



DISTRICT OF STEWART

COMPLETE COMMUNITY ASSESSMENT | NOVEMBER 2024

URBAN
SYSTEMS

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DATE: NOVEMBER 2024

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0895.0025.01

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1.0 EXECUTIVE SUMMARY

Several factors make planning for future growth and development in Stewart unique from other communities. These factors include;

- The community's remoteness;
- The presence of several physical and regulatory constraints impacting development;
- Climatic conditions (significant precipitation in the form of rain and snow);
- A declining and aging population;
- The boom-and-bust nature of the local mining industry; and
- A lack of local trades/skilled labour

This Complete Communities project provided the District of Stewart with the opportunity to evaluate community needs and considerations through four (4) lenses; housing, infrastructure, transportation and daily needs. Each of these lenses was evaluated using geospatial assessments to better understand opportunities for making Stewart a more 'complete' community. Key findings of this analysis include:

- The downtown area currently has among the lowest housing densities in the Stewart townsite. Directing future high density residential developments to this area will not only help to address existing and projected housing needs, but will also contribute to the development of a vibrant downtown core.
- The District's Housing Needs Report identified a need for additional housing for individuals with mobility issues, including seniors. It is recommended that such housing be directed to the areas within the 10-minute walkshed of the downtown core and health centre.
- There is currently sufficient serviced, vacant lands within the community to accommodate the projected 5-year and 20-year housing needs.
- Key water main extensions as identified in the District's Water Master Plan would help to improve fire flows and facilitate future development of the townsite.
- The establishment of an industrial park along the Highway 37A corridor could help to facilitate the redevelopment of the downtown area, south of 5th Avenue.

The undertaking of this project is timely for Stewart, as the District is planning to undertake updates to its Official Community Plan and Zoning Bylaw in 2025. The findings of this Complete Communities Assessment better inform and prepare the District in the updating of these two foundational planning documents.

Through this project, the District of Stewart is better prepared to engage residents on various planning initiatives, accommodate future growth, and ensure that future development in the community is deliberate and aligns with the vision of the community.

2.0 PROJECT OVERVIEW

2.1 UBCM COMPLETE COMMUNITIES PROGRAM

The Union of BC Municipalities (UBCM) launched the Complete Communities program in 2023 to support local governments and modern treaty First Nations to advance community goals through the creation of more complete communities. The program supports communities in undertaking assessments to inform:

- Land use decision-making,
- Considering housing need, supply, and location;
- Providing transportation options including increased walkability; and
- Making connections to infrastructure investment and servicing decisions.

The Complete Communities approach analyzes the community using four lenses:



2.2 PROJECT PURPOSE

The purpose of the project is to understand how Stewart can support the development of more housing and developable area within the municipality. This involves setting land use planning objectives that encompass a range of goals, including offering a wider range of housing and transportation options, enhancing walkability, accessibility, age-friendliness, and equity within the community, achieving greater efficiency in servicing and infrastructure, and promoting environmental sustainability by reducing greenhouse gas emissions, particularly those generated by transportation.

An important component of the Complete Communities Plan is determining how to direct growth in a manner that is both cost-effective and sustainable. This primarily involves identifying an approach to development that will meet Stewart's housing needs, daily needs, transportation needs, align with municipal infrastructure capacity, and accommodate the limited land base. Options for crown land acquisition are explored in order to meet these needs.

These goals are achieved by analyzing the community through the four community lenses to identify plausible development types and locations. Identified development scenarios were tested to understand the costs, benefits, and challenges associated with them. Scenario testing helps to inform decisions regarding if some developments are viable from a financial and infrastructure perspective. This analysis enables the District of Stewart to make informed decisions about how to direct development in a feasible way that aligns with financial and community objectives.

2.3 PROJECT CONTEXT

There are a number of factors that make the undertaking of this project timely for the District, including:

- Potential new mining projects, which could result in an influx of workers to the District;
- The recent completion of studies and assessments regarding natural hazards and potential impacts to development;
- The completion of an asset management plan;
- Recent efforts and interest in community-to-community engagement with the Nisga'a Nation;
- A need to identify additional lands to accommodate commercial, industrial and residential uses;
- Recent provincial legislative changes introduced through Bill 44 aimed at facilitating housing developments;
- The development of an interim Housing Needs Report in 2024 which outlines a 5-year housing need of 34 units and 20-year housing need of 66 units, as well as other core housing needs;
- Existing and anticipated future challenges related to housing availability and affordability;
- An Official Community Plan (OCP) and Zoning Bylaw update;
- The undertaking of a Trail Network Plan in 2024; and
- A general lack of skilled labour and trades in Stewart, which hinders developments.

The Complete Communities Assessment sought to address and incorporate the abovementioned considerations by analyzing and identifying areas of the community best suited to different forms of development. This assessment also provided an opportunity for the District to evaluate community needs and considerations through four (4) lenses; housing, infrastructure, transportation and daily needs. The results of the analysis highlight future infrastructure needs, identify potential amendments to the OCP and other land use bylaws, identify lands for potential future development, and inform incentive programs for future development.

This project also provided the District with an opportunity to build off previous infrastructure planning initiatives. For example, while previous infrastructure analyses completed by the District did identify a need to improve fire flows, analysis undertaken as part of this project help to better quantify the extent and impact of potential improvements. Areas of the community that may have the capacity to accommodate future development without the need for extensive capital infrastructure investment were also identified.

Overall, this project leaves the District better prepared to ensure future development within Stewart is deliberate and aligns with the long-term vision and goals of the community.



2.4 COMMUNITY ENGAGEMENT

The District undertook several initiatives as part of the development of the Complete Communities Plan. Community engagement was conducted in tandem with other projects, and these events were leveraged to gain more information and insight into directions for the Complete Communities plan. Table 2.1 describes the community engagement events and key findings that informed the development of the Complete Communities Plan.

Table 2.1: Community Engagement Events

Event	Date	Number of attendees	Key Findings
Community Hall User Group Meeting	October 25 th , 2023	10	<ul style="list-style-type: none"> • There is a need to improve the existing arena to facilitate community meetings and gatherings. • There is a need for greater accessibility in community facilities • There are services and activities that cannot be offered in Stewart due to a lack of suitable space and facilities.
Open House	October 26 th , 2023	14	<ul style="list-style-type: none"> • There is a need for a social space for seniors. • There is a need to improve walkability and active transportation in the community through trail improvements, including accessibility, maintenance, and expansion of trail routes.
Stakeholder interview with Stewart Community Connections	October 26 th , 2023		<ul style="list-style-type: none"> • Stewart Community Connection is leading several initiatives to improve social conditions in Stewart • There is a need for improved transportation options for seniors • There is a need to recruit more health professionals to Stewart
Downtown Revitalization Open House	May 24 th – 26 th , 2023	20	<ul style="list-style-type: none"> • The community would like to maintain Stewart's unique lifestyle, character and culture, including heritage buildings in the downtown. • Stewart residents value their local public amenities. • There is a need for infrastructure improvements, including road repair, cell service, etc. • There is a need for cycling and pedestrian infrastructure, including dedicated bike path and lanes, accessible walking trails, and safer crosswalks.
Open House	July 24 th , 2024		<ul style="list-style-type: none"> • There is a need for accessible active transportation options in the community. • There is a community desire for a perimeter trail around the community offering active transportation as a feasible way to move around town and improving overall walkability. • There is a need to improve pedestrian infrastructure and linkages within and through the townsite, including safe highway crossings and quality sidewalks.
Nisga'a Nation engagement	N/A	N/A	<ul style="list-style-type: none"> • The District of Stewart is pursuing conversations with the Nisga'a Nation to better understand their vision for Stewart, as well as how the Nation would like to be involved in planning and other District initiatives going forward .

3.0 COMMUNITY CONTEXT

Located on the northwest coast of British Columbia, Stewart was established in the early 1900s during the gold rush. Stewart was incorporated as a municipality in 1930. Since establishment, Stewart's economy and population base has cycled through booms and busts dependent on mining, natural resources, and marine transportation operations. More recently, Stewart has focused more on forestry, tourism, and ongoing mining exploration.

Pre-European contact, the northern portions of the Portland Canal, including the present day townsite of Stewart, were occupied by the Tsetsaut First Nations. The Nisga'a also used the head of the Portland Canal seasonally for hunting and berry picking. The Nisga'a referred to the area as "Skam-A-Kounst" which means "safe house", likely due to the fact that it offered protection from invasions from surrounding first nations.

3.1 STUDY AREA

Stewart townsite refers to the area where almost all residential and commercial development has occurred and where the majority of the municipal infrastructure is located. The municipal boundary encompasses a much larger area than the townsite, however this area is wilderness and largely undevelopable except for industrial and recreational land uses. For this reason, Stewart's townsite was selected as the primary study area for this Complete Communities Plan.

The analysis in this Plan included identification of Crown lands suitable for an industrial park. This search was conducted outside of the townsite and District boundaries, alongside Highway 37A.

3.2 DEMOGRAPHIC INFORMATION

Between 2011 and 2021, Stewart's population rose insignificantly from 494 to 517, representing an approximately 5% population increase. In the same time period, the rest of the province saw a 14% population increase. Stewart's population is generally older compared to the rest of BC, with a higher proportion of the population in the 45-64 years and 65 years and older age categories. Stewart's median age in 2021 was 49.2 years, while BC's median age was 42.8 years. However, Stewart has a lower proportion of elderly people aged 85 years and older than the rest of BC, which is likely due to the lack of assisted living and care homes in Stewart.

The average household size in Stewart in 2021 was 2 people per household, lower than BC's 2.4 people per household. Stewart's housing stock is comprised of 92.2% single detached homes, compared to BC's 42.4% single detached homes out of the total housing stock. Of Stewart's households, 82% are owned by the occupant(s) and 18% are rented. BC has an overall lower proportion of owners, with 67% owners and 33% renters.

Stewart has an average household income of \$95,000, which is lower than BC's average household income of \$108,600.

3.3 COMMUNITY GOALS & DIRECTIONS FOR ACTION

Community planning processes and strategies undertaken in recent years have identified and prioritized the community's main goals. These plans relied on community engagement to inform the vision and priorities of community development in Stewart. Community goals related to this Plan's focuses on the areas of housing, daily needs, transportation, and infrastructure were identified using the following documents:

- 2023-2026 Strategic Plan
- 2014 Official Community Plan (OCP)
- 2024 Downtown Vision and Action Plan
- 2020 Housing Needs Assessment
- 2020 Age Friendly Assessment Community Plan

3.3.1 2023-2026 STRATEGIC PLAN

The following community goals were identified in the Strategