proposals for UGA adjustments.

The BPS compiles information on existing conditions, and the costs of providing infrastructure and services outside of the existing UGA under hypothetical scenarios with increased urbanization in the area. The study has built a tool to consider the potential vulnerability of the area to residential and commercial development, as well as its potential suitability for such development. In addition, the study considers regulations and policies that may have to be satisfied, or amended, to adjust UGA boundaries.

The BPS also considers policy tools that could address the stark transitions felt by residents where rural land uses abut urban land uses, as well as policy tools for environmental protection, conservation, and recreation. Finally, the study addresses topics relevant across many parts of the county including the BPS Area: affordable housing, economic development, and transit.

Study Area

The BPS Area extends eastward from the Southwest Urban Growth Area (SWUGA) to Broadway Ave, north to Cathcart, and south to the county line, an area that is currently designated as rural and that includes the community of Clearview. The Maltby UGA contains industrial uses, the Brightwater wastewater treatment plant, and a historic town center; the Maltby UGA represents a part of the county that would likely see the effects of any increased densities within the BPS

Executive Summary Topics

This Executive Summary and Findings section presents highlights of the Boundary Planning Study (BPS) and is arranged with the following major sections:

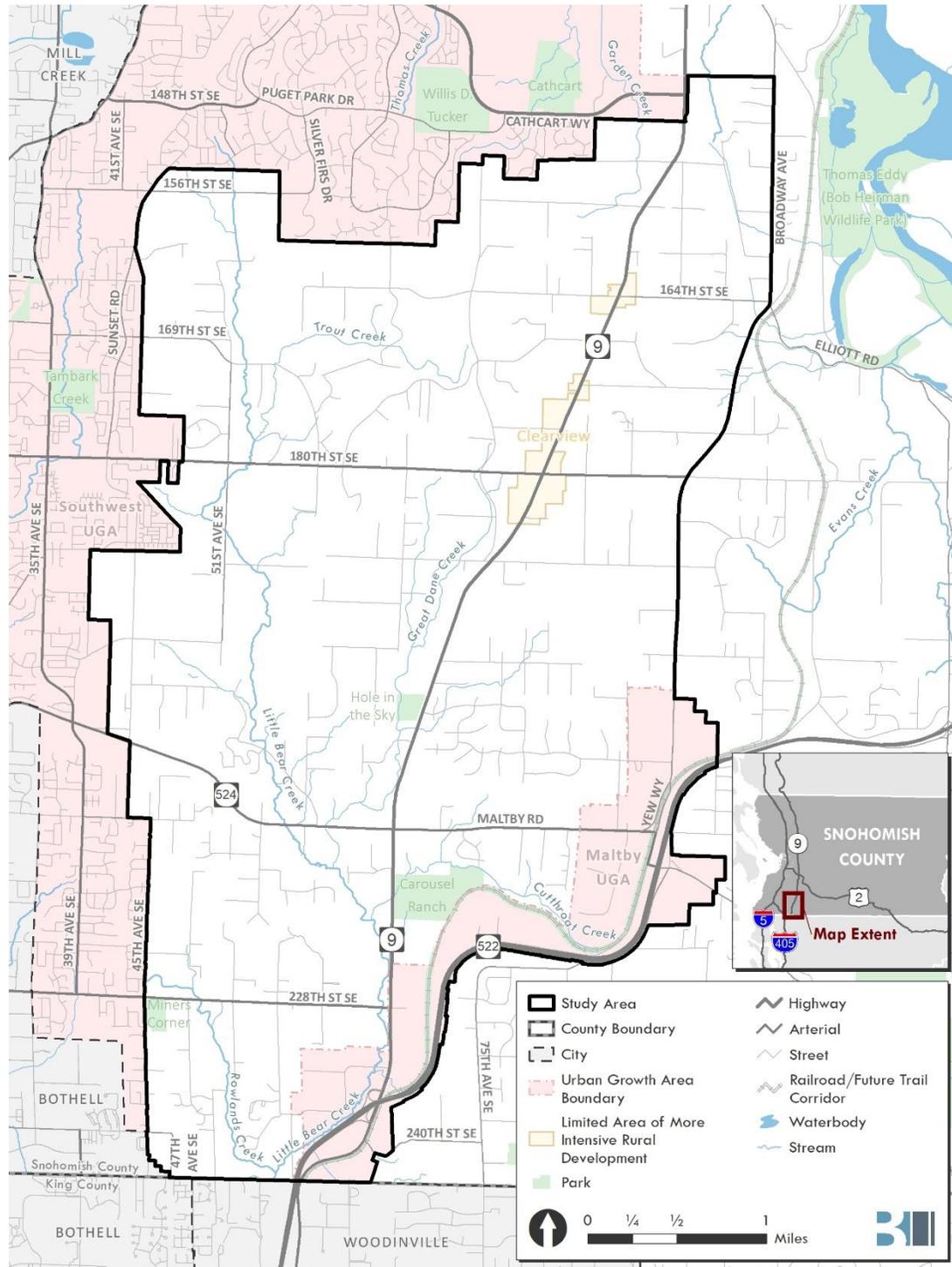
- Purpose and Study Area
 - Limitations of this Study
 - Study Findings
 - Scenarios Description
 - Scenario Evaluation
 - Implications and Future Use of This Study
-

Area, while also likely providing some opportunities. For these reasons, the Maltby UGA is included in the BPS Area, even though the study does not consider growth scenarios for the Maltby UGA.

The BPS Area is over 10,000 acres in size, and includes rural homes and hobby farms, numerous creeks, including Little Bear Creek, and a sole source aquifer. There is a long-standing commercial center at Clearview along SR 9. Public parks and open space offer passive and active recreation opportunities, and local schools offer education to children. Other infrastructure includes state highways, county roads, and rights-of-way, water utility lines and wells, and gas pipelines.

The BPS Area was chosen for study because it is adjacent to a fast-growing area where the County has seen and expects to see continued interest in expanding the UGA. Given the interest and pressures on this part of the county, the County wanted to develop data and information under existing conditions and hypothetical growth scenarios, all of which consider the presence and importance of Little Bear Creek and other streams.

Exhibit 1. Boundary Planning Study Area



Note: This map was generated solely for the Southwest UGA Boundary Planning Study and is subject to all limitations of the study described in Chapter 1 of this report. All data, analysis, and information set forth herein are for illustrative purposes only and are subject to change. Snohomish County makes no representation or warranty concerning the content, accuracy, currency, completeness, or quality of the information contained herein.
 Source: Snohomish County GIS, 2019; BERK, 2019.

Approach

As a high-level study, the BPS *generally* describes current social, environmental, land suitability, and capital facility conditions in the BPS Area, such as:

- **Social:** Socio-economics including population, housing, and employment; land use and growth patterns; and cultural resources.
- **Environmental:** Surface water; wetlands and geologic hazards; groundwater; natural areas and tree canopy; watershed characterization; agriculture and forestry; and open space assessment.
- **Land Suitability and Opportunities:** Vulnerability and suitability; and opportunities and tools that may warrant further consideration.
- **Capital and Service Delivery and Costs:** Transportation/traffic/transit; parks; fire protection and emergency medical services; schools; water and sewer; stormwater/surface water; power, gas, and telecommunications; and fiscal analysis/costs of service.

The BPS evaluates a range of hypothetical growth scenarios for the rural part of the BPS Area, and includes a “Current Strategies” Scenario with no change to existing land use designations based on adopted 2035 growth targets, the planning horizon for Snohomish County’s 2015 Comprehensive Plan. The two additional scenarios apply hypothetical urban land development patterns, with increased housing densities and mixed uses when compared with the existing rural designation.

One of these two scenarios considered increased urbanization focused on two separate nodes and is called the “Nodes” Scenario. The other spreads increased growth across the rural parts of the study area and is called the “Urban” Scenario.

These Nodes and Urban scenarios do not have a target year and represent an average urban “buildout” with no assumption of a timeframe over which development could occur. As the BPS is not a plan, projecting the timing of growth under the two hypothetical “urbanized” scenarios would not have been appropriate. However, for the purposes of completing fiscal analyses, the approach required use of establishing a future year and 2035 was used with the two scenarios to match the Current Strategies Comprehensive Plan horizon year.

The purpose of evaluating hypothetical scenarios is to: 1) consider costs of providing infrastructure and services outside of the existing UGA, and 2) understand potential environmental and social implications.

The study also assesses regulations and policies that must be satisfied or amended if UGA boundary adjustments were to be considered in future planning initiatives.

In addition to evaluating the BPS Area, the BPS study identifies conditions and implications for a wider area that could be affected by changes to land use within the BPS. The wider or “secondary” study area is uniquely defined for each study topic.

Limitations of this Study

It is important to reiterate that the BPS is a high-level study, not a detailed plan or proposal for land use or growth distribution. The two hypothetical growth scenarios described in this study – “Nodes” and “Urban” – are not plans, proposals, or projects currently under consideration by the County.

If, in the future, the County considers any proposed changes to UGA boundaries or land uses in the BPS Area, the County will, at that time, fully analyze any such proposal. The existence of this study does not presume an outcome on any proposal or comprehensive plan update process the County will consider in the future. Because the BPS is a high-level study producing rough or approximate analysis, any future detailed analysis of a specific proposal may produce different results or information.

The BPS is also limited to studying the BPS Area. Other geographic areas are considered for context and to understand, at a high level, implications for areas outside the SWUGA BPS Area that might arise from changed land use scenarios within the BPS Area. The study does not presuppose or consider changed land use scenarios in other parts of the county. The study assesses the implications of increased growth occurring in the BPS and does not consider the implications or tradeoffs of increased growth allocated elsewhere in the county.

Study Findings

Outreach

Outreach Activities

While designed as a study to collect information and data, the BPS included stakeholder outreach to share information about the BPS and provide opportunities to gather insights from stakeholders about BPS Area conditions. Objectives were to:

- Create shared understanding between government representatives, tribes, consultants, community leaders, and other stakeholder groups,
- Gain clarity on what currently works well and what doesn't in the BPS Area and vicinity,
- Hear ideas from both technical professionals and community members,
- Increase the understanding of the interconnected complexities of the region,
- Share the study results with the broader community, and
- Explain how the study will be available for future planning efforts, including the 2023 County Comprehensive Plan Update and how the community can be engaged with that Plan.

A variety of methods were used to share information and to seek insight, including developing a website where several hundred people signed up to stay informed. In addition, stakeholder

interviews, workshops, and a survey were conducted during the BPS. The draft BPS was shared with a summary, full report, and interactive map series. The County held a workshop and an online survey was conducted. Consistent themes heard during outreach included:

- **Transportation System Investments.** Many felt traffic congestion and lack of road, bike, and pedestrian facilities are affecting their quality of life. Some suggested roadway infrastructure investments and others service improvements (e.g., transit). As a largely rural area, this is a pressing consideration for residents today, and increases in concern if there is more development.
- **Natural Environment Values and Conservation.** Natural systems (e.g., streams, trees) are assets and provide ecosystem services. Many want to protect the environment and avoid degradation or loss of trees and habitat.
- **Rural Character.** Many value the rural feel of the area and desire to keep urban growth in other already-developed parts of the county. Others want to limit where added growth could go in the BPS Area (e.g., add to businesses or village at Clearview) and retain a feeling of farm and rural beyond.
- **Housing Affordability and Availability.** Many desired more housing choice and affordability. Some found that solutions to add housing lay in the existing urban areas, and others thought that urban housing allowances in the BPS Area could be a solution.
- **Quality Services and Infrastructure.** There is an appreciation of schools, parks, and other services in the area and, at the same time, a sense of need for added improvements. Additional growth should not be allowed until infrastructure is in place to accommodate it beforehand.
- **Engaged Community.** Residents in and around the BPS Area care about their community and want more opportunities to feel engaged and represented.

Governing Frameworks

Over recent years, the County has seen continued interest in seeking changes to the UGA on the southeast edge of the SWUGA for a number of reasons.

A multitude of interconnected state, regional, and local laws and authorities determine how growth will occur in Washington State, starting with the state Growth Management Act (GMA), which seeks to manage growth to prevent sprawl. In addition, there are interconnected layers of processes and criteria to consider when seeking amendments to UGA boundaries. Changes to UGA boundaries largely hinge on whether there is a demonstrated need driven by population and employment growth, that the UGA can be served with urban levels of service, and that boundaries are logical.

While it is the County that adopts UGA boundaries, it is not County policy alone that guides where growth can occur, and when UGAs can be amended. Development patterns need to be consistent with policies at a countywide and regional level. If UGA amendments were desired,

and they were not consistent with regulations and policies, processes are in place for seeking changes to those regulations and policies. Legislative amendments would be a lengthy process with the potential for success uncertain.

Existing policies are applicable to the “edge” areas where rural and urban land uses abut. Situations that arise from abutting land uses can create tension and concern, and the BPS has identified tools that may be applicable when considering possible remedies.

The Clearview community is unique in that it is the only designated Limited Area of More Intensive Rural Development (LAMIRD), a GMA-based designation, within the county. Changes to boundaries in LAMIRDs are only possible under limited situations. A current initiative called “A Road Map to Washington’s Future” has reviewed possible adjustments to the planning framework in Washington State, including potential flexibility in the framework for LAMIRDs.

Another initiative is an update to the County’s Buildable Lands Report, which reviews how determinations are made on availability for land for urban development. Recent state legislation has adjusted the Buildable Lands Report requirements and approach.

Meanwhile, “VISION 2050,” the Puget Sound Regional Council’s process to develop a strategy for accommodating an additional 1.8 million people in the central Puget Sound area, is under review.

Current Conditions

Social

Socio-economics

There are over 11,000 residents in the BPS Area living in over 4,000 homes, and they tend to be older, married, and have a higher median income than other residents of the SWUGA or the county as a whole. Similar to other areas of the county but to a greater degree, a majority of the residents are white, non-Hispanic. Given the rural nature of the BPS Area, the housing stock is dominated by owner-occupied, single-family housing. The BPS Area has a greater proportion of manufactured and mobile homes, a source of affordable housing, than other areas of the county. These units are in distinct mobile home parks as well as individual units on separate parcels.

The local economy in the BPS Area is strongly dominated by construction and manufacturing industries in the Maltby UGA, as well as services likely related to the Brightwater Treatment Plant. Other employment activities include retail, commercial, and institutional uses in the Clearview Limited Area of More Intensive Rural Development (LAMIRD) as well as rural uses such as daycare facilities, event venues, and equestrian training. Recreation and tourism activity in the BPS Area appear related to existing and planned regional parks, trails, and other facilities, as well as horse-related businesses. Over half of BPS Area residents commute at least 10 miles to work, with the most common places of work being Seattle and Everett. Most employees that work in the BPS Area commute from outside, with over half of employees commuting from at least 10 miles away.

Land Use and Growth Patterns

Almost three-quarters of the BPS Area is in residential use. Over 10% consists of vacant or undeveloped property. Another 4% is in commercial use such as Clearview. The remaining 10% of land is in public/civic/utility use or other uses. With the exception of the Maltby UGA, the land use pattern in the BPS Area is low-density residential. However, most of the platted lots are less than 5 acres in size because they were developed prior to 1995, when the County increased minimum lot sizes in the rural area as part of the County's first Comprehensive Plan under the GMA. Development density is limited because of the rural designation of the BPS Area.

A 2017 population capacity evaluation found the unincorporated Municipal UGAs to the west and the unincorporated SWUGA are growing faster than cities in the county – as of 2017, the Unincorporated SWUGA has met 81% of its 2035 population target.

Demand is high for housing in the unincorporated SWUGA, west of the BPS Area, with much of the buildable land capacity used, especially along the western boundary of the BPS Area.

Single-family development has consumed about half of the single-family capacity in unincorporated areas in the SUWGA. Although the largest proportion of housing units built across the county are single-family detached housing, over 40% of new housing units across the county permitted between 2010 and 2015 were duplex or multi-family units.

Housing capacity estimates suggest that future housing demand can be accommodated with existing land supplies within the SWUGA, but there may be locations close to the BPS Area boundary on the west where developable lands are scarce.

Cultural Resources

Valued by tribes, Little Bear Creek and other BPS Area streams have long sustained fish. Little Bear Creek also provides a relatively wide natural open space corridor. There is a higher potential for archaeological resources along Little Bear Creek and other stream corridors than areas beyond these stream corridors.

Abundant resources and successful logging, mills, and farming attracted Euro-American settlers to Clearview, Cathcart, and Maltby over a hundred years ago. The BPS Area also attracted settlers with small farm plots and



Strawberry field, Clearview 1944, Mann 2015



Maltby RR Depot, Undated Mann 2015



Maltby School 1920s, Mann 2015

proximity to industries and cities via trains. The area's commercial agriculture history is recognized in local grange halls and remaining historic agrarian buildings.

Rural estate homes and animal-keeping still exist. Similar to over a hundred years ago, residents continue to commute to nearby city centers, now by roads instead of trains.

Environmental

The BPS Area is notable for its extensive tree canopy, fish-bearing streams, and sole-source aquifer. The BPS Area provides important critical area and open space functions and values. Rural residential properties with hobby farms, equestrian centers, and some value-added agriculture (e.g., flowers) reinforce a rural character and economy.

All categories of critical areas defined under the GMA are found in the BPS Area, including wetlands, critical aquifer recharge areas (CARAs), fish and wildlife habitat conservation areas, frequently flooded areas, and geologic hazard areas. (RCW 36.70A.030(5)) Critical areas tend to be concentrated along the Little Bear Creek corridor, though there are other important fish-bearing streams with wetlands and riparian areas and abutting steep slopes, such as Trout Creek, Great Dane Creek, Cutthroat Creek, and Rowlands Creek.

This BPS evaluates six basins and 14 sub-basins for current conditions including:

- Indicators of intactness: overall forest cover, forest cover in critical areas, critical areas extent, aquatic habitat extent.
- Indicators of degradation: total impervious area, total impervious area within critical areas, and storm conveyance density.

Considering indicators for watershed intactness, and watershed degradation, subbasins in the central-western portions of the BPS Area – including Middle Little Bear Creek, Trout Creek, and Rowlands Creek – have the highest protection priority rating of Protection Priority 1. This is a rating system developed for the BPS reflecting science, professional literature, and consultant team professional expertise in collaboration with County surface water management staff. Subbasins in the central-eastern portions of the BPS Area, including Upper Little Bear Creek, Great Dane Creek, and Cutthroat Creek, are considered Protection Priority 2. The eastern portion of the BPS Area is evaluated as Protection Priority 3, and includes basins draining to the Snohomish River. Other subbasins to the west and south straddling the BPS Area are identified as places for targeted restoration.

These indicators illustrate broad conditions but are not meant to take the place of more in-depth basin studies and plans that county, state, and federal agencies produce. Local conditions at a block or parcel scale may vary from the conditions summarized across sub-basins.

Exhibit 2. Map of Draft Watershed Characterization Results by Subbasin Within the BPS Area

Protection Priorities

Draft Watershed Prioritization

- Low Priority
- Protection Priority 1
- Protection Priority 2
- Protection Priority 3
- Targeted Restoration

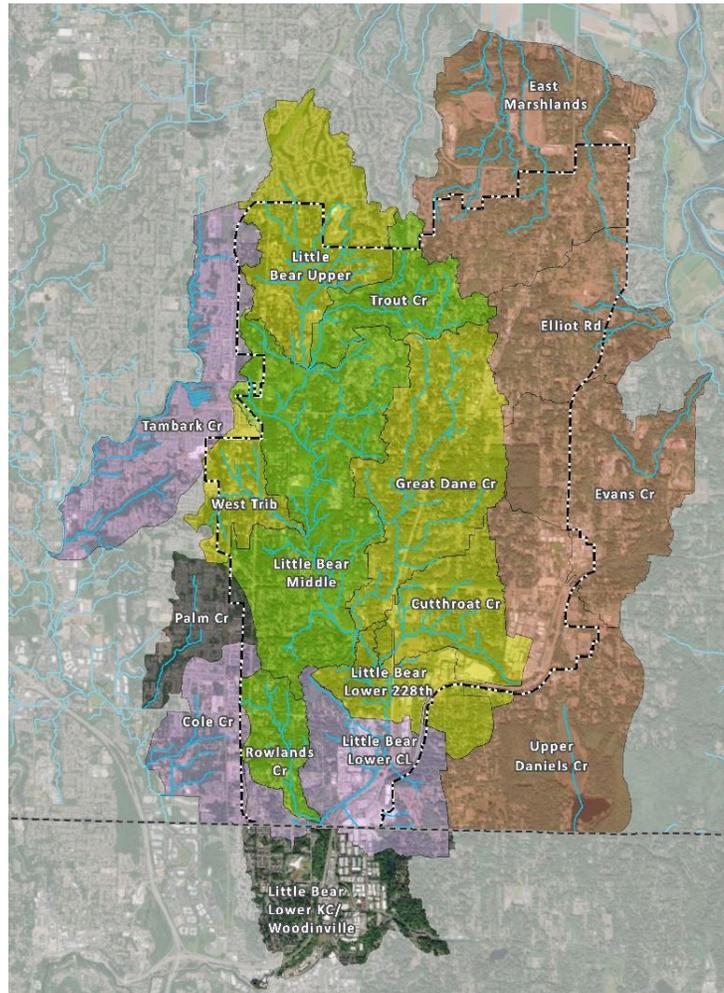
Protection Priority 1: Subbasins where there are the highest extents of important critical areas and aquatic habitats, which also show highest levels of intactness.

Protection Priority 2: Subbasins where there are high extents of important critical areas and aquatic habitats, and that are still generally intact.

Protection Priority 3: Subbasin where the extent and existing condition of important critical areas is moderate; however key indicators of degradation (impervious surface coverage and storm drainage conveyance) are low.

Targeted Restoration: Subbasins where key indicators of watershed process degradation are moderate to high; however, indicators of extent and intactness focused on important critical areas and aquatic habitats remain at moderate levels.

Lower Priority: Exhibits high degradation and low intactness conditions.



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Source: Snohomish County GIS, 2018; ESA, 2019.

Groundwater quality and quantity is important to protect for potable water use. Thus, Snohomish County limits land uses, and requires hydrogeologic studies and best management practices within CARAs such as the Cross-Valley Sole Source Aquifer.

Managing groundwater recharge and discharge is also essential to ensure groundwater continues to replenish streams. Groundwater in areas along and adjacent to Little Bear Creek that have glacial outwash sediments at the ground surface are more vulnerable to impacts from development than with glacial till sediments. Impacts to these areas are also more likely to impact groundwater baseflow discharging to Little Bear Creek. Although travel times are longer,

groundwater recharge from fill-covered areas elsewhere in the BPS Area does reach potable aquifers and discharges to Little Bear Creek or the Snohomish River.

From a sub-regional perspective, the BPS Area is on the edge between urbanized areas and rural areas. These rural areas provide substantially more ecosystem services as part of a larger rural area surrounding the lower Snoqualmie valley. See Section 5.G, Open Space Assessment. The natural features of the BPS Area – including the substantial tree canopy, limited impervious surface coverage, and relatively intact stream system – provide numerous benefits in the BPS Area and for the region as a whole.

Puget Sound Regional Council's *Regional Open Space Conservation Plan* reinforces the results of the Open Space Assessment Tool (OSAT) that the Little Bear Creek corridor is a conservation need in the region.

Capital/Service Delivery

The BPS evaluates major categories of County-provided facilities including transportation, parks, and stormwater/surface water. Highlights of current conditions that were considered in the development of hypothetical growth scenarios for the study are highlighted below.

- **Transportation/Traffic/Transit:** Major state routes – SR 9 running north-south, SR 524 running east-west, and SR 522 along the southeastern edge through the Maltby UGA – are the primary travel routes and are highly traveled. The BPS Area's current density of County-owned roadway lane-miles per square mile is less than half that of the county's unincorporated UGA and has no facilities classified as principal arterials. Given that much of the county's non-UGA land is remote from cities and UGAs, the average provision of roadways within the BPS Area is well above the average of all non-UGA areas. The BPS Area has low bikeway density compared to the unincorporated UGA and does not have any non-motorized trails. There is no transit service as the community voted in 1997 and 2008 not to be included in Community Transit's service area. While there are some locations within the BPS Area that could support transit, most areas would need to densify considerably to support cost-effective transit service.
- **Parks:** Snohomish County is the primary provider of parks and recreation services and manages about 156 acres of parkland, though only Miners Corner is developed as an active park and Hole in the Sky is an undeveloped park accessible by reservation. The East County Park and Recreation District serves the area with an active park in Maltby. The future Carousel Ranch Park is undeveloped with a master plan to guide future use. The County has secured a railroad corridor and is in the process of securing the property rights to develop a rail with trail alignment for future extension of the Centennial Trail. The University of Washington maintains an experimental forest for educational purposes that may be a future opportunity for passive recreation. Natural gas pipelines and power lines traverse the BPS Area, and the entities that own them allow for some public use subject to agreement and practices.

- **Stormwater/Surface Water:** Most of the study area is rural, and there are limited constructed stormwater features. Impervious area is relatively low and forest/permeable conditions are high. Most of the County's current surface water management revenue collected for services in this area is related to non-residential use (e.g., Maltby).

The study also considered capital facilities and services provided by a number of the multiple special districts that provide services important for daily life:

- **Fire Protection:** Fire District 4 and particularly Fire District 7 provide services to the BPS Area.
- **Schools:** Four school districts – Everett, Northshore, Monroe, and Snohomish – serve the BPS Area. Each have schools in the BPS Area, and three have properties that are planned for development or expansion, including Everett, Monroe, and Northshore School districts.
- **Water:** A majority of the BPS Area is served by municipal water service providers, including Alderwood, Cross Valley Water, and Silver Lake Districts, but principally Cross Valley. Unserved areas will require new conveyance infrastructure. Some served areas require new or updated infrastructure. The districts have plans to address infrastructure needs.
- **Sewer:** Sewer service is the responsibility of the same three special purpose districts identified for water service. However, within the BPS Area, only Cross Valley provides service to the Maltby UGA consistent with the GMA requirements that allow sewer only as an urban service. Most of the BPS Area is feasible for sewer service, with limiting factors such as development costs associated with topography and distance to the nearest treatment plant.
- **Power:** PUD 1 provides power to the BPS Area. At present, there is sufficient distribution capacity within the BPS Area. In the periphery of the BPS Area, however, there are other substations with circuits that are currently heavily loaded or at capacity during summer peak contingency conditions.
- **Gas:** PSE provides local natural gas service to western Snohomish County, including the BPS Area. Hazardous liquid pipelines also extend through the BPS Area.
- **Telecommunications:** Telecommunication services include landline and cellular service. Broadband, cable, and internet service is also available. Telecommunication infrastructure can support information needs and economic development.

Scenarios Description

As noted, the BPS evaluates a range of hypothetical growth scenarios for the rural part of the BPS Area, and includes a “Current Strategies” Scenario with no change to existing land use designations based on adopted 2035 growth targets, the planning horizon for Snohomish County’s 2015 Comprehensive Plan. The use of hypothetical growth scenarios is to provide information and analysis about the implications of changing the current plans and strategies for land use in the area. The hypothetical scenarios are not formal alternatives or proposals. Scenarios are a means to identify potential future growth levels and patterns, and how that could affect environmental, social, and capital facilities/service conditions, including costs. Three scenarios provide distinct conditions: 1) Current Strategies based on today’s county land use policy through 2035, as adopted in the County’s Comprehensive Plan, 2) focused development in Nodes, and 3) a more extensive Urban pattern. The “Nodes” and “Urban” scenarios do not have dates associated with them as they consider average urban “buildout” conditions, with no assumed timeframe. Each scenario is described more below.

The BPS uses a concept called “typologies.” Applying this concept, scenarios are built with housing and commercial forms (or typologies) that can fit in either a rural or urban context depending on density and open space. The typologies include forms that fit the current BPS Area housing pattern and rural commercial nodes consistent with the County’s adopted Rural Residential-5 and Clearview Commercial zones. They also illustrate urban housing types and mixed-use commercial that could be applied to the BPS Area landscape, guided by land suitability results described later in this Executive Summary. Housing types include various sizes of single-family lots, cottages, townhomes, and apartments. Mixed use commercial is also considered.

Prior to developing scenarios, the consultant team gathered information about current conditions regarding environmental, social and economic, and public service topics. A staff and consultant charrette was then held during the study where teams identified broad concepts for conservation, land use, transportation, and parks and recreation for the purposes of the study. Different ideas were then coalesced into the following scenarios using the charrette results.

Current Strategies: This Current Strategies Scenario is based on future land use categories and zoning districts in place today. All analyses associated with this scenario are based on the adopted Comprehensive Plan and 2035 growth targets. Most of the area is zoned for Rural 5-Acre Lots, allowing a very low density of 1 dwelling per 5 acres or 0.2 units per acre. The Maltby UGA is zoned mostly as Light Industrial as well as Industrial Park, Heavy Industrial, Planned Community Business, and General Commercial and others.

Nodes: The Nodes Scenario would contain urban uses within denser focal points in the southwest and northeast portions of the BPS Are. Under the Nodes Scenario:

- A rural edge is retained on the northwest.
- On the northeast, the area is more compact and urban with more residential open space

typologies to transition to lower density rural areas to the east.

- Along the southwest, a narrower band of residential is included, transitioning to the rural corridor of Little Bear Creek.
- The central east retains a rural character until heading south to Maltby.
- The western edge of Maltby is Rural, and over time, greater landscaped transitions would provide a buffer between uses (e.g., dense trees, berms, or similar strategies).

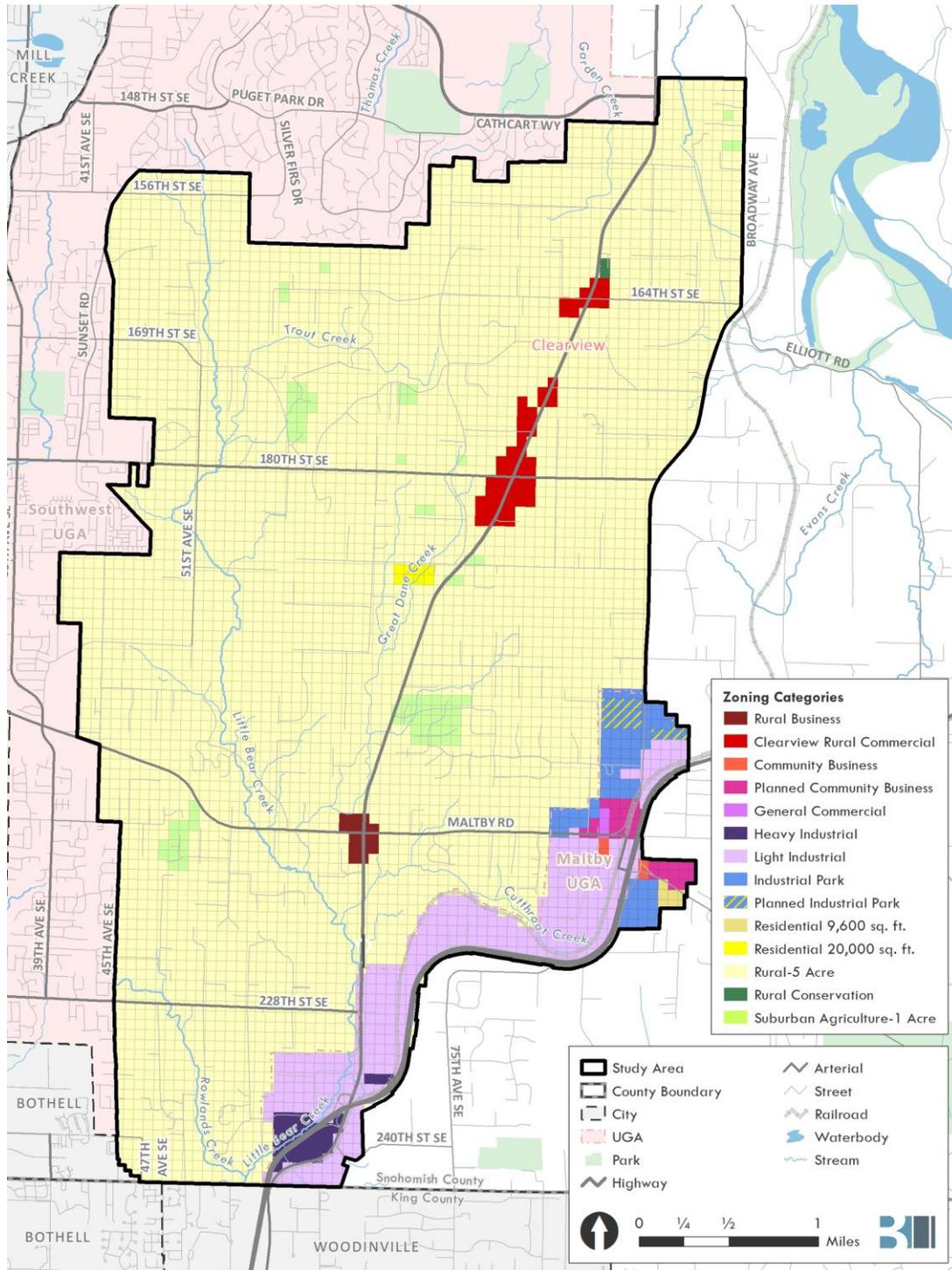
Urban: The Urban Scenario extends urban uses to the most territory. Under the Urban Scenario:

- There are more continuous urban areas.
- Higher density Mixed Use Commercial, Walk Up Multifamily, and Townhouses are integrated into the Clearview area.
- A "Convenience Center" is located at SR 524 and SR 9, similar to Current Strategies.
- Greater mixed-use is provided near Maltby.
- Clustered development typologies are applied extensively across urban areas to:
 - Recognize concentrations of critical areas,
 - Promote low impact development, and
 - Offer transitions from urban to rural densities.
- The value of Little Bear Creek is addressed by assuming rural large single-family development in the vicinity of the creek. Open space conservation focus areas are also applied along major sensitive creek corridors to promote optimal clustering and low-impact development patterns.

Typically, within an urban growth area, densities are higher than in rural areas to meet the GMA goals for compact urban growth, avoiding sprawl, and conserving environmentally sensitive areas and open space. Subsequent parts of the BPS describe how there can be use of lower densities in urban separators or where there are critical area complexes of high functions and values. For that reason, the BPS scenarios in some cases use densities that are lower than may be considered traditional for urban designated land.

The Current Strategies, Nodes, and Urban scenarios are mapped on Exhibit 3, Exhibit 4, and Exhibit 5, respectively, applying different forms (typologies) of development. Maps illustrate a 2-acre grid cells instead of street blocks or parcels. This approach was used for the purpose of completing subsequent parts of the study.

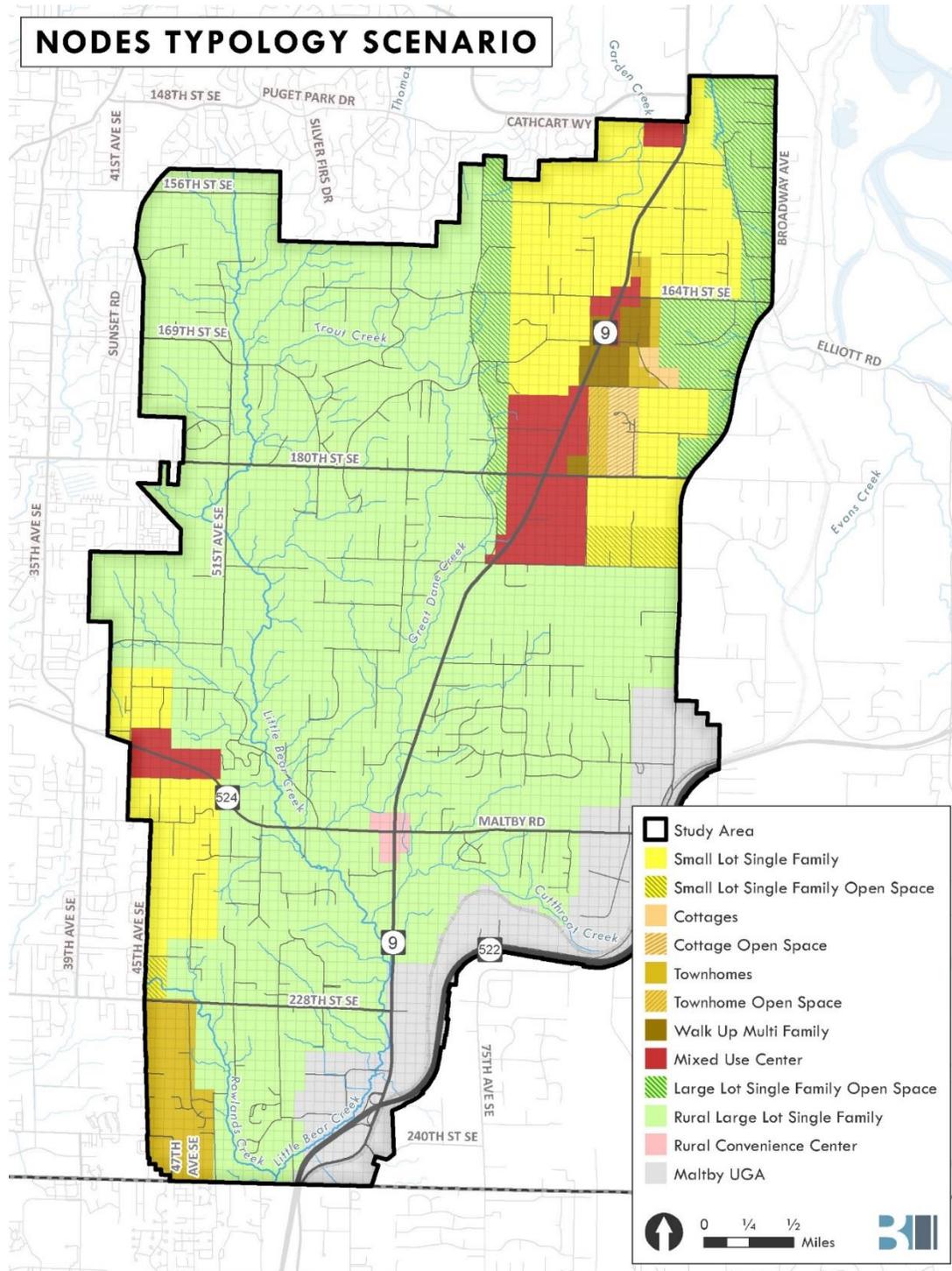
Exhibit 3. Current Strategies – Existing Zoning with 2-Acre Grid Cell



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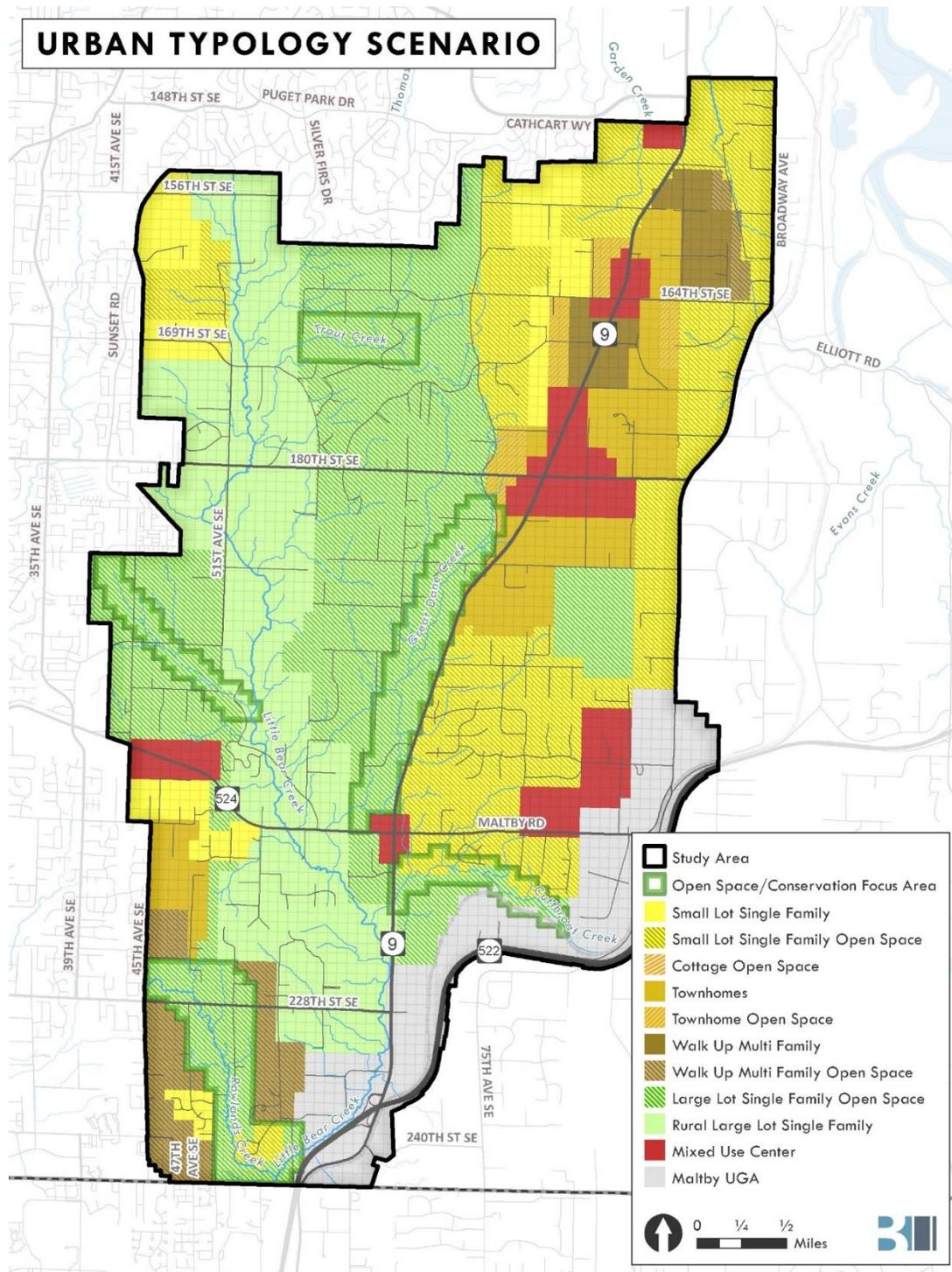
Source: Snohomish County PDS, 2018; BERK, 2018.

Exhibit 4. Hypothetical Nodes Scenario with 2-Acre Grid Cell



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 Source: BERK, 2019.

Exhibit 5. Hypothetical Urban Scenario with 2-Acre Grid Cell



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 Source: BERK, 2019.

The Nodes and Urban scenarios were designed by applying urban typologies in the area to create a range of denser development patterns. Once vulnerable acres (e.g., streams and buffers) were considered, as well as other factors such as capital facilities, open space, and unavailable land/inefficient patterns, the resulting growth yields were calculated. The Urban and Nodes scenarios developed for the purposes of the BPS produce a large number of housing units and modest increases in jobs. Under Current Strategies, minimal housing is anticipated due to its largely Rural status.

Exhibit 6. Housing and Job Estimates by Scenario

Scenario	Housing Units (Total)	Population (Total)	Employment (Total)
2010	4,102*	10,976	4,478
Current Strategies (2035)	4,224	11,310	9,200
Nodes	19,687	45,261	12,040
Urban**	27,386-27,801	62,961-63,914	12,409

Notes *The Transportation microanalysis zone (MAZ) model identifies 4,096 as the figure based on Census information. The figure 4,102 is based on 2018 Assessor data and is rounded from grid-cell information.

**Due to the Large Lot Open Space in the central north area between the creek network, a range of densities is tested. The low range is about 415 dwelling units less and assumes 2.5 units per net acre, whereas the upper number is at 4 units per net acre.

Sources: Snohomish County, 2018; BERK, 2019.

Two nodes were considered in the “Nodes” scenario: A Node area to the Northeast in Clearview represents about 70% of the residential growth and the Southwest Node represents about 30% of the residential growth.

Scenario Evaluation

The following findings were developed from an evaluation of the two hypothetical growth scenarios and the scenario with no change to existing land use designations.

Environmental

There would be an increase in impervious areas if development were to occur consistent with any of the scenarios, with the least increase under Current Strategies and the most under the Urban Scenario.

Exhibit 7. Impervious Surface Additions within BPS Area by Scenario

Scenario	Acres	Impervious Increase
BPS Area Total Acres	10,291	
Impervious Acres		
Current Condition (2015)	1,963	
Current Strategies	2,281	+16%
Nodes	3,194	+63%
Urban	3,914	+99%

Source: BERK, 2019.

Future development under any scenario will result in land cover change – both through increases in impervious surfaces and loss of forest cover. Landscape-level changes in land cover could result in alteration of watershed processes, with reduced infiltration and evapotranspiration. See Section 5.B for changes in total impervious area by scenario within each sub-basin in relation to basin protection priorities. Generally, areas of change to highest intensity use are primarily focused in subbasins that already have lower levels of ecological intactness (higher levels of degradation) but there are locations where impervious areas would increase in protection priority basins, typically with the greatest under Urban followed by Nodes and Current Strategies.

Stormwater management practices that follow County adopted standards and guidelines are designed to mitigate impacts within any drainage basin where development occurs. However, while stormwater BMPs can help mitigate stormwater impacts, they may not necessarily fully replicate the watershed processes and functions of a forest landscape.

Land use decisions and protection of critical areas in upstream reaches within the BPS Area will have implications for downstream reaches of Little Bear Creek (in the City of Woodinville and King County), as well as downstream reaches of Daniels Creek (draining to Bear Creek), Tambark Creek, and North Creek. This study does not specifically quantify or qualitatively describe these “implications.” Hence downstream cumulative effects should be assumed. Downstream implications of development under the scenarios would be generally consistent with the extent area of each subbasin within the BPS Area.

Under each scenario, there are potential groundwater recharge reductions that could reduce stream baseflow, with the least change under Current Strategies and the most change under the Urban Scenario. With this preliminary high-level analysis, under the Urban Scenario there could be a cumulative reduction of up to 2.2 cubic feet per second (cfs) of recharge that would discharge to Little Bear Creek and up to 1.9 cfs reduction of recharge that would discharge to the Snohomish River. At this general level of analysis, if the BPS Area were to have

extensive development of urban patterns, the overall management of the area would change and include municipal water systems instead of wells and new stormwater systems to meet County and special district requirements and plans. This high-level analysis provides a comparative review of the scenarios from the groundwater perspective. There are other planning and legal considerations relevant to groundwater and land use, such as in-stream rules, water rights, water quality, habitat conservation, and service-provider obligations relevant to the BPS Area.

Under each scenario, there is likely to be a reduction in forest cover and pervious areas with the addition of new development and associated impervious area. The Urban Scenario would have more impervious surface increases than the Nodes Scenario, and both would have a much greater change than planned under Current Strategies.

The County has tree protection regulations in place, though lesser percentages of trees are required to be retained under more urban residential development patterns with subdivisions containing greater lots or developments with higher densities than for developments with fewer lots. The loss of tree canopy could increase urban heat island effects and reduce carbon sequestration and storage. While the BPS Area has less contribution to carbon storage and air purification than rural areas to the east, it offers more regional benefits than the urban areas to the west based on the BPS use of the regional open space assessment tool.

Air quality is closely tied to vehicle greenhouse gas emissions. System-wide vehicle miles traveled (VMT) were extracted from the County's travel demand model for each scenario. For the PM peak hour, VMT is expected to increase by 16% from existing condition to 2035 under the Current Strategies. The Urban Scenario would result in the largest increase, approximately 2% higher than the Current Strategies, and Nodes in between the two.

Social

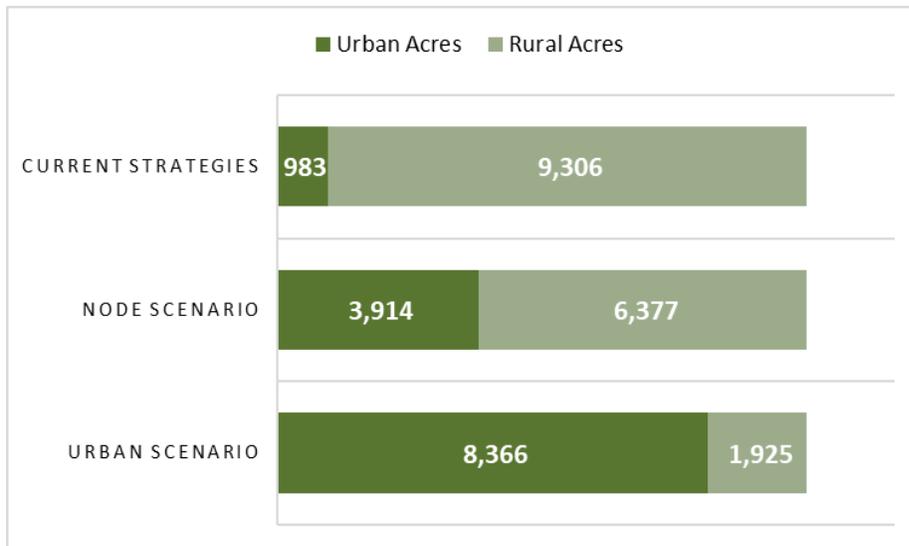
The Nodes and Urban scenarios would produce substantially more housing than Current Strategies through a strategy for local housing oriented more to denser forms of development, including multi-family options, than historical development in adjacent areas.

Limited housing is anticipated in the BPS Area under Current Strategies (just over 100 new housing units between 2011 and 2035). The Nodes or Urban scenarios would contribute a significant amount of housing within the county, although it is important to note that the Current Strategies has a time horizon of 2035, while the Nodes and Urban scenarios are not time-based and are representing how much housing could be built in the area under the typologies applied in the design of the scenarios (the "Housing Yield"). The Nodes Scenario would produce over 15,000 new dwellings, about 20% of the unincorporated SWUGA stock, 12% of the county unincorporated stock, and 5% of the countywide stock. The Urban Scenario would produce over 23,000 new dwelling units, or about 30% of the current share of unincorporated SWUGA

dwelling, 17% of the county unincorporated, and 7% of the countywide stock. The typologies applied in the Urban Scenario generated about 80% of the over 23,000 dwellings as attached housing types, primarily townhomes. Based on the design of the scenarios, about 70% of the resulting housing was located in the NE Node and about 30% in the SW Node. Under the Urban Scenario 81% of the gross acres were in an urban typology, including the Maltby UGA.

Current Strategies includes about 10% of land in Urban use in the Maltby UGA. Applying typologies across the area under the Nodes scenario, the share of urban land increases to 38%, including Maltby. Applying the typologies to the Nodes scenario, about 50% of the over 15,000 dwellings would be small lot single-family with the rest in attached housing types.

Exhibit 8. Gross Acres in Urban and Rural Use by Scenario



Source: Snohomish County, 2018; BERK, 2019.

Suitability and Vulnerability

Understanding constraints and opportunities in the BPS Area is an important goal of the BPS. An integrated approach was taken to organize and integrate the contextual social, environmental, and capital facility conditions information, and to determine the relative implications of scenarios through a Land Suitability Analysis Tool.

Vulnerability and Suitability

In the context of the Land Suitability Analysis Tool framework, relevant characteristics to consider with respect to siting development in appropriate locations can be divided into two categories:

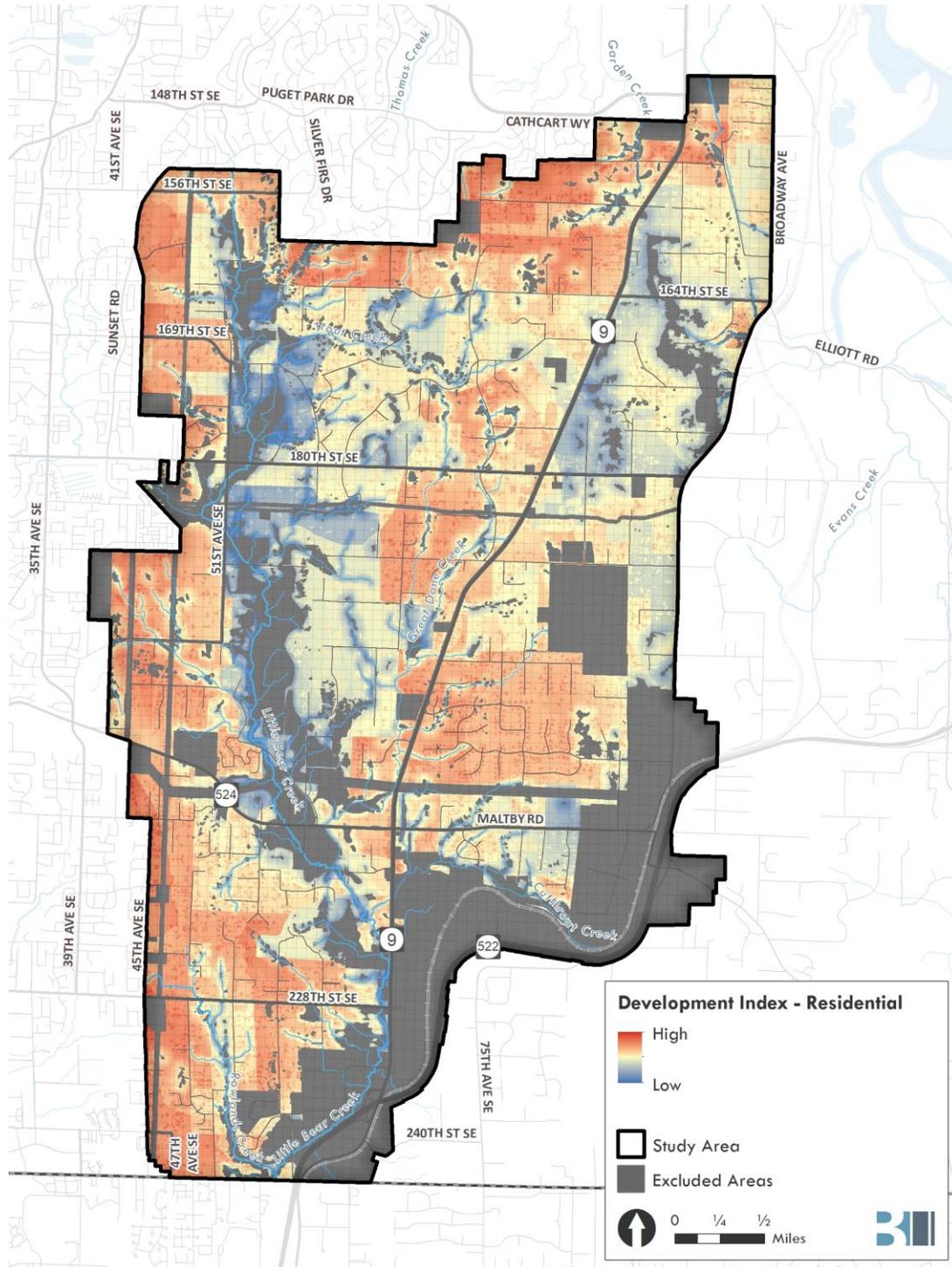
- **Landscape vulnerability** involves characteristics that would be impacted by new development, which could be through the presence of new development (e.g., land cover) or the ongoing effects of a development (e.g., proximity to wetlands).
- **Development suitability**, on the other hand, determines the appropriateness of a certain use in a location. This may include factors such as the ability to service the site with water and wastewater services cost-effectively, or accessibility of the site to transportation systems.

A picture of the area's vulnerability and suitability was developed for the BPS by applying weightings to the parameters developed to represent landscape vulnerability and development suitability. This was further refined based on whether the development was residential or commercial. Based on the parameters, the following maps were generated illustrating the combination of Vulnerability and Suitability scores. The maps include landscape attributes in 2-acre grid cells as a base, to which parameters and the weightings are applied.

- The **Residential Development Index map** (Exhibit 9) highlights those areas where development would tend to have lower landscape impacts but still be in highly suitable locations for residential uses.
- The **Commercial Development Index map** (Exhibit 10) highlights those areas where new commercial development projects would tend to have lower landscape impacts but still be sited in desirable locations.

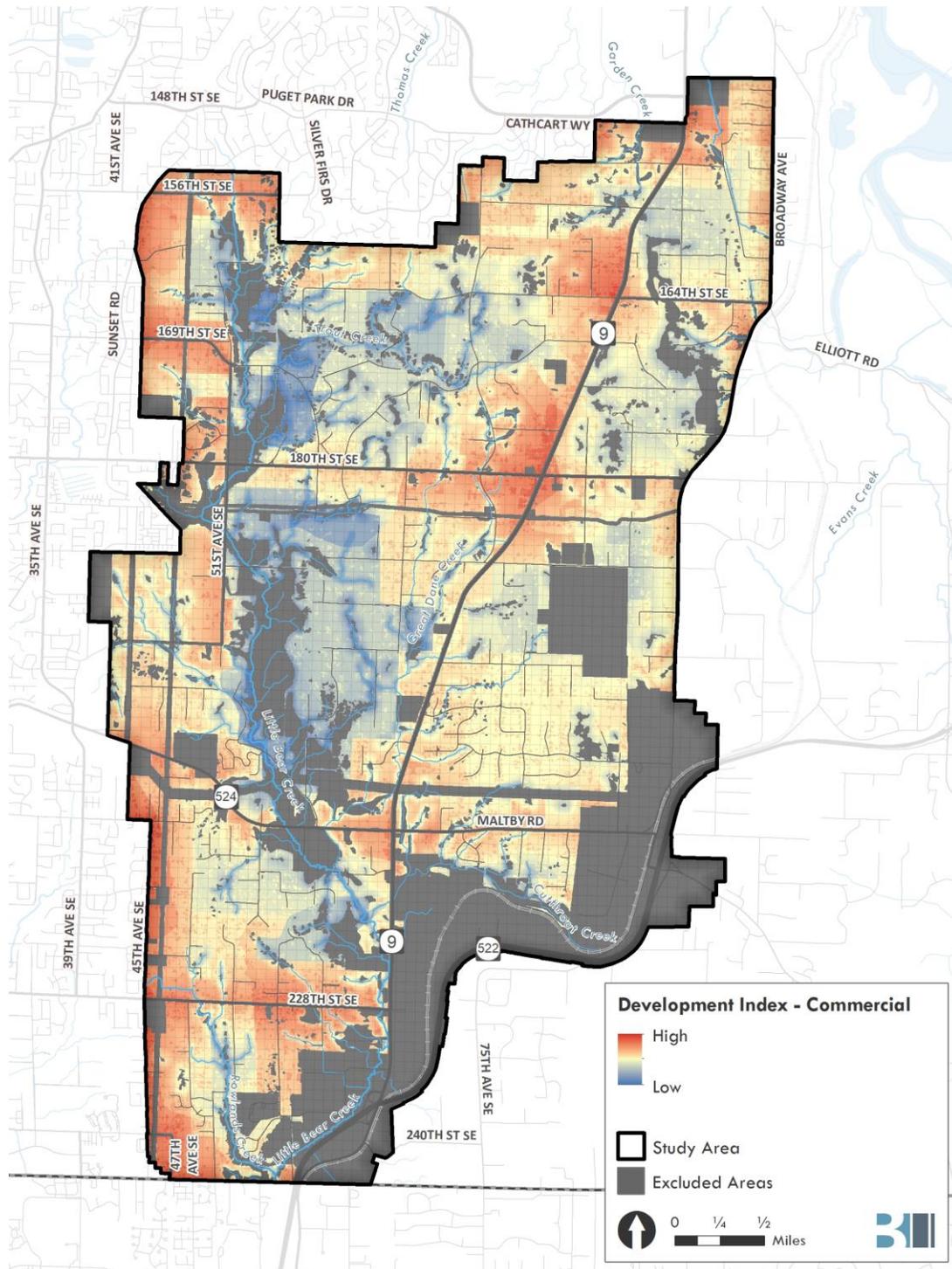
The Development Index maps include both the suitability and vulnerability scores and highlight those areas that generally score well according to both metrics. Results are high-level. Additionally, it is important to consider that the Land Suitability Analysis Tool uses existing spatial data and broad approaches that produce approximate results and is not meant to provide a site-level analysis of a property's potential for development or potential impacts on the environment. The tool is flexible. If different parameters were chosen for representation of landscape vulnerability and development suitability and/or if different weightings for the parameters were applied, different maps would be produced.

Exhibit 9. Demonstration of Residential Development Index



Note: This map was generated solely for the Southwest UGA Boundary Planning Study and is subject to all limitations of the study described in Chapter 1 of this report. All data, analysis, and information set forth herein are for illustrative purposes only and are subject to change. Snohomish County makes no representation or warranty concerning the content, accuracy, currency, completeness, or quality of the information contained herein.
 Source: BERK, 2019.

Exhibit 10. Demonstration of Commercial Development Index



Note: This map was generated solely for the Southwest UGA Boundary Planning Study and is subject to all limitations of the study described in Chapter 1 of this report. All data, analysis, and information set forth herein are for illustrative purposes only and are subject to change. Snohomish County makes no representation or warranty concerning the content, accuracy, currency, completeness, or quality of the information contained herein.
 Source: BERK, 2019.

County Provided Infrastructure

Transportation Demand

The net change in land use was evaluated in the County's travel demand model under each scenario: Current Strategies, Nodes, and Urban. For the Nodes Scenario, a separate analysis was completed of the Northeast and Southwest nodes to see implications of each area independently.

To evaluate the effect of each land use scenario on the roadway network, the BPS used an evaluation framework based on the County's arterial roadway screening methodology. The County methodology compares an arterial roadway's forecasted vehicle volume to its capacity.¹ The County's screening approach considers bidirectional volumes and capacities as an initial screening step before doing more detailed study of a particular corridor. Because the scenarios evaluated include predominantly residential growth, the peak period traffic patterns are likely to be more directional in nature. Therefore, this study uses the County's established methodology to calculate a roadway's capacity, but focuses on the peak direction results to produce a more conservative assessment of infrastructure needs.

Growth in traffic between the 2019 and 2035 travel demand models was extracted and added to observed counts at study locations. These forecasted volumes were then compared to the capacity of each location to estimate the 2035 LOS under each scenario.

As expected, given the land use intensity assumptions, the Urban Scenario generally has higher volumes than the Nodes scenario, which in turn has higher volumes than the Current Strategies. The amount of arterial lane capacity needed is highest under the Urban Scenario and lowest under the Current Strategies. Due to the difference in methodology described above, and the availability of more recent traffic counts and modeling results, this evaluation finds that, even assuming the capacity improvements included in the 2015 Comprehensive Plan Update, the Current Strategies would require additional infrastructure to support its planned growth. North-south capacity requirements are considerably higher than east-west needs, which matches the predominant existing travel patterns and the future growth.

Total arterial lane-miles needed in both directions were calculated for each scenario, as summarized in Exhibit 11. The analyses do not separate out State and County lane miles or costs. Snohomish County staff estimate that the construction and right-of-way cost per lane-mile of roadway in the BPS Area would range from \$11M to \$14M (in 2018 dollars), including pedestrian facilities and bikeways. Using this assumption, it is estimated that State's and County's costs to construct the roadway infrastructure to support the Current Strategies would be \$600M to \$1.3B. The Nodes scenario could range from roughly \$1.1B to \$2.6B and the cost for the Urban Scenario

¹ Note that the County's formal terminology is Maximum Service Volume.

could range from \$1.7B to \$2.9B. The Northeast Node cost would be similar to the Nodes scenario (i.e., developing both nodes) at \$1.2B to \$2.2B, while the Southwest Nodes would be lower at \$700M to \$1.4B. Exhibit 11 summarizes the difference among scenarios, with the Southwest Node having the smallest increase in need compared to the Current Strategies (\$100M) and the Urban Scenario having the largest increase in need (\$1.1B - \$1.6B).

These ranges could be substantially affected by right-of-way needs, which could be higher for the corridors where whole new arterials or multiple lane capacity additions are needed, likely requiring extensive displacements of existing land uses. It should be emphasized that the lane-mile estimates relate to arterial capacity only – the local street network would generally be completed by new development.

Exhibit 11. 2035* Total Arterial Lane-Miles Needed and Cost by Scenario

Scenario	Total Arterial Lane-Miles Needed	Estimated State and County Cost (2018 Dollars)**
Current Strategies	55 - 87	\$600M - 1.3B
Nodes Scenario	102 - 181	\$1.1B - 2.6B
<i>Difference Between Nodes Scenario and Current Strategies</i>	47 - 94	\$500M - 1.3B
NE Node Scenario	102 - 157	\$1.1B - 2.2B
<i>Difference Between NE Node Scenario and Current Strategies</i>	47 - 70	\$500M - 900M
SW Node Scenario	65 - 94	\$700M - 1.4B
<i>Difference Between SW Node Scenario and Current Strategies</i>	7 - 10	\$100M
Urban Scenario	162 - 201	\$1.7B - 2.9B
<i>Difference Between Urban Scenario and Current Strategies</i>	107 - 114	\$1.1B - 1.6B

Notes: *The County maintains a 2019 base year model reflecting current conditions and a year 2035 model, which aligns with the planning horizon for the Comprehensive Plan. Though the model is designed for the year 2035, the land use estimates for Nodes and Urban scenarios represent a moderate buildout that could extend beyond 2035.

**Includes costs for both State and County facilities.

Source: Fehr & Peers, 2019.

Parks

The County's parks level of service (LOS) standards are based on population growth; applying LOS standards to the scenarios illustrates the increased demand and investment that would be needed to serve the potential scenario populations. The evaluation below assumes local-serving amenities would be located within the BPS Area or Secondary Study Area; amenities for regional

facilities could be located within the BPS Area or elsewhere in the county. Under all scenarios the assumption *outside the BPS Area* is that the County's growth would match 2035 Comprehensive Plan.

- **Current Strategies.** The status quo is assumed and no demand beyond the County's 2015 Parks and Recreation Element is anticipated in the BPS Area. Allocated rural population for year 2035 has already been achieved as of 2018 in the BPS Area. There is a small amount of capacity for added rural growth. However, the County has planned for a countywide unincorporated demand and its Parks Element identifies the location for park improvements, including some in the BPS Area.
- **The Nodes Scenario** would add 53% of population above countywide unincorporated population estimates. The number of expected park facilities needed increases accordingly. The County does not apply an acres-based LOS standard. With higher levels of growth and facility needs, if focused in this area, there may be a need to acquire land to place facilities within them.
- **The Urban Scenario** would add 81% of population above countywide unincorporated population estimates. The number of expected park facilities needed would be the highest amongst all scenarios. There could be an associated need for acres of parkland.

Exhibit 12. Increased Facility Demand by Scenario

Facility	Countywide 2035 Uninc. Demand*	BPS Current Strategies 2035	BPS Area Node	BPS Area Urban
Total Population	63,338	11,430	45,261	62,961
Study Area Net Population Growth Yield (Base Year 2018: 11,430)	—	0	33,831	51,531
Increase in Population above 2035 Parks Element Assumption			53%	81%
Active Recreation Facilities	15	0	10.4	15.9
Passive Recreation Facilities	11	0	9.3	14.1
Regional Trail	6	0	3.9	5.9
Waterfront	1	0	2.9	4.5
Campsites	43	0	32.2	49.1
Parking Spaces	393	0	281.9	429.4

Note: *Column presents values from Parks and Recreation Element, Table 6, 2015 Comprehensive Plan. The Countywide Population is noted in that plan as for the period 2013-2035.

Source: (Snohomish County, 2015); BERK, 2019.

Transportation and Parks Costs in the County by Scenario

Considering the increase in growth under all scenarios, together with the County's level of service standards and example project costs for similar infrastructure and facility improvements,

Snohomish County would incur transportation and parks capital facilities costs to serve the BPS Area, particularly under the Nodes and Urban scenarios. See Exhibit 13.

- **Transportation:** Under Current Strategies, there are some investments in transportation that would be needed to address volumes exceeding road capacity. Investments would otherwise be largely based on the current six-year capital facility plan. The Nodes Scenario has less growth and less demand on county transportation systems (both State and County roads), and the Urban Scenario greater growth that is more extensive and more costly.
- **Parks:** For parks, Current Strategies has a minimal demand because the small 2035 rural growth allocation in the BPS Area has been reached and the area has already been planned for parks assuming low growth. The Nodes and Urban scenarios have significantly more population, with Urban having the greatest demand on parks.

Provision of county roads and parks would require support from private development impact fees, though the County would still incur greater responsibilities than in its current Comprehensive Plan. An interlocal agreement between WSDOT and Snohomish County requires the collection of fees to mitigate impacts to state highways.

Exhibit 13. County Capital Facilities Demand and Planning Level Costs: Transportation and Parks

	Current Strategies: 2035	Nodes Scenario	Urban Scenario ³
Transportation¹			
Arterial Lane-Miles Needed: County and State Roads	55-87	102-181	162-201
Estimated Cost (2018 dollars) ²	\$600 M - \$1.3 B	\$1.1 - \$2.6 B	\$1.7 - \$2.9 B
Parks³			
Facilities Demand/Cost	\$0M ⁵	\$16.64 M	\$25.35 M
Acres Demand/Cost	\$0M ⁵	\$26.79 M	\$42.83 M
Cost (February 2019 dollars)	\$0M ⁵	\$43.43 M	\$68.18 M
TOTAL COST	\$600 M - \$1.3 B	\$1.14 - \$2.64 B	\$1.77 - \$2.97 B

¹ Costs are both County and State costs.

² Snohomish County staff estimate construction and right-of-way cost per lane-mile of roadway in the BPS Area would range from \$11M to \$14M (in 2018 dollars), including pedestrian facilities and bikeways alongside the arterial.

³ For parks, the NE Node is about 70% of the population and housing, and generally the resulting cost, and the SW Node is about 30% of the demand and cost.

⁴ Assumes the Large Lot Single Family typology is at 2.5 dwelling units per net acre. If at 4 dwelling units per net acre, there would be another 415 dwellings and about a 2% greater demand and associated cost.

⁵ As of 2018, requirements for park facilities to meet growth targets were already achieved. The area has already been planned for parks assuming low growth. The County has planned for a countywide unincorporated demand and its Parks Element identifies the location for park improvements including some in the BPS Area.

Nodes – Independent Costs: As illustrated in Exhibit 11, the NE Node is a driver for most of the lane miles under the Nodes scenario and would need 47 – 70 added road miles above Current Strategies, at a cost of \$500M - \$900M. The SW Node would need 7-10 miles of roads above Current Strategies with a cost of \$100M.

For parks, the SW Node contributes about 30% of the added population and resulting cost of \$13.3M; the remaining demand would be in the NE Node and result in 70% of the demand and cost at about \$30.2M.

Private development would pay park and transportation impact fees. Development would also provide local roads and onsite recreation per County requirements. However, the County cannot charge 100% of county road and park system costs to development and must use some public funds from other non-impact fee sources to address needed facilities. Further as noted above road costs apply to both state and county facilities; some of the road investments would need to be made by the State for state routes.

Non-County Service Providers

In addition to County facilities, publicly provided facilities by special district are addressed either quantitatively or qualitatively, including fire protection, schools, water, sewer, and power. Other regional services, such as the Snohomish Health District or the Sno-Isle Library District, are not addressed. They are important services but less directly affected by local development patterns in the BPS Area.

For fire protection, schools, and power, the service providers' standards of service or demand assumptions were reviewed as well as their system or capital plans. Based on the scenario's growth yields, the standards of service were applied, and demand estimated. For high-level comparative purposes only, recent cost estimates for special district facilities were then applied to the scenarios estimate demand. For water and sewer, special districts were contacted, and plans reviewed; potential water and sewer need, and demand was based on professional expertise of the consultant team informed by available studies and plans.

See Exhibit 14 for results by scenario. The Urban Scenario typically has greater effects on services due to greater and more extensive growth than the Nodes Scenario; an exception is schools. Given growth under the Nodes Scenario is more concentrated in two school districts, this scenario would require greater investment in those areas, whereas the Urban Scenario distributes growth across the four districts.

For some services, a share of costs would be borne primarily by private development (e.g., water or sewer facility extension) or fees would be paid for fair share of facilities needed due to growth (e.g., school impact fees, water and sewer general facility charges). For other services, such as fire protection, costs would be covered by taxpayers; to some degree, added urban development would increase assessed value of land and corresponding taxes for services, but a fiscal analysis would need to be conducted to ascertain effects. Some development may provide mitigation to the district through environmental review.

Exhibit 14. Special District Facilities Demand and Conceptual Costs

	Current Strategies	Nodes Scenario ¹	Urban Scenario
Fire Protection			
New Fire Stations Potential FD4		0.02 – 0.1	0.05 – 0.2
New Fire Stations Potential FD7 ²	Per current district plans	2.1 – 4.9	3.2 – 7.2
Relative Cost (2018 dollars)		\$10.2 – \$23.3 M	\$15.2 – \$34.6 M
Schools			
Everett Elementary Student Demand		0	413
% of Standard School Population	Per current district plans	0	83%
Potential Elementary Schools		0	1
New Elementary Costs		0	\$80 M
Monroe Elementary Student Demand		0	1,056
% of Standard School Population	Per current district plans	0	211%
Potential New Elementary Schools		0	2
New Elementary Costs		0	\$160M
Northshore Elementary Student Demand		786	584
% of Standard School Population	Per current district plans	157%	117%
Potential Elementary Schools		1-2	1
New Elementary Costs		\$80 M – \$160	\$80M
Snohomish Elementary Demand Total		1,907	1,897
% of Standard School Population	Per current district plans	381%	379%
Potential Elementary Schools		4	4
New Elementary Costs		\$320 M	\$320 M
Sewer			
Sewer Mains (LF)		145,000	200,000
Pump Station		8	13
Cost Range	Per current district plans	\$96 – \$320 M NE Node: \$72 – 240 M SW Node: \$24 – 80 M	\$132 – \$440 M
Water			
Storage		Storage deficits in Cross Valley would be increased.	
Supply	Per current district plans	Ample source capacity due to Everett supply.	
Power			
Total and Net Energy Consumption (All Sources): Million Btu	Total: 2,171,700	Total 8,599,600 Net: 6,450,700	Total: 11,962,600 Net: 9,813,700
Net Increase in Electric Consumption: kWh per year	1,683,600	166,981,800 NE Node: 118,141,100 SW Node: 48,774,300	208,904,900

¹ Costs are fairly proportional to expected growth, particularly for services that are driven by population and household changes. The NE Node is about 70% of the population and housing, and generally the resulting cost, and the SW Node is about 30% of the demand and cost.

² Fire Districts measure their standards of service by response time. This evaluation is based applying observed housing units per stations today to the scenarios for comparison.

Because service provider system plans are broad in nature, it is difficult to isolate costs due just to Current Strategies. Where providers have identified current projects in the BPS Area, these are noted in individual topic sections in Chapter 7. However, the contribution of growth by Current Strategies on the system is low; less than 200 housing units are expected under allocated targets. Thus, Current Strategies would not create a demand by itself for expansions or new facilities (e.g., schools, fire stations, etc.) and expected costs would likewise be low.

County Fiscal Evaluation

Snohomish County is the primary service provider in the BPS Area, and thus the fiscal impacts of providing services is addressed in the BPS. The fiscal modeling allows comparison of scenario revenues and expenditures to Current Strategies, yielding the net fiscal impact of each scenario.

Revenues, departmental operating expenditures, and most departmental capital expenditures were projected on a per capita basis to determine the County's net fiscal impact under each scenario. Because of the nature of the scenarios under analysis, two County departments or divisions were identified as particularly affected by the scenarios: Transportation and Parks and Recreation. These two entities were identified as having significant additional capital expenditures to extend the County's existing levels of service to the BPS Area under the levels of increased development considered in the hypothetical growth scenarios. For these departments, capital cost estimates were generated independently using the methods and results described earlier in this Executive Summary and Findings.

As shown below and discussed further in Section 7.1, the net fiscal impact (scenario revenues over Current Strategies minus scenario expenditures over Current Strategies) for both the Nodes and Urban scenarios are negative, meaning that projected revenues do not cover the full estimated cost of providing appropriate service and infrastructure to new residents. The Nodes Scenario shows a net fiscal impact of -\$829 million. The Urban Scenario shows a net fiscal impact of -\$1.2 billion.

Exhibit 15. Scenario Comparison, Net Fiscal Impact, 2019-2035, 2018\$

	Revenue Over Current Strategies	Expenditures Over Current Strategies	Net Fiscal Impact
Current Strategies	\$0	\$0	\$0
Nodes Scenario	\$413,800,000	\$1,243,000,000	(\$829,200,000)
Urban Scenario	\$628,400,000	\$1,875,000,000	(\$1,246,600,000)

Sources: Snohomish County, 2019; BERK, 2019.

This means that over time, the County's regular revenues are not sufficient to cover the expected expenditures which, as discussed, are heavily impacted by the additional

Transportation and Parks and Recreation capital costs. For Transportation, the determination of where road mile improvements would need to be located (e.g., SR 9 or new county roads) is not identified. If the improvements occurred on state facilities, some of the Transportation capital costs identified here would shift to the State.

The fiscal evaluation considers the scenarios on top of growth already included in the adopted Comprehensive Plan; it does not consider the implications of additional growth occurring in other parts of the county, instead of in the BPS Area.

Additionally, this analysis covers a set period; the County regularly uses debt financing and other financing techniques to implement large capital costs that are not covered in any one period by that period's regular revenues. Both the Nodes and Urban scenarios pose high capital costs because they change the current land use of the BPS Area.

These contextual factors should be considered when weighing the net fiscal impact of each scenario.

Tools and Opportunities

The BPS identifies a range of policy tools that could address the stark transitions felt by residents where rural land uses abut urban land uses, as well as policy tools for environmental protection, conservation and recreation. The BPS also considers topics relevant across many parts of the county including the BPS Area: affordable housing, economic development, and transit.

Tools that address environmental conservation or a more permanent defined UGA boundary include open space conservation incentives that happen incrementally, or designated corridors through the GMA Comprehensive Plans together with lower densities and protection standards. Components of the BPS Area could meet various definitions or criteria for conservation after evaluation.

Tools addressing scale, landscaping, separation of uses, and zoning could ameliorate conflicts in use intensity. Some could be implemented more easily than others at the time of new development or redevelopment (e.g., scale and landscaping). There may be incentives to achieve greater distance and landscaping between uses though that could require a longer period of implementation.

Other tools could advance other policy objectives to advance environmental protection and recreation, such as a public benefit rating system, carbon mitigation program, land trust partnerships, or trails on pipelines.

Other policy objectives that could be advanced in the BPS Area regard:

- Housing choice and affordability, where requirements for affordable housing or needed ownership housing types could be required by urban zoning if urban designations were considered for application in the BPS Area under future planning initiatives.

- Economic development of rural businesses inside or outside of LAMIRDs, though these options are more likely to be limited and “small scale” given the GMA direction for development in rural areas.
- The BPS Area is not included in the Community Transit district which would require annexation by cities or a vote to extend boundaries. Regional express service is possible whether rural or urban. Local transit service would depend on density of development, with the ability to serve areas if densities are similar to Silver Firs to the north.

Implications and Future Use of This Study

Implications

The BPS has coalesced existing information and applied models and evaluations that advance the understanding of the BPS Area at a broad scale. The top implications include:

1. **Community Outreach and Engagement:** Because the BPS is an analytic study and not a plan, the outreach focus was to collect public views rather than engagement, which is a more intensive process to interact with the public as formal visions and proposals for policies and plans are developed. Nevertheless, outreach for the BPS illustrated community interest about the future of the BPS Area. As with all plans for action under the state GMA, public participation will be an element through various stages of the upcoming Comprehensive Plan Update.
2. **Governing Frameworks:** Changes to UGA boundaries largely hinge on whether there is a demonstrated need driven by population and employment growth, that the UGA can be served with urban levels of service, and that boundaries are logical. While it is the County that adopts UGA boundaries, it is not County policy alone that guides where growth can occur, and when UGAs can be amended. If UGA amendments were desired, and they were not consistent with regulations and policies, there are processes for seeking changes to those regulations and policies. The potential for success is uncertain, and this could be lengthy in time. There are a number of initiatives that could alter how the County plans for urban areas and rural areas including LAMIRDs like Clearview.
3. **Character and Land Use:** The BPS is a place of contrasts. It offers natural beauty as well as busy, pass-through roads. Despite lots developed to urban and semi-urban densities during pre-GMA periods, the BPS Area is about half covered in tree canopy. The area offers quiet homes in dispersed patterns and it offers crossroads with commercial services. Through outreach results, community character and history were valued, and there may be opportunities to bolster the character of development and the treed canopy through landscape standards.

4. **Social:** With growth pressures in the region, housing prices have risen locally, and households buying into the area are wealthier. Opportunities for affordable homes are limited due to rural densities, and manufactured homes have become a local affordable source of units. There is capacity to grow in established UGAs elsewhere in the county, including unincorporated areas and in particular cities. If the BPS Area were to be developed in Nodes or in a more expansive Urban pattern, it would add significant capacity for a range of housing types compared to either the SWUGA or county as a whole. Linking inclusionary housing requirements, transfer of development rights, and other opportunities are possible if some or all of the area is considered for urban development in the future.
5. **Environment:** Much of the BPS Area provides high class and high value streams and wetlands. Watershed functions are intact in the central portion of the BPS Area and partially intact elsewhere. The Watershed Characterization priorities are a starting place for considering future land use patterns whether rural or urban. Groundwater supports stream baseflows and provides potable water in a sole-source aquifer; there are opportunities to use stormwater techniques or other approaches to maintain recharge. Open space and tree canopy provide regional air quality and habitat benefits as well as local benefits; improving tree canopy retention requirements could be an avenue of exploration whether the area is rural or urban.
6. **Land Suitability:** Fine-tuning of vulnerability and suitability characteristics and weightings, and application to scenarios, whether the ones developed for the purposes of this study or other scenarios, could occur as part of future studies or planning efforts.
7. **County Capital and Service Delivery and Costs:** As a rural area with limited county road networks there would be a significant lift to provide an urban road network. Similarly, change to a partially or fully urban area places much greater demands on providing active parks and other park and trail facilities to the public. With additional residents, there is both a likely greater revenue as well as costs for services and facilities across all County departments and divisions. The County's fiscal position considering both operations and capital shows a negative revenue balance based on current revenue sources assuming growth happens in the next 15 years versus over a longer time frame; some of the costs, however, would be assumed by the State, thus decreasing the amount of lift required by the County and negative revenue balance. It should be noted that the study does not assess what capital and service delivery implications and costs there would be if additional growth, beyond growth already included in the adopted Comprehensive Plan, was applied in other parts of the county, instead of in the BPS Area.
8. **Non-County Capital and Service Delivery and Costs:** There would be a great increase in demand for all service areas if greater urban growth were allowed as tested with scenarios. Capital costs would likely be incurred for fire protection and schools and development could pay impact fees or mitigation fees; property owners may also support services through tax revenues. If designated urban, the area can be served with municipal sewer service though

costs vary by location; costs would be borne by development on the whole. Water line sizing and fire flow improvements are needed whether rural or urban. If the Nodes and Urban scenarios were implemented at some time in the future, their growth is an order of magnitude greater than what was anticipated in special district water system plans; from a regional level, it is possible that the special districts could meet the theoretical demand increases of the Urban and Nodes scenarios because they purchase water from the City of Everett, which has large source capacity. Private development would be responsible for meeting stormwater standards, which could improve the water quality conditions but not fully address changes in the watershed condition. The structure of stormwater service demand and revenue would shift from a more commercial basis today, to a commercial-residential basis with the urbanized scenarios. Similar to #7, it should be noted that the study does not assess what capital and service delivery implications and costs there would be if additional growth, beyond growth already included in the adopted Comprehensive Plan, was applied in other parts of the county instead of in the BPS Area.

9. **Tools for Compatibility and Transition.** Whether the BPS Area is urban or rural, there are opportunities to address scale, landscaping, separation of uses, and zoning to ameliorate conflicts in use intensity such as along the Maltby UGA. Other conservation tools could result in a more permanent defined UGA boundary.
10. **Opportunities for Transit:** Regional express service is possible in the BPS whether rural or urban. Local transit service would depend on density of development, with the ability to serve areas if densities are similar to Silver Firs to the north.

Future Use of this Study

This study provides data and information for future county planning efforts affecting the BPS Area. These efforts could include but are not limited to:

- The 2023 Snohomish County Comprehensive Plan Update, when alternatives for accommodating future growth will be developed, and/or in future planning initiatives.
- Review of annual docket requests if proposed in the BPS Area.

The County could consider results of outreach in developing policies and plans and conduct further community engagement. The County could apply or refine conditions information such as watershed or open space assessments in developing policies and plans. The suitability analysis could be refined or revised, and new scenarios could be developed as more complete alternatives under SEPA.

