A Preliminary Assessment of Adding New Retail Space in the City of Snoqualmie, Washington: The Case of the Highway 18/Interstate 90 Interchange

Lynn Marion Fredenburg

A thesis proposal submitted in partial fulfillment of the requirements for the degree of

MASTER OF URBAN PLANNING

University of Washington

2014

Committee:
Frederick Wagner
Donald Miller

Program Authorized to Offer Degree:
Urban Design and Planning
Abstract

A Preliminary Assessment of Adding New Retail Space in the City of Snoqualmie, Washington: The Case of the Highway 18/Interstate 90 Interchange

Lynn Marion Fredenburg

Chair of the Supervisory Committee:

Dr. Frederick Wagner

Department of Urban Design and Planning

This thesis is a preliminary assessment to determine the feasibility of annexing 85 additional acres into Snoqualmie, Washington’s urban growth area (UGA), based on smart growth practices, retail trends and the city’s visions. Snoqualmie is located approximately thirty miles east of Seattle, Washington along Interstate 90. A recent economic analysis states that Snoqualmie is experiencing a seventy percent retail leakage and is short retail land (approximately thirty to forty acres). Snoqualmie has proposed to annex the Highway
18/I-90 interchange to the city’s Urban Growth Area (UGA) making it available for
development. The interchange is comprised of 85 acres and is currently designated rural
residential and zoned RA-5, one home per five acres. (King County 2012) The land
proposed to be annexed is on the edge of the town, adjacent to the interstate and slated for
big-box development. This land falls within the protected Mountains to Sound Greenway
corridor and has thus been denied twice by King County to include it in the UGA. The
corridor is comprised of 1.5 million acres, providing a connected landscape for nature,
wildlife, recreation, working forests, agriculture and education. The Mountains to Sound
Greenway is working to ensure this land is preserved for future generations. It is the
Mountains to Sound Greenway’s mission to “conserve and enhance the landscape from
Seattle across the Cascade Mountains to Central Washington ensuring a long-term balance
between people and nature.” (Mountains to Sound Greenway 2014)

After assessing the proposed annexation based on smart growth principles and real estate
trends, it is not recommended to annex Highway 18/I-90 Interchange into Snoqualmie’s
UGA. It is recommended that the interchange remain zoned as Rural Residential and within
the Mountains to Sound Greenway Corridor. Alternative ways to add retail in a smart
growth manner, consistent with city’s visions are included.
# Table of Contents

Table of Figures ......................................................................................................................................................... ii
1.0 Introduction .............................................................................................................................................................. 2
   Background ................................................................................................................................................................. 2
   Research goals ........................................................................................................................................................... 9
   Statement of the problem ....................................................................................................................................... 10
   Rational .................................................................................................................................................................... 11
   Significance/Implications ...................................................................................................................................... 11
   Limitations & directions for future work .................................................................................................................. 12
2.0 Investigation of Smart Growth .................................................................................................................................. 13
   The importance of using smart growth principles (SGP) ......................................................................................... 13
   Smart growth principles .......................................................................................................................................... 14
   Smart growth principles in rural towns .................................................................................................................... 20
   What is sprawl? ......................................................................................................................................................... 22
   Why is it important to avoid sprawl? ....................................................................................................................... 22
   Alternatives to sprawl ........................................................................................................................................... 24
   Types of smart growth to avoid sprawl ................................................................................................................... 24
   Infill ......................................................................................................................................................................... 25
   Mixed-use retail ....................................................................................................................................................... 27
   Summary .................................................................................................................................................................... 29
   Washington State Growth Management Act & Snoqualmie ..................................................................................... 29
3.0 Real Estate Trends ...................................................................................................................................................... 33
   Business model in smart growth communities .................................................................................................... 39
4.0 Analysis of Hwy 18/I-90 Interchange Proposed Annexation ....................................................................................... 41
   Hwy 18/I-90 Interchange proposal .......................................................................................................................... 41
   What are the benefits of the Hwy 18/I-90 Interchange annexation? ...................................................................... 46
   Smart growth principles analysis of the Hwy 18/I-90 Interchange .................................................................... 46
5.0 Proposals for Snoqualmie .......................................................................................................................................... 53
   Vacant lots in existing Business Park ........................................................................................................................ 53
   Rethinking office parks with mixed-use developments ........................................................................................ 56
   Underutilized parking lots .................................................................................................................................... 59
   Create focal points ................................................................................................................................................... 61
   Policies and practices ............................................................................................................................................... 62
6.0 Conclusion ................................................................................................................................................................. 64
Bibliography .................................................................................................................................................................. 66
Appendix A: Abbreviations ........................................................................................................................................... 68
Appendix B: RCW 36.70a.110 ....................................................................................................................................... 69
Appendix C: City and Urban Growth Area: Land Use Designations ......................................................................... 74
Appendix D: Snoqualmie City Zoning Map .................................................................................................................. 75
Appendix E: Map of Foodplain in Snoqualmie, WA .................................................................................................... 76
Table of Figures

Figure 1: Location of Snoqualmie, WA (Source: Author) .......................................................... 2
Figure 2: Proposed annexation in relationship to Snoqualmie with existing conditions image. (Source: Author) ................................. 4
Figure 3: Population chart for Snoqualmie (Source: Author) ...................................................... 6
Figure 4: Hwy 18/I-90 existing conditions (Source: Author) ...................................................... 8
Figure 5: Aerial view of Hwy 18/I-90 Existing Conditions. (Image from Google Earth) .......... 8
Figure 6: Housing type preference from the 2013 Community Preference Survey (Source: Author) ................................................................................................................... 38
Figure 7: Map of Snoqualmie and proposed annexation (Source: Author) ................................. 43
Figure 9: Image of vacant lots on Snoqualmie Ridge (Google Earth image modified by author) .......................................................................................................................... 54
Figure 10: Vacant parcels on Snoqualmie Ridge, (Source: Author) ............................................ 55
Figure 11: Vacant parcels on Snoqualmie Ridge (Source: Author) ............................................ 55
Figure 12: Time elapsed photo on Snoqualmie Ridge (Source: Author) .................................... 57
Figure 13: Example of vertical mixed-use. (Adelaide City Council n.d.) .................................... 58
Figure 14: Left: Example of a mixed-use office space (Metro Jacksonville 2011), Right: Example of a mixed-use, office space, retail, and residential building (Good Fulton & Farrell 2014) .......................................................... 58
Figure 15: Underutilized parking lots on Snoqualmie Ridge, (Google Earth image modified by author) .................................................................................................................. 60

All photos and diagrams by author unless otherwise noted.
Acknowledgments

I would like to thank Dr. Wagner and Dr. Miller for their tireless help and guidance. I would like to thank my classmates and friends at the University of Washington.

Special thanks to John, Catherine, Susan, Emily, Jim and Stuart for supporting throughout.
Dedication

To my grandmother and grandfather Dorothy and William Thomson.
1.0 Introduction

Background

Snoqualmie Washington is located approximately thirty miles east of Seattle Washington. (Figure 1: Location of Snoqualmie, WA (Source: Author)}
The city of Snoqualmie was the fastest growing city in Washington in 2011. (Broom 2011) Snoqualmie grew from 2,150 in 2000 to 10,670 in 2011, to 11,594 today. (Figure 3: Population chart for ) The city of Snoqualmie is comprised of two parts. (Figure 2: Proposed annexation in relationship to Snoqualmie with existing conditions image. (Source: Author)) The oldest part is the historic downtown that lies between the Snoqualmie River and the historic railroad. Because the historic downtown is located within the floodplain, developing new land as well as redeveloping current parcels is difficult. The second part is the newly planned and built development along Snoqualmie Ridge that caused the city to boom in the late 90’s, and 2000s.
Figure 2: Proposed annexation in relationship to Snoqualmie with existing conditions image. (Source: Author)
During the late 80’s, the Snoqualmie Ridge development was proposed and approved that annexed in an additional 1,300 acres along the ridge south of town that rises above the flood plain. (City of Snoqualmie 2014) Once completed, the Snoqualmie Ridge development prompted Snoqualmie’s (Sanders 2014) population from 2,150 to 11,000. The development included an office park, single-family and multi-family residences, open space, schools, community centers and retail. The first families moved onto the ridge in 1998 and it is now home to eighty five percent of the city’s population. (Broom 2011) Although retail land was included in the initial proposal, the city planners of Snoqualmie now realize it is not an adequate amount to serve the booming population. Snoqualmie Ridge is primarily zoned as mixed-use today because it was annexed in as one development under the mixed-use code. In the initial stages the developer was assembling land for residential and commercial, therefore zoning it as mixed-use was the best fit. Although it is still zoned as mixed-use it will most likely be rezoned to best reflect the uses once development has been completed. (Sanders 2014)
The city is continuing to grow, although at a slower rate. In order to guide future growth, Snoqualmie is adopting progressive visions, goals and policies. The city’s comprehensive plan included many elements of sustainability and ‘green growth’ that promotes the health of the environment while growing in a sustainable manner. In addition, the city has recently joined a King County initiative to cut back on their greenhouse gas (GHG) emissions. Following the guidelines of the Carbon Neutral City Report\(^1\) will help guide the city to reach their goals. The characteristics of this growing city make it a unique community faced with many decisions that will determine the city’s future character.

A recent retail analysis conducted by CollinesWoerman shows retail leakage as well as a shortage of land available for retail development within the city’s urban growth area (UGA). The Hwy 18/I-90 Interchange is intended to meet Snoqualmie’s retail needs. It would cover the 30-40 acres the city is lacking and could possibly meet

---

\(^1\)Many cities (Snoqualmie included) are adopting policies and plans to reduce Green House Gas Emissions. The Road to 2050 – Carbon Neutral City Final Report discusses innovate ways for
some of the retail leakage. It consists of 85 acres located south of the Snoqualmie Ridge development and along Interstate 90 and Highway 18. The land within the interchange is currently zoned as RA-5, (one home per five acres). The area located east of the proposed area it is zoned RA-2.5, (one home per two and half acres). A 1990 Interlocal Agreement, which preceded the Snoqualmie Ridge annexation, identified the interchange as a proposed area for future review. However the agreement was not a binding agreement for a future urban-land use designation. (King County 2012)

On-the-ground observations show the interchange to be a heavily wooded area with little to no development. It is difficult to know exactly the conditions of the property because it is gated off and not open to the public. Roadside observations (Figure 4: Hwy 18/I-90 existing conditions) and Google Earth images (Figure 5: Aerial view of Hwy 18/I-90 Existing Conditions. (Image from Google Earth) show a heavily vegetated space that is likely home to an array of wildlife.
Figure 4: Hwy 18/I-90 existing conditions (Source: Author)

Figure 5: Aerial view of Hwy 18/I-90 Existing Conditions. (Image from Google Earth)
According to the Washington State Growth Management Act (GMA), urban development can only occur within the designated UGA pursuant to RCW 36.70a.110. The boundaries of the UGA must be approved by the county before it can be adopted by the city pursuant RCW 36.70A. The interchange is not within the UGA. Snoqualmie has twice proposed (once in 2008 and once in 2012) to annex the Hwy 18/I-90 interchange into their city. In 2008 the proposal included uses for the interchange such as a hospital or community college. The 2012 proposal stated commercial development as the primary use. King County has denied both proposals, not allowing the interchange to be included in the UGA, because, in the county’s opinion, the city has not shown sufficient need. The county argues that the GMA and Countywide Planning Policies (CPP) do not support expansion of the UGA based on retail leakage. They also argue that if annexed a substantial loss of rural land would occur at the expense of an auto dependent development with auto dealers, department stores, fast-food restaurants, motels and gas stations. Based on these arguments the County has kept the interchange zoned as rural residential.

**Research goals**

The objective of this thesis is to analyze the 2012 proposal based on smart growth practices, Snoqualmie’s local and regional vision, and real estate trends in the region to determine whether the Hwy 18/I-90 interchange should be annexed or if retail should be added in a different manner. In addition, this thesis offers a variety of proposals for commercial development that are specific for Snoqualmie. The proposals offer alternative ways that Snoqualmie can add retail in a manner
consistent with the visions of the city, real estate trends and smart growth principles.

**Statement of the problem**

A recent retail analysis by CollinesWoerman in 2011 revealed that Snoqualmie experiences a 73% retail leakage, meaning citizens leave Snoqualmie for 73% of their shopping needs. In addition, the retail analysis states that the city has a 25-30 acre retail deficit. (CollinesWoerman 2011) Some retail development was included in the initial plan of Snoqualmie Ridge, however, the city planners now realize it is not enough to serve the growing population of Snoqualmie. (Tucker 2013)

Snoqualmie has proposed to annex 85 additional acres into the cities' Urban Growth Area known as the Hwy 18/I-90 Interchange. (Ladwig 2012) The proposed annexation lies along the southern border of the city. The land is adjacent to I-90 as well as State Route 18, both of which experience high levels of traffic. Snoqualmie forecasts potential revenue created from the sales tax both from their citizens as well as the passing interstate traffic. (Tucker 2013) Currently this land is protected by King County and a non-profit organization, Mountains to Sound Greenway Trust. Although there are options for the county or the trust to buy development rights and prevent future developments, there are currently no legal restrictions other than the restrictions that RA-5 zoning includes. The Mountains to Sound Greenway protects a corridor along I-90 that is intended to keep a green buffer from the Puget Sound to Eastern Washington which will, among other things, support and enhance
native wildlife while protecting the natural resources in the region. (Jones & Jones Architects n.d.) King County has denied Snoqualmie’s proposal both in 2008 and 2012, refusing to allow these acres to be added into the UGA and eliminating the possibility of the interchange being annexed into their city for another four years. Although it has been denied twice it is possible Snoqualmie will attempt to annex this land again. Before doing so, this report intends to serve as a preliminary assessment of the proposed annexation for the stakeholders.

**Rational**

As our populations increase, growth is inevitable, therefore it is essential to ensure the growth happens in a manner that preserves and enhances the quality of life of a community. In rural areas in particular, growth may be seen as an adverse condition for fear that it will change the style of life that the citizens have grown to know and enjoy. Smart growth principles make it possible for communities to grow in ways that will support economic development and jobs, create better neighborhoods with a range of housing, commercial, and transportation options and achieve healthy communities that provide families with a clean environment, in a manner consistent with the city’s character.

**Significance/Implications**

The goal of this report is to conduct a preliminary assessment determining whether adding the Hwy 18/I-90 Interchange into Snoqualmie’s UGA follows smart growth practices and is consistent with the real estate trends in the region. Following smart growth practices and
real estate trends will ensure the city grows in a manner benefiting the environmental, social and economic health of the city, which is in line with the cities goals. These efforts will ensure a successful development that has investors, enhances the existing community, and provides jobs and retail choices for the citizens.

Limitations & directions for future work

This assessment does not include a financial retail analysis. It is recommended that a financial retail analysis be conducted in the future. In addition, it is recommended that a regional economic impact study is conducted to assess the impact a big-box development would have on local businesses in the surrounding area since this is the type of retail proposed for the interchange.
2.0 Investigation of Smart Growth

Smart growth

The Smart Growth Network (SGN) was created in 1996 by the US Environmental Protection Agency (EPA) and several non-profit organizations with the mission of creating growth practices that boost the economy, protect the environment and enhance the community. SGN created the smart growth principles (SGP) as guidelines that cities can use to best guide the growth while adhering to the missions of the SGN. (Smart Growth Network 2002) These guidelines help decision makers determine where and how to grow, how to use the land efficiently, what type of infrastructure is needed and other choices that determine the vitality of the city. If used correctly, smart growth can “be implemented using comprehensive planning and land-use regulations to guide, design, develop, revitalize, and build communities”. (McDonell 2008)

The importance of using smart growth principles (SGP)

Today citizens and businesses are realizing the benefits of moving to and practicing smart growth principles. Residents of smart growth communities benefit from a vibrant community that is safe, walkable, has multiple housing and transportation options, preserves open space and creates a unique sense of community and place. Businesses benefit from greater creativity, innovation, more consumers and workers. Because SGP’s encourage denser growth, it is often cheaper to live and work in these communities because the dense form provides a more efficient use of the infrastructure.
The environmental benefits are numerous when communities use SGP. Because smart growth cities are built using a dense compact model\(^2\), rather than a land-consumptive sprawl model, more open space is left preserved. The preserved open space helps control erosion, absorbs storm water and mitigates flooding events. The open space provides habitat for the wildlife and access for residents to nature. Following these principles will ensure a healthy environment for future generations to come. (McDonell 2008)

SGPs also help mitigate climate change by reusing buildings and infrastructure, creating dense compact cities, and reducing the number of vehicle trips needed. These steps will help mitigate the negative effects of climate change. Climate change in the Pacific Northwest will increase the average temperatures, create more precipitation and a decreased snowpack (which is the water supply throughout the summer as it melts). There will be more frequent and intense forest fires and a decrease in forest health. The salmon habitat will be threatened due to lowered level of streams, the sea level will rise, and there will be loss of beaches. (United State Environmental Protection Agency 2014) In order to best care for our environment and quality of life, and mitigate climate change, it is necessary for everyone to do their part in reducing greenhouse gas emissions. The decision makers who guide the growth of our communities have a unique opportunity to make big steps in lessoning our carbon footprint, and this can be done by using smart growth practices.

**Smart growth principles**

\(^2\) A compact building design is one that focuses on grouping buildings together and directs growth upward rather than outward.
The Smart Growth Network promotes ten basic principles for smart growth: (U.S. Environmental Protection Agency 2013)

1) Mix land uses
2) Take advantage of compact building design
3) Create a range of housing opportunities and choices
4) Create walkable neighborhoods
5) Foster distinctive, attractive communities with a strong sense of place
6) Preserve open space, farmland, natural beauty, and critical environmental areas
7) Strengthen and direct development towards existing communities
8) Provide a variety of transportation choices
9) Make development decisions predictable, fair, and cost-effective
10) Encourage community and stakeholder collaboration in development decisions

**Mix Land Uses**

Mixing land use puts a variety of uses next to one another en lieu of separating uses. For example, uses such as residential, commercial, office space, and recreational amenities are located adjacent to one another. This enables alternatives to driving, such as walking or biking, due to the proximity of the uses. In addition it creates a diverse and sizable population that can support public transit. Mixing uses can also help revitalize downtowns that have vacant spaces or office parks that are vibrant during work hours but quiet otherwise. (Smart Growth Online n.d.)
Communities will realize an economic benefit as well by mixing uses. Businesses will benefit from their proximity to residents and residents will have a variety of options for retail and transportation with mixed use developments. Workers will want to move to these vibrant communities that are livable as well as workable. Mixing uses creates a vibrant community with a variety of options and provides an alternative to existing plans that separate the uses. (Northeast - Midwest Institue 2001)

*Take advantage of compact building design*

Compact building design encourages grouping buildings together and growing upward rather than outward. Taking advantage of compact building design is an alternative to land-consumptive developments that grow outward. Compact buildings and cities allow more open space to be preserved. In addition it is beneficial to cities because it is cheaper per unit to provide infrastructure to a dense area than for sprawling development. Compact buildings and cities can make public transit options more economically viable. Municipalities can encourage or require this type of development through the comprehensive plan and zoning ordinances.

*Create a range of housing opportunities and choices*

Creating a range of housing opportunities and choices allows all households, from varying income levels, to find an option in the smart growth community. Having a diversity of options can also reduce the auto-dependency because workers will be able to afford houses near where they work, opposed to an area that has been gentrified and the houses are too expensive for all households to afford. This enables alternative modes of transportation
other than a private vehicle and ensures jobs, education, commercial centers, etc., are available to all income levels via public transit.

*Create walkable neighborhoods*

Creating walkable neighborhoods is one of the key components to smart growth. Mixing land uses, compact building design, and safe pedestrian corridors are all components to make a community more walkable. Personal and social benefits to walkable communities include lower transportation costs, greater social interaction, improved personal and environmental health and expanded consumer choices. Communities and developers are realizing the importance of walkable communities, as consumers demand such amenities.

*Foster distinctive, attractive communities with a strong sense of place*

Fostering distinctive and attractive communities with a strong sense of place instills pride in a community creating a safe and vibrant community. Encouraging residents to celebrate the uniqueness of their neighborhood encourages community participation and interaction making a better community.

Techniques communities can use to create this type of community are by using natural and man-made barriers or landmarks to define neighborhoods, towns and regions. In addition encouraging the construction and preservation of buildings that are assets to a community and have a history in the community helps create a sense of pride and place. Highlighting the historic buildings through plaques, celebrations, or other forms of education can help provide a point of pride in the community. Infrastructure and natural resources are used
to create distinctive and beautiful places as well. Using these techniques will help create a vibrant smart growth community that citizens find pride and place in and will chose to move and or stay in such a community.

Preserve open space, farmland, natural beauty, and critical environmental areas

Open space is referred to as “natural areas that provide important community space, habitat for plants and animals, and recreational opportunities, as well as farm and ranch land (working lands), places of natural beauty, and critical environmental areas (e.g., wetlands).” (Smart Growth Online n.d.)

The preservation of open space provides fiscal benefits as well as environmental and health benefits. Open space creates tourism dollars and prevents local tax increases that come with the construction of new infrastructure. Open space ensures lands for farm and ranch are available, providing jobs to the community.

In addition to economic gains open space provides endless benefits for the ecosystem. Open space helps prevent floods because precipitation is able to permeate into the ground instead of flowing into flood prone areas which are a hazard to life and property. As the water absorbs into the ground it flows through a natural filter provided by the layers of earth. The list of benefits open space provides for the environment and ecosystems continue including, protection of animal, plants and natural beauty, while combating air, noise and water pollution. Open space helps control erosion and mitigate climate change. Smart growth communities are realizing the many benefits of open space preservation.
Strengthen and direct development towards existing communities

Directing development towards existing communities is cost effective and improves the quality of life. There is no need for new infrastructure, saving the city money, while increasing the efficiency of already developed land. The communities will benefit from a stronger tax base. While it is appealing to develop on the fringe of existing communities due to the large amounts of undeveloped land, developers and communities are realizing the opportunities presented by infill development as environmental awareness rises. Techniques such as infill development preserve open space while creating walkable communities.

Provide a variety of transportation choices

Providing a variety of transportation options decreases already congested roadways, improves connectivity and increases the availability of high-quality transit service. Connections between pedestrian, bike, transit and road facilities is an important facet of this SGP.

Make development decisions predictable, fair, and cost-effective

The local government needs to make infrastructure and regulatory decisions that support and encourage smart growth practices. It needs to be encourage by both the private and public sector.

Encourage community and stakeholder collaboration in development decisions
The most successful planning and development projects happen when they occur in response to the communities wants and needs. The people who will best create visions and define the needs are those who live and work there. Having citizen participation early on and often in the process is a necessary component and will ensure the best results. For the quickest results, encourage community and stakeholder collaboration.

Summary

Smart growth practices are becoming an increasingly popular approach for communities and businesses. By following smart growth practices, communities will create strong neighborhoods, a range of options for housing and transportation, and a strong economy. Economic benefits created from smart growth communities include an increase in productivity and innovation of businesses. Smart growth communities that strive to achieve the smart growth principles are vibrant communities where people and businesses chose to call home. (Smart Growth Network 2002) (Fulton 2013)

**Smart growth principles in rural towns**

These smart growth principles are important for all towns to practice regardless of size. Small towns and rural areas need particular attention to the principles due to the large amount of undeveloped or low-density land that often surrounds rural areas. Because of the proximity to open space, if practices and policies are not implemented rural land will be developed into a sprawl condition. “Programs and policies need to encourage investment to improve the economic health of small town downtowns and rural community centers. Compact development and efficient use of existing infrastructure can help rural
communities get the most out of expensive basic infrastructure and services.” (McDonell 2008)

In rural communities facing the pressures of growth, there is often a fear of a change of lifestyle. Residents want to preserve the small-town character, farmland, and natural landscapes, while still experiencing the benefits of growth. If not directed carefully, growth can increase traffic congestion, negatively impact the environment and result in an unwanted condition of sprawl.
**What is sprawl?**

One of the conditions that smart growth practices mitigate is sprawl. Sprawl is defined as “low density development beyond the edge of service and employment, which separates where people live from where they shop, work, recreate and educate thus requiring cars to move between zones” and is considered an ‘adverse condition’ by New Urbanist’s thinking. (McDonell 2008) This “adverse condition” happens through a scattering of low-density, low-rise, developments that fragment the open space, typically on the periphery of cities where there is undeveloped land available. The areas in between these scatterings are gradually filled in with similar uses. (Golam Rahman 2008) Sprawl is not a desirable condition for communities striving to create walkable and vibrant communities. It is an inefficient use of land, not typically walkable and does not mix uses or create a sense of place. It can be appealing for uses such as auto retail that do not fit into other urban fabrics. In addition, it does often provide the city with revenue from the sales tax.

**Why is it important to avoid sprawl?**

It is important to avoid sprawl because it creates an inefficient and fragmented system on the periphery of a town that is negative for the environmental, social, and economic health of a community. The undeveloped land on the periphery of a city is often under pressure to be developed. As the land is developed, small pockets of development, disjointed from the urban hub lead to a fragmented ecosystem. This disjointed environment is negative on the periphery of the city as well as can be harmful to the inner city as well. Business is drawn away from the downtown areas and small local businesses are unable to continue, and a downtown can become deserted. (Golam Rahman 2008) The affects of sprawling
development has negative impacts on the environmental, social and economic health of a community.

*Environmental Health*

Sprawl has negative consequences on the local ecosystems. Sprawl is an inefficient use of open space and eats up a large amount of land. This type of development contributes to the destruction of wildlife habitat, introduces non-native species and animals, while fragmenting the ecosystem. There is an increase in pollution from oil and gasoline and an increased potential for flooding and soil erosions, a decrease in groundwater and an increased risk to life and property. (McDonell 2008)

*Social Health & Economic Health*

Urban sprawl can negatively affect social and economic conditions as well. As mentioned before providing services to sprawling conditions is more expensive per capita than providing services to a dense community. There is an increase in community costs for infrastructure, roads, schools, sewers, etc. There is often pressure for local rural landowners to sell their property to developers. The sprawl increases the auto dependency, increases pollution, traffic and reduces the potential for alternative transit options. This has the effect of isolating the young, poor, and elderly populations who are unable to drive, or lack access to cars. Sprawling environments make it more difficult to provide public transportation and increase the time needed to commute. Jobs are lost with agriculture and forestry land being used, as well as reducing the rural character or the community’s sense of place. (Golam Rahman 2008) (McDonell 2008)
Alternatives to sprawl

Without a cohesive plan sprawl can occur having a negative impact on infrastructure, commercial needs, efficient transportation options, and can have negative impacts on nearby communities. (McDonell 2008) If a comprehensive plan is created with smart growth principles in mind, new developments can prosper economically and socially, mitigating negative effects the development may have on surrounding regions or environments. Many new developments are being held accountable for these smart growth practices, as the benefits are being realized and demanded by consumers. (Golam Rahman 2008)

Communities using smart growth practices to avoid sprawl can improve the quality of life for the residents who will benefit from the improved social, economic, and physical health while protecting natural resources because the dense city will allow open space to be preserved. This will foster economic growth, while maintaining the heritage and character of the community. These strategies can make the city a more attractive place to live and promote the urban areas, reducing development pressures on undeveloped land. (McDonell 2008) Alternative ways to grow instead of sprawl focus developments around and in urban areas that are already developed. Smart growth tools that avoid sprawl include infill and mixed-use developments.

Types of smart growth to avoid sprawl

Measures to prevent urban sprawl
Two smart growth tools that planners and developers can use to mitigate sprawl are infill development and mixed-use development. Using these tools to add retail will create a vibrant community with strong environmental, social and economic health. In addition, both the local and broader regions benefit from the improved health. These vibrant communities will attract and keep citizens living and working in the community. Fragmented, or leap frog, developments on the periphery of an urban area can be replaced with smart growth developments, densifying the city, preserving the open space on the periphery, while creating better communities. (Golam Rahman 2008)

The smart growth principles will work best in communities where stakeholders realize the importance of creating livable communities and the citizens are involved in the process early on and often. Involving the citizens throughout the planning process will ensure the smart growth development gains traction and has the support needed. In addition, the planners and developers will be able to best meet a community’s needs if they are involved throughout the process.

**Infill**

Infill is a tool used to avoid sprawl and increase density. “Infill development is often seen as an opportunity to address sprawl and its associated problems while at the same time revitalizing and growing existing communities.” (McConell 2010, 25) Infill development finds underutilized spaces in existing developed areas, and develops them in a more dense form, maximizing the potential by contributing to a more compact, less land consumptive form. (Northeast - Midwest Institue 2001) These types of developments have many
benefits including improving social, environmental and economic health. (Smart Growth Network 2002)

The social and economic benefits include an increased mobility for those who cannot or chose not to drive, decreasing congestion and pollution, while improving health conditions. The city will experience lower costs in infrastructure per capita, fully utilizing existing facilities before expanding to outlying areas. Infill developments can provide a mix of services to a community. It can fill the gaps to provide services such as a grocery store, park, school, or other services. “Commercial centers, surplus industrial or institutional lands, transit corridor and neighborhoods that already have some mixing of uses may offer the best opportunities for mixed use developments.” (Northeast - Midwest Institutue 2001)

Infill practices also promote the health of the environment by concentrating the development in already developed areas, therefore preserving open space, farmland, natural beauty, and critical environmental areas. (Smart Growth Network 2002) If new development was focused into existing urban areas of dispersed, low-density developments, the land around the periphery of the city could be preserved.

There are many new local and state policies that promote new infill developments as an answer to preventing sprawl. (McConell 2010) Although many people promote infill development there are those who oppose these types of developments.
Current residents typically pose the biggest concern to a developer trying to implement infill. Some community residents argue that infill will have negative effects on the surrounding neighborhoods. The negative side effects feared are an increase in traffic and congestion, more stress put on existing infrastructure, increased crime rates, and a loss of open space in the urban fabric. “If there is one thing people hate more than sprawl it is density.”(Flint 2005) (McConell 2010)

**Mixed-use retail**

Mixed-use retail is another tool planners and developers can use to avoid low-density sprawling developments. Mixing land uses, such as commercial, residential, recreational, educational, helps create vibrant and diverse communities. (Smart Growth Network 2002) These neighborhoods are active both during the day and evening. The proximity to each use makes them accessible by foot or bike, reducing the need for a car, therefore reducing traffic congestion and pollution.

Many communities in the US have experienced a separation of land uses. Originally the land uses were separated to avoid nuisances, but this has led to a pattern of development that makes it necessary to drive between uses. This separation of land uses is a significant departure from the way towns were built in the early 20th century. (Smart Growth Network 2002) Communities are realizing the benefits of mixed land use and trending back towards these types of developments.
Communities can encourage mixed-use are through state funded incentives, and encouraging residents to live near where they work. Some of the incentives used in Seattle, Washington include tax increment financing (TIF) that provides funds for land acquisition, and project development, tax abatements on the housing portion of a mixed-use project, permit fee reduction in targeted areas, and system development fee reduction or waiver in targeted areas. (Oregon Transportation and Growth Management 2013)

Adopting the smart growth principles and adding them to the city codes ensures future growth is consistent with smart growth principles and the city's vision. Adopting mixed-use principles will create more walkable communities by concentrating critical services near homes, jobs, and transits. (Smart Growth Network 2002) Blending the residential, commercial, cultural, institutional, and if appropriate, industrial uses will have many benefits. Mixed-use allows for greater housing variety and density while reducing the travel time between housing and workplaces, retail business, recreation etc. Mixed-use development encourages a more compact building design, strengthens neighborhood character and promotes pedestrian and bicycle friendly environments. (American Planning Association 2013)

The benefits of mixed-use are shown time and again in research, but there are difficulties associated with such developments and they are not always a success. In practice, mixed-use growth can be hard to implement due to difficulties including inefficiency and lack of timely funding of such development projects. In addition, if the stakeholders involved as
well as the community do not support the development it will not gain support or funding.

(Golam Rahman 2008)

**Summary**

Techniques such as mixed-use development and infill provide alternatives to developing open space, farmland, environmentally sensitive areas, etc. Infill and mixed-use practices enhance underutilized spaces creating more walkable and dense neighborhoods with more options for the residents. By channeling the growth into already developed areas in a smart growth manner a community can be created that is efficient, socially and personally gratifying for the citizens as well as protecting the environment for current and future generations. (Golam Rahman 2008)

**Washington State Growth Management Act & Snoqualmie**

The Washington State Growth Management Act (GMA), RCW.36.70A, was adopted after it was determined that uncoordinated and unplanned growth in addition to a lack of common visions can be harmful to the environment, economic health, and high quality of life enjoyed by residents in Washington.³ The GMA requires cities to have a comprehensive plan that guides the city planning for the next 20 years. The plan should address many items including the vision of the community, the transportation, infrastructure, open space, economics etc. The plan also must include the delineated urban growth area (UGA) boundaries that is established by the county, in collaboration with the municipalities. The UGA designates the locations and densities of growth that must be sufficient for the

---

³ For additional information regarding the Washington State Growth Management Act see Appendix A.
forecasted 20-year needs of the city. After being created in collaboration with the city and the county the city must comply with the boundaries.

Snoqualmie planners worked with the public through a series of meetings to create the cities goals and visions. Snoqualmie’s Vision’s Core Components as found in the Comprehensive Plan are: (City of Snoqualmie 2014, Vision 1-1)

- **A Unified City** with **Strong Leadership** that cultivates community, incorporates equity and sustainability in decision-making, fosters partnerships to further local and regional goals, and thrives through active citizen engagement.

- **A Healthy, Diverse Economy**, with stable businesses and employment opportunities that benefits our citizens, the surrounding rural area, and the region as a whole.

- **A Distinctive Sense of Place** based on the quality and beauty of our natural and built environment, valued historic and cultural assets, unique local character, and a commitment to quality design and construction.

- **A Livable and Complete Community** where our citizens can live, work, socialize, and recreate in a safe, attractive, and healthy environment.

In addition Snoqualmie’s Comprehensive Plan includes many elements that support smart growth practices. One of the city’s central visions is sustainable development. Included here are a few visions pertinent to the annexation of the Hwy 18/I-90 Interchange:
The City supports a pattern of resource use that meets human needs, while preserving the environment for present and future generations. As discussed in the Snoqualmie Sustainability Strategy, this concept addresses economic and social considerations in meeting human needs, while maintaining the health of natural systems.

The 2013 Snoqualmie Comprehensive Plan advances a sustainable approach to planning the city’s future growth and development. The plan commits to restoring ecosystems, conserving key habitats, cleaning up polluted waterways, and reducing the greenhouse gas emissions of the city as well as the community at-large. The plan elements utilize updated residential and employment targets aligned with the Vision 2040 Regional Growth Strategy, shows the ability to meet those targets, and establishes an affordable housing goal for this planning period as required.” Draft and Introduction Vision 1-4 (City of Snoqualmie 2014, 1-4)

The 2013 Snoqualmie Comprehensive Plan advances a sustainable approach to planning the city’s future growth and development. Snoqualmie has also adopted The Road to 2050: “80 by 50” Strategy Maps for Carbon-Neutral Cities. (The Innovation Network for Communities 2013) Some communities in King County have pledged to include it in their planning process. The pledge’s goal is to reduce greenhouse gas emissions by 80% of the

---

4 Vision 2040 is the Puget Sound Regional Council (PSRC) multicounty plan, which guides regional plans and with which local plans must be consistent. PSRC is designated by Washington State, under federal and state law, as the central Puget Sound Metropolitan Planning Organization (MPO) & Regional Transportation Planning Organization (RTPO); this areas includes King, Kitsap, Pierce & Snohomish counties. For additional information see www.psrc.org/growth/vision2040.
2007 baseline by the year 2050. In order to reach this goal Snoqualmie must use smart growth tools and promote sustainable growth and behaviors.
3.0 Real Estate Trends

“The key to successful real estate development and community building is to understand the psyche of the American people and move deftly to satisfy changing market demands and needs in the real estate places we create.” (Booth 2002)

When considering the type of development that could occur, it is important to look at consumer and real estate trends to determine if the development will be a success, gain traction in the community, and help create a vibrant livable community with a strong economic base. The following section compiles trends for the Seattle region as well as nationwide to assess the future path of retail developments and to determine whether or not the Hwy 18/I-90 interchange would be in line with regional and national trends and be an economic success for the developers and Snoqualmie.

In the publication Emerging Trends in Real Estate, 2013, Seattle is ranked 7th out of the top 20 markets nationwide for investment opportunities for developers. (Miller 2012) There are many opportunities for domestic and global investors in the region. Seattle is experiencing a high growth in job opportunities, in part due to the area being a global center for software industries. Seattle has a high quality of living and many job opportunities making it one of the best markets for younger adults. Seattle will continue to see an increase in population and jobs, attracting real estate developers to the region. Investors favor the Seattle region for many reasons, one of which being the “industrial-to-mixed-use transition taking place for many suburban industrial and business park sites”. (Miller 2012) This mind set favors a mix of use (i.e., mixing retail, office, residential etc.)
and moves away from separated land use developments such as the retail strip proposed in the Hwy 18/I-90 Interchange.

The annexation of the Hwy 18/I-90 Interchange into the UGA would open the interchange to be developed with big-box sprawl development such as strip malls, auto stores, and big-box building models. Big box stores are greater than 50,000 sq. ft. and can be as large as 250,000 sq. ft. (That is almost 6 football fields put together.) (Good Jobs First 2014) This development would create a private vehicle oriented retail strip. The retail strip would be separated from the two main retail strips (historic downtown Snoqualmie and the Snoqualmie Ridge development) and the residential neighborhoods making it an auto dependent strip. The proximity to two major arterial routes makes this location appealing due to the revenue that would be generated from sales tax; however, the retail trends suggest that the consumers are moving away from such developments that require auto-dependency. (Miller 2012)

In the Planetizen, Strauss reports the end of the era of big box developments because many customers either want to drive less or are shopping online. Strauss emphasizes the decline in demand for big box stores. (Krauss 2012) Big box retailers are beginning to rethink their typical design, and shrink into smaller more urban compatible models. Walmart has opened its new urban format store in Washington D.C. Some of Walmart’s new stores are less than 5,000 sq. ft., in comparison to the Supercenter that averages 182,000 sq. ft. (McMahon 2014)
In addition to major chain retailers creating a new model, many businesses are realizing the benefits of locating in a compact, walkable downtown with many housing and transportation options. The mix of uses and a high quality of life has social and environmental benefits as well as provides economic advantages for the businesses. (Fulton 2013) Smart growth places offer more options; provide benefits for the environmental and social health while improving the economic success of a company. In the Smart Growth and Economic Success report it states that companies who move to compact, walkable downtowns will experience: (Fulton 2013)

- **Increase in productivity and innovation.** Environments that encourage social interaction promote innovated ideas and collaboration. In addition it makes it easier for employees to incorporate physical activity into their commutes, enhancing their well-being which improves productivity and reduces absenteeism and health care costs.

- **Improved ability to compete for labor.** Many people are choosing to move to 'live, work, play' communities. Smart growth places also offer a range of housing and transportation options enabling low-wage workers to afford housing near the jobs.

- **Stronger retail sales.** Businesses find it easier to attract workers in a vibrant community that has 24-hour markets and customers who may be passing by.\(^5\)

---

\(^5\) 24-hour amenities are services that draw visitors or consumers into an area throughout the day, not just during working hours. Neighborhoods that are primarily office spaces experience use during working hours, but lie vacant otherwise. Mixing uses such that other amenities are included in the neighborhood will draw visitors throughout the day, maximizing the use of the space and creating a vibrant and safe neighborhood.
Although many studies cite the benefits local businesses experience in a walkable town it can still be appealing to develop big chain retail development due to the potential revenue from sales tax. A possible solution seen in California is the partnering of two entities, the city of Modesto and Stanislaus County. In order to avoid the “fiscalization of land use” that can happen when two adjacent entities are competing for retail development, the two partnered and agreed to share one percent of the sales tax. (Salkin 2005, 59) A possible partnering between Snoqualmie and the adjacent cities could result in a partnership that benefits all.

The post war suburban developments that separated uses of residential neighborhoods from other uses are losing popularity. The term “adapting the burbs” is being used to address this shift. Young people (who drive the trend of where to live) are moving away from the suburbs to transit-oriented communities, even at the cost of personal livingspace. Generation Y are willing to move into smaller spaces in order to be close to amenities. A 2002 survey taken with adults in California and a second survey in 2007 with adults in the Southwest (Texas, Arizona, New Mexico, and Nevada) asked participants if they would rather live in a small home with a small backyard and a short commute or in a large home with a large backyard and a long commute to work. (Lewis 2010) In both surveys, the majority would rather live in the small home with a small commute. In that same survey, the respondents chose mixed-use neighborhoods where they were able to walk to stores, schools, services etc. over a neighborhood where they would have to drive to the services.

In *Emerging Trends in Real Estate, 2013*, Miller urges developers to realize that their future

---

6 Generation Y is characterized as those born from 1977 – 1994. They are the largest cohort since the Baby Boomers (the high numbers reflects the high numbers of their parents generation). At this time Generation Y is 20 – 32 years old and are becoming a strong force in the market trends.
success lies in identifying prime locations for transit-oriented hubs and densifying the hub, as opposed to adding big-box development and sprawl. In addition to attracting the younger generation, communities will enjoy the benefit of greater revenues per capita from densification. Dense developments generate greater revenues per unit of infrastructure needed due to the decreased cost in infrastructure (i.e., sewer lines, roads, etc.) that need to be either built, maintained, or upgraded to serve outlying areas. (Miller 2012)

Although consumers are favoring walkable neighborhoods over auto-dependent neighborhoods, a recent survey, the 2013 Community Preference Survey, conducted by the National association of Realtor shows that 52% of adults would prefer a single family detached home with a large yard (Figure 6: Housing type preference from the 2013 Community Preference Survey (Source: Author)). While there is still demand for suburban developments, many parts of the US are rethinking traditional suburbs. The concept of separating land uses (housing from retail strips, from office parks, from malls) is losing traction to more compact developments. “Under any circumstances, investors wisely bet on infill.” (Miller 2012) The trend of consumers is moving to areas where walking and transit are available and residents are not auto-dependent. (Smart Growth Online n.d.) “Population shifts into infill areas and urbanizing suburbs, especially locations near mass transit stops, favor multifamily, too. More people willingly forsake space and yards for greater convenience and avoiding car dependency.” (Miller 2012)
While there are challenges to adding mixed-use development into suburban communities, projects in suburbs are becoming increasingly common. “Every suburban city now wants pedestrian-friendly, transit-oriented, vertically integrated mixed-use projects” says John Breitinger, a real estate investments manager with United Properties in Minneapolis. (Bell 2005) By creating mixed-use office spaces cities and towns are able to increase the customer base for local shops, bring new jobs into the town, create more of a demand for restaurants, movie theaters, grocery stores, and other entertainment.

Many consumers today are looking for communities to move to with walkable downtowns that provide options for working and services. Retail has the best chance of succeeding when amenities, such as restaurants, movie theaters, and entertainment features, are added that attract consumers in the evenings, not just during the working hours. This will help downtowns compete with online selling. Big-box businesses, such as Walmart, are
being forced to rethink their models and to "shrink into urban streetscapes to capture business from move-back-in trends." (Miller 2012) Necessity retail such as supermarkets, drugstores, and cleaners, are being added by infill into residential neighborhoods to provide consumers with walkable, dense communities. Retail development adjacent to housing and businesses has potential to thrive because of the many potential consumers. These trends do not support the addition of sprawling retail such as the Hwy 18/I-90 Interchange. The annexation of the interchange would create a land-consumptive model that is auto dependent for consumers, not congruent with the current trends.

It is shown that communities, consumers, and businesses all benefit from denser, walkable cities that avoid sprawl and have mixed-use developments. Creating such a community will benefit the environmental, social, and economic health of the community, making it a more vibrant place to live that residents chose to move to and stay, strengthening the community and making it a better place to live. Based on regional and nation trends the Hwy 18/I-90 Interchange proposal is not the type of development that many communities want to encourage. Developers and can attempt to use infill and mixed-use development to meet the retail shortage in Snoqualmie.

**Business model in smart growth communities**

The business in a smart growth community creates a productive and innovative environment for the employees. The geographic concentration of people and businesses improves access to “education and skilled labor, suppliers and supporting businesses and outside knowledge gained by face-to-face interactions among workers at different firms.”
(Fulton 2013) Many businesses are rethinking their store design to fit into downtown retail spaces. Target Corporation is launching a new urban format store called City Target that hopes to help boost the company profits. There are six City Target stores and they have experienced a strong sales base since opening. New retail stores are announced to open in historic downtown LA including grocery stores and larger big box stores (i.e., Ross Dress for Less, Zara, and Sport Chalet) usually found in sprawl developments. Relocations such as these are occurring in small towns as well. Excelda Manufacturing relocated to downtown Brighton, Michigan that has a population of 7,475. The chief financial officer said they chose to move because of the “vibrant, dynamic, and energetic” downtown and that it would help attract younger employees at the company. (Fulton 2013)
4.0 Analysis of Hwy 18/I-90 Interchange Proposed Annexation

Hwy 18/I-90 Interchange proposal

The Hwy 18/I90 Interchange proposal is located on the southwest border of Snoqualmie’s city limits. It is immediately north of Interstate 90 where Highway 18 crosses the interstate. (Figure 7: Map of Snoqualmie and proposed annexation and Figure 8: Parcels included in proposed annexation: (Source: Author)) Snoqualmie has twice (2008 and 2012) proposed to have these 85 acres annexed into their UGA. If approved, the 85 acres would be available for development as commercial retail. King County has denied their request both times. The proposal designates the land for retail development such as, but not limited to, auto retail and large scale, big-box development. Although the proposal has been denied twice the likelihood of them city trying again is high.

The parcels are currently owned by Puget Western Inc., King County Public Hospital and a private owner. (Table 1: Information for parcel’s included in the proposal, (Source: Author)) Puget Western Inc. is a development company responsible for many of the low-density developments along the I-90 corridor. (Puget Western, Inc n.d.) Notably, King County owns approximately 20 acres of land for a public hospital in an area that they are not allowing development to occur. The Planning Department does not have additional information regarding the intentions of King County with the property they own.
Approximately 51 of the acres have environmental issues including erosion hazards and wetlands. Erosion is defined in the Comprehensive Plan as “the wearing away of land surfaces by water, wind or ice, though moving surface water is the dominant cause of erosion in the Puget Sound region.” (City of Snoqualmie 2014, 6-11) Erosion is a natural process that can be accelerated through land use modifications and developments. Development within Erosion Hazard Areas are allowed if an Erosion Control Plan is created and approved, and the development follows a set of criteria that is consistent with DNR-approved forest practices. (Snoqualmie Municipal Code 2014, 19.12.120) Wetlands are described in the Comprehensive Plan as “areas inundated or saturated by groundwater or surface water at a rate and duration sufficient to support prevalent vegetation adapted to saturated soils. Freshwater wetlands such as bogs, marshes, swamps, wet meadows, scrub-shrub and forested systems are widespread west of the Cascades, occurring both as isolated wetlands or association with rivers, streams, lakes or ponds.” (City of Snoqualmie 2014, 6-6) In the Snoqualmie Municipal Code (19.12.180) wetlands must have a buffer of 40-175 feet depending on the type of wetland as well as the type of use proposed (i.e., high impact use needs a wider buffer than low impact use). If the interchange were developed an extensive Environmental Impact Statement as well as Environmental Plan would be necessary to mitigate negative effects on the environment.
Snoqualmie, WA: City Limits and Proposed Annexation

Legend
- Proposed Annexation
- Snoqualmie City Limits
- King County Unincorporated
- Parcel
- Rivers

Figure 7: Map of Snoqualmie and proposed annexation (Source: Author)

Data from King County GIS Center
Map prepared April 2014
by Lynn Fredenburg
Snoqualmie, WA: Proposed Annexation

Figure 8: Parcels included in proposed annexation: (Source: Author)
<table>
<thead>
<tr>
<th>Parcel</th>
<th>Owner</th>
<th>Structures</th>
<th>Environmental Issues</th>
<th>Total Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>0223079046</td>
<td>Private Owner</td>
<td>Vacant</td>
<td>No</td>
<td>1.4</td>
</tr>
<tr>
<td>0223079063</td>
<td>Private Owner</td>
<td>Vacant</td>
<td>No</td>
<td>9.62</td>
</tr>
<tr>
<td>0223079007</td>
<td>Puget Western Inc.</td>
<td>Vacant</td>
<td>Yes – Erosion Hazards</td>
<td>8.73</td>
</tr>
<tr>
<td>0223079049</td>
<td>King Co Pub Hospital</td>
<td>Vacant w/ Mobile Home (1974) – 3319 sq ft</td>
<td>No</td>
<td>20.85</td>
</tr>
<tr>
<td>0223079064</td>
<td>Puget Western Inc.</td>
<td>Vacant</td>
<td>Yes – Erosion Hazard, Wetland</td>
<td>22.36</td>
</tr>
<tr>
<td>7462900130</td>
<td>Puget Western Inc.</td>
<td>Vacant</td>
<td>Yes – Erosion Hazard, Wetland</td>
<td>7.38</td>
</tr>
<tr>
<td>7462900120</td>
<td>Puget Western Inc.</td>
<td>Vacant</td>
<td>Yes – Erosion Hazard, Wetland</td>
<td>6.4</td>
</tr>
<tr>
<td>7462900110</td>
<td>Puget Western Inc.</td>
<td>Vacant</td>
<td>Yes – Erosion Hazard, Wetland</td>
<td>6.27</td>
</tr>
</tbody>
</table>

*Table 1: Information for parcel’s included in the proposal, (Source: Author)*
What are the benefits of the Hwy 18/I-90 Interchange annexation?

If the interchange were to be annexed and developed there are fiscal benefits the city would experience as well as additional retail options for the residents. The city would benefit from the additional sales tax the development would attract. There would also be additional jobs for citizens. It is likely there would be additional entry level jobs that could provide the younger generations with work experience. In addition the citizens of Snoqualmie would have more options of where to shop. The annexation could help catch some of the retail leakage the city is experiencing.

Smart growth principles analysis of the Hwy 18/I90 Interchange

The updated 2032 Comprehensive Plan emphasizes a need for growth to occur in a manner consistent with smart growth principles. Encouraging development and growth that is congruent with Snoqualmie’s Comprehensive Plan and visions will help best serve the communities wants and needs. The Hwy 18/I-90 Interchange is not congruent with the smart growth principles nor the Snoqualmie Comprehensive Plan and visions (Table 2: Smart growth analysis of the Hwy 18/I-90 Interchange (Source: Author)).
<table>
<thead>
<tr>
<th>Does the Hwy 18/I-90 Interchange annexation use Smart Growth Principles</th>
<th>Yes</th>
<th>No</th>
<th>Unsure</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mix land uses</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Take advantage of compact building design</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Create a range of housing opportunities and choices</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Create walkable neighborhoods</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Foster distinctive, attractive communities with a strong sense of place</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Preserve open space, farmland, natural beauty, and critical environmental areas</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Strengthen and direct development towards existing communities</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Provide a variety of transportation choices</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Make development decisions predictable, fair, and cost-effective</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Encourage community and stakeholder collaboration in development decisions</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

Table 2: Smart growth analysis of the Hwy 18/I-90 Interchange (Source: Author)
Mix land uses

The Hwy 18/I-90 Interchange is not designated for a mixed-use development. The proposal is to develop the land for big box commercial retail and auto retailers. The retail proposed would create an auto dependent strip that does not promote alternative modes of transportation.

Take advantage of compact building design

The types of development that are proposed at the Hwy 18/I-90 Interchange are not compact. Big-box sprawl is defined as larger than 50,000 sq ft and can be as much as 250,000 sq. ft. These large buildings are not compact and do not provide an efficient use of land. (Good Jobs First 2014) In addition to the development not being walkable it will create many impervious surfaces that are harmful to the environment.

Create a range of housing opportunities and choices

This smart growth principle is not applicable to the Hwy 18/I-90 interchange's proposed uses.

Create walkable neighborhoods

The Hwy 18/I-90 interchange is not a walkable distance for the average person from Snoqualmie. The interchange is approximately 1.5 miles from Snoqualmie Ridge and approximately 4 miles from the historic downtown. This exceeds the 'Five Minute Walk' standard, which is the average distance a pedestrian is willing to walk before opting to drive. (Olson 2010) It would be difficult for those without a vehicle to access the
development. While this is further than the average pedestrian is willing to travel it may be a bikable distance, although the terrain could be prohibitive as it includes a steep hill from the valley that I-90 runs along to the top of Snoqualmie Ridge.

Foster distinctive, attractive communities with a strong sense of place

Snoqualmie is located in a unique location with many points of attraction, both natural and man-made drawing visitors into town. Snoqualmie Falls is one of the Washington’s most popular scenic attractions. More than 1.5 million visitors pass through Snoqualmie each year to visit the falls. (Snoqualmie Falls 2014) Snoqualmie is adjacent to Mt Si, which draws a large number of hikers. Snoqualmie is also located along a historic railroad line now operating as a ‘toy train’, traveling from Fall City, through Snoqualmie and onward to North Bend. Other manmade features include the Puget Sound Energy development at Snoqualmie Falls, the Snoqualmie Casino, and multiple golf courses (Mt. Si Golf Course, Tournament Players Club, and Snoqualmie Ridge Golf Club. These unique features make Snoqualmie a community with pride and a sense of place. It also provides a focal point drawing visitors in throughout the year which increases the potential consumer base.

Preserve open space, farmland, natural beauty, and critical environmental areas

The preservation of open space is important in Snoqualmie. Snoqualmie has an average annual rainfall of 62.12 inches. (US Climate Data n.d.) This large amount of rain creates rainwater run off issues, which are exacerbated by a loss of pervious land. Open space will benefit the city with more land to absorb and filter rain, reduce flooding and stormwater drainage issues. In addition, maintaining open space lowers the amount of pollution
washing into the streams, rivers, and lakes. The development of the Hwy 18/I-90 Interchange would pave over an important ecosystem used to absorb and filter the rainwater. As mentioned before the interchange is part of the Mountains to Sound Greenway which is a corridor stretching from the Puget Sound to Eastern Washington and provides a scenic byway as well as a connected ecosystem for wildlife.

*Strengthen and direct development towards existing communities*

The proposed development is not directed towards the existing communities. Options are available in the existing community where development could happen (discussed in more detail in 5.0 Proposals for Snoqualmie) The proposed development is located far enough away from existing communities that it would be an auto dependent zone. In addition, the new businesses could be harmful to existing businesses in Snoqualmnie and surrounding regions.

*Provide a variety of transportation choices*

The Hwy 18/I-90 interchange is located at the intersection of two main highways. This interchange is an auto dependent location. It is located approximately 4 miles from historic Snoqualmie and 1.5 miles from the central retail strip on Snoqualmie Ridge. There is currently one bus that runs from Snoqualmie to the interchange and it runs once every hour. The road could potentially have a bike lane although the roadway does have a fast speed limit and precautions would need to be taken in the design of the bike lane to ensure safety.
Make development decisions predictable, fair, and cost-effective

The annexation and development of the Hwy18/I-90 Interchange would have benefits for the city such as revenue from the sales tax, an increase in jobs and potential investors. Alternatively, in Supersizing Small Town America, Salkin argues that communities with big box stores do generally derive some economic benefit (typically from sales tax) but it comes at the cost of local businesses that experience a loss in business. In addition, Salkin suggests ways that small towns can guide big box development into regional centers that will help preserve the small town quality of life and maintain the local economic boosts that larger retail developments will offer. (Salkin 2005, 50). Many traditional big-box retailers (i.e., Walmart, Target, grocery stores, etc.) are scaling the size of their buildings down in order to fit into small urban scale landscapes. This would help cities such as Snoqualmie include retail into the existing communities although it still would harm the existing local businesses.

Encourage community and stakeholder collaboration in development decisions

While it is unknown the extent to which the local community and stakeholder collaboration is involved in this process it is a necessary component to the process. It could be assumed that local business owners would oppose the annexation of this land for big-box stores. Such retail models as the one proposed for the interchange have a regional affect due to increased traffic, noise, air and water pollution. Big-box stores are also cited to take away from the aesthetic quality of an area. Many retail stores in downtown areas follow a set of design guidelines that create a pleasant environment. Big-box stores are not held accountable to these design guidelines, and often break up the nature landscape or view
with a large building and parking lot without landscaping. In addition they are built as a destination shopping center and draw business away from other local businesses in surrounding regions. Therefore, it is recommended to include the surrounding cities, stakeholder and business owners in the planning process. (Salkin 2005, 51)
5.0 Proposals for Snoqualmie

The following are suggestions for ways that Snoqualmie can meet their growing retail needs while preserving the Hwy 18/I-90 Interchange as open space. Using these tools, the city will best serve both the community and the environment, preserving open space and mitigating pollution and flooding while strengthening the existing downtown areas and providing residents with additional retail and business. The proposals are focused in the Snoqualmie Ridge Development. The Ridge is the preferred location for new retail because of the restrictions on the historic downtown due to flooding issues and because the majority of the residents that the retail would be serving live on Snoqualmie Ridge.

Vacant lots in existing Business Park

Snoqualmie Ridge has approximately 100 acres of underutilized office space land located centrally in the community (Figure 9: Image of vacant lots on Snoqualmie Ridge). These lots are underutilized because they have low-rise office buildings with large parking lots. Redeveloping these lots with new mixed-use retail will help strengthen existing developments and provide consumers with more options. Existing and future businesses will benefit from a wider consumer base. Infill will enhance partially developed lots, maximizing the economic potential of these lots. (A few images of lots that remain empty within the city’s business park are shown below. (Figure 10, Figure 11)) These lots are already served by the city’s infrastructure therefor it is cheaper to add retail here than in undeveloped areas. These lots are also centrally located to many single and multi-family
residences and would help create a dense, compact, walkable city that is consistent with the smart growth principles and the city's vision.

Figure 9: Image of vacant lots on Snoqualmie Ridge (Google Earth image modified by author)
Figure 10: Vacant parcels on Snoqualmie Ridge, (Source: Author)

Vacant Parcel zoned for Industrial. Owned by Puget Western Inc. Parcel number 7851800050, 4 acres.

Figure 11: Vacant parcels on Snoqualmie Ridge (Source: Author)

Vacant Parcel zoned for Commercial. Owned by Puget Western Inc. Parcel number 7851800110, 7.5 acres.
**Rethinking office parks with mixed-use developments**

“If they are to realize their potential, suburban business districts must be reinvented as more functional, more diverse, more interconnected, and more pedestrian-friendly places than they are today. They likely will be linked by improved transit service and will emphasize good pedestrian linkages and place-making standards beyond the realm of traditional zoning provisions.” (Booth 2002)

As seen in the national real estate trends, many suburb towns in the U.S. are going through transformations from the separated office parks to mixed-use complexes that contain retail shops, office space, apartments and many transportation options. This development model is being practiced with success in many suburban communities similar to Snoqualmie. (Fast Company 2013)

The business park currently has many offices and buildings that are used only during working hours and lie vacant and underutilized at night. These large lots can be developed (or in some cases redeveloped) with mixed-use services that will attract people in the evenings as well, maximizing the economic and social potential of the lots while creating activities for Snoqualmie residents. Adding a mix of uses to Snoqualmie’s existing business park will create vibrant neighborhoods that provide the community with a sense of place, generate tax revenue for the city, and improve the private sectors change of success. (Booth 2002)
The following is an example of a lot that is used during working hours yet lies vacant in the afternoon/evening. The first image was taken at 3:00 pm on a weekday and the second was taken the same day at 7:00 pm. (Figure 12: Time elapsed photo on Snoqualmie Ridge)

![Image](image.jpg)

**Figure 12: Time elapsed photo on Snoqualmie Ridge (Source: Author)**

There exists an opportunity to redevelop these underutilized office park spaces on Snoqualmie Ridge. Many lots either lie vacant, partially used, or are severely underutilized based on the number of cars observed during the day, the vacant buildings, and conversations with the planners of Snoqualmie. New development models are emerging that provide alternatives to office parks being a separated use. Examples include building retail shops, restaurants and other amenities on the bottom floor, with office space on the top floors. An example of a type of vertical mixed-use development is shown below. (Figure 13: Example of vertical mixed-use.)
Figure 13: Example of vertical mixed-use. (Adelaide City Council n.d.)

The following image (Figure 14: Left: Example of a mixed-use office space (Metro Jacksonville 2011), Right: Example of a mixed-use, office space, retail, and residential building (Good Fulton & Farrell 2014).) shows how mixed-use buildings can be developed with retail on the bottom, office space on the following floors, with the possibility of residential above. Developments such as these can help encourage economic retail growth in a walkable neighborhood.

Figure 14: Left: Example of a mixed-use office space (Metro Jacksonville 2011), Right: Example of a mixed-use, office space, retail, and residential building (Good Fulton & Farrell 2014).
Before such developments are built it is important that there is sufficient demand to support these complexes. A financial analysis will determine if there is sufficient demand in Snoqualmie. Creating these mixed-use neighborhoods will provide current and new businesses with a stronger customer base, therefore increasing the demand for retail.

**Underutilized parking lots**

On Snoqualmie Ridge there are large tracts of land designated for parking lots. The development of these large parking lots encourages auto-dependency. (Booth 2002) Observations show that these parking lots are severely underutilized if not empty, throughout the day. One of the first steps in adding density and diversity is freeing up parking space and allowing it to be redeveloped. The following image (Figure 15: Underutilized parking lots on Snoqualmie Ridge, (Google Earth image modified by author)) shows parking lots on Snoqualmie Ridge that are underutilized, and would be a prime location for redevelopment into a mixed-use neighborhood.
Funding parking infrastructure can be costly and the price can be a potential obstacle to a project being completed. “Projects start, and often die, at this crucial juncture because of the cost of structured parking (Rusin 2013).” The city can work with developers to make funding available for parking infrastructure. Tools such as taxable revenue bonds, tax increment financing (TIFs), special assessment districts, or Federal Grants are all available to help developers finance parking infrastructure. One example is an office complex in downtown Madison, Wisconsin, where the developer sold taxable revenue bonds to finance the construction of a parking complex. Grant programs that do not need to be paid back
include, Congestion Mitigation and Air Quality Improvement Program, Transportation Alternatives Program, and Community Development Block Grant Program.

Rusin adds that ‘suburbanites’ are less willing to pay for parking, but will change their habits if it is slowly introduced. (Rusin 2013) The city can create parking fees that charge users differently. Unbundling the cost of parking requires tenants, customers, or employees to pay differently for different spaces in order to keep fair parking fees that are accessible for everyone. Adding free parking for short time users will allow many users to continue parking for free.

Freeing up parking spaces for development will encourage transportation alternatives to the single occupancy vehicle. This will help create a vibrant, pedestrian friendly environment, where consumers and businesses have many options and opportunities to succeed. The city will see an improvement in the social and economic health of the community. Local businesses will be given an opportunity to succeed and promote the region. In addition development pressures of the open space will be relieved, allowing more natural environments to remain and thrive.

**Create focal points**

One of the reasons the Hwy 18/I-90 Interchange is attractive for Snoqualmie is the amount of potential consumers that drive on these corridors. Snoqualmie is concerned that if new retail is added within the existing city limits, there would not be a large enough consumer base to support the retail. Creating focal points of attraction in and around the city will
draw more tourists into the city that will support both the new and existing retail developments in the city. Snoqualmie already has major points of attraction (i.e., Snoqualmie Falls, Historic Train, golf courses, wineries, etc.) and adding additional attractions can enhance the economic health of current and potential businesses. CollinesWoerman have proposed to create outdoor recreational activities along the Snoqualmie River where development is not allowed due to flooding hazards (See Appendix E: Map of Floodplain in Snoqualmie, WA). Examples include recreational trails, parks, and a kayak park. (CollinesWoerman 2011) The many unique natural and man-made features in Snoqualmie attract millions of residents a year with the potential of even more when additional points of attraction are added. Therefore, while the city does not have the traffic of I-90 they still benefit from a high number of tourists who are potential consumers.

**Policies and practices**

In order to direct development elsewhere Snoqualmie and King County can adopt policies or practices discouraging development at the interchange. One example is the Transfer of Development Rights (TDR) Program. TDR is a voluntary, incentive-based, and market driven tool used to preserve land and guide growth to urban areas. Communities are able to regulate the amount, location and density of development. This tool allows rural landowners to get financial compensation without selling, or fully developing their land. They can sell their development rights to urban developments who are then allowed to develop at a higher density or height than was formally allowed. Rural land is thus preserved and urban land is more fully utilized.
Another tool available to maintain the land is conservation easements, also known as a conservation restriction. Conservation easements are a legal tool for the long-term protection of natural areas and farmlands that are threatened by urban development. In a conservation easement agreement the landowner donates some of their land rights (i.e., development rights) to a public entity. This is a legal agreement that applies to future landowners as well. Both of these agreements can benefit the land owner due to a decrease in property taxes as well as it can qualify as a tax-deductible donation.

By following a mix of these solutions, Snoqualmie will be able to ensure that future development happens in existing urban areas and not in rural areas such as the Hwy 18/I-90 Interchange. It is a win-win situation for all parties involved.
6.0 Conclusion

After a preliminary analysis of the Hwy 18/I-90 Interchange it is recommended that the Hwy 18/I-90 Interchange remain zoned as RA-5 and Snoqualmie add retail into the community within existing developments (in particular along Snoqualmie Ridge) in a manner that is consistent with smart growth practices, retail trends, and the city’s vision. The proposed development is not in line with the smart growth principles created by the Smart Growth Network and the development would create an auto-dependent sprawling strip that is inconsistent with Snoqualmie's Comprehensive Plan and Vision Statement. In addition, new development on the periphery of the town is not consistent with regional and national real estate trends. (Miller 2012)

Smart growth practices can help guide Snoqualmie, and other cities, to focus growth in a manner that promotes healthy communities with robust economies, a strong sense of place, healthy lifestyles and a healthy natural environment. Smart growth practices are one way planners can help ensure that efficient land-use planning is attained. Snoqualmie should use smart growth tools such as infill and mixed-use in order to meet the retail needs while maintaining the quality of life residents enjoy. Using programs such as transfer of development rights and creating policies that promote smart growth practices, Snoqualmie can ensure future growth enhances the economic, social and environmental health of the region.
In addition, the city must consider real estate trends when determining whether to attempt to annex this interchange again. While the forecasted benefits of annexing the land may be appealing, the type of community it would create is not the type the people of Snoqualmie are hoping it will become and could potentially harm local and adjacent businesses. Communities such as Snoqualmie should practice regional planning with adjacent stakeholders, encouraging efficient land use planning strategies and economic policies that will support local businesses.
Bibliography


Stuart, Sheri. "Strengthening the Commercial District: 10 Tips for Terrific Retail Promotions." *National Main Street Center* (National Main Street Center) 192 (December 2002).


Appendix A: Abbreviations

GMA – Growth Management Act

RA-2.5 – Rural residential zoning (2.5 acres per house)

RA-5 – Rural residential zoning (5 acres per house)

SGP – Smart Growth Principles

SGN – Smart Growth Network

TDR – Transfer of development rights

UGA – Urban growth area
Appendix B: RCW 36.70a.110

Comprehensive plans — Urban growth areas.

(1) Each county that is required or chooses to plan under RCW 36.70A.040 shall designate an urban growth area or areas within which urban growth shall be encouraged and outside of which growth can occur only if it is not urban in nature. Each city that is located in such a county shall be included within an urban growth area. An urban growth area may include more than a single city. An urban growth area may include territory that is located outside of a city only if such territory already is characterized by urban growth whether or not the urban growth area includes a city, or is adjacent to territory already characterized by urban growth, or is a designated new fully contained community as defined by RCW 36.70A.350.

(2) Based upon the growth management population projection made for the county by the office of financial management, the county and each city within the county shall include areas and densities sufficient to permit the urban growth that is projected to occur in the county or city for the succeeding twenty-year period, except for those urban growth areas contained totally within a national historical reserve. As part of this planning process, each city within the county must include areas sufficient to accommodate the broad range of needs and uses that will accompany the projected urban growth including, as appropriate, medical, governmental, institutional, commercial, service, retail, and other nonresidential uses. Each urban growth area shall permit urban densities and shall include greenbelt and open space areas. In the case of urban growth areas contained totally within a national historical reserve, the city may restrict densities,
intensities, and forms of urban growth as determined to be necessary and appropriate to protect the physical, cultural, or historic integrity of the reserve. An urban growth area determination may include a reasonable land market supply factor and shall permit a range of urban densities and uses. In determining this market factor, cities and counties may consider local circumstances. Cities and counties have discretion in their comprehensive plans to make many choices about accommodating growth. Within one year of July 1, 1990, each county that as of June 1, 1991, was required or chose to plan under RCW 36.70A.040, shall begin consulting with each city located within its boundaries and each city shall propose the location of an urban growth area. Within sixty days of the date the county legislative authority of a county adopts its resolution of intention or of certification by the office of financial management, all other counties that are required or choose to plan under RCW 36.70A.040 shall begin this consultation with each city located within its boundaries. The county shall attempt to reach agreement with each city on the location of an urban growth area within which the city is located. If such an agreement is not reached with each city located within the urban growth area, the county shall justify in writing why it so designated the area an urban growth area. A city may object formally with the department over the designation of the urban growth area within which it is located. Where appropriate, the department shall attempt to resolve the conflicts, including the use of mediation services. (3) Urban growth should be located first in areas already characterized by urban growth that have adequate existing public facility and service capacities to serve such development, second in areas already characterized by urban growth that will be served adequately by a combination of both existing public facilities and services and any additional needed public facilities and services that are provided by
either public or private sources, and third in the remaining portions of the urban growth areas. Urban growth may also be located in designated new fully contained communities as defined by RCW 36.70A.350. (4) In general, cities are the units of local government most appropriate to provide urban governmental services. In general, it is not appropriate that urban governmental services be extended to or expanded in rural areas except in those limited circumstances shown to be necessary to protect basic public health and safety and the environment and when such services are financially supportable at rural densities and do not permit urban development. (5) On or before October 1, 1993, each county that was initially required to plan under RCW 36.70A.040(1) shall adopt development regulations designating interim urban growth areas under this chapter. Within three years and three months of the date the county legislative authority of a county adopts its resolution of intention or of certification by the office of financial management, all other counties that are required or choose to plan under RCW 36.70A.040 shall adopt development regulations designating interim urban growth areas under this chapter. Adoption of the interim urban growth areas may only occur after public notice; public hearing; and compliance with the state environmental policy act, chapter 43.21C RCW, and under this section. Such action may be appealed to the growth management hearings board under RCW 36.70A.280. Final urban growth areas shall be adopted at the time of comprehensive plan adoption under this chapter. (6) Each county shall include designations of urban growth areas in its comprehensive plan. (7) An urban growth area designated in accordance with this section may include within its boundaries urban service areas or potential annexation areas designated for specific cities or towns within the county. (8)(a) Except as provided in (b) of this subsection, the expansion of an urban
growth area is prohibited into the one hundred year floodplain of any river or river segment that: (i) Is located west of the crest of the Cascade mountains; and (ii) has a mean annual flow of one thousand or more cubic feet per second as determined by the department of ecology.  

(b) Subsection (8)(a) of this section does not apply to:  

(i) Urban growth areas that are fully contained within a floodplain and lack adjacent buildable areas outside the floodplain;  

(ii) Urban growth areas where expansions are precluded outside floodplains because:  

(A) Urban governmental services cannot be physically provided to serve areas outside the floodplain; or  

(B) Expansions outside the floodplain would require a river or estuary crossing to access the expansion; or  

(iii) Urban growth area expansions where:  

(A) Public facilities already exist within the floodplain and the expansion of an existing public facility is only possible on the land to be included in the urban growth area and located within the floodplain; or  

(B) Urban development already exists within a floodplain as of July 26, 2009, and is adjacent to, but outside of, the urban growth area, and the expansion of the urban growth area is necessary to include such urban development within the urban growth area; or  

(C) The land is owned by a jurisdiction planning under this chapter or the rights to the development of the land have been permanently extinguished, and the following criteria are met:  

(I) The permissible use of the land is limited to one of the following: Outdoor recreation; environmentally beneficial projects, including but not limited to habitat enhancement or environmental restoration; storm water facilities; flood control facilities; or underground conveyances; and  

(II) The development and use of such facilities or projects will not decrease flood storage, increase storm water runoff, discharge pollutants to fresh or salt waters during normal operations or floods, or increase hazards to people and property.  

(c) For the
purposes of this subsection (8), "one hundred year floodplain" means the same as "special flood hazard area" as set forth in WAC 173-158-040 as it exists on July 26, 2009.
Appendix D: Snoqualmie City Zoning Map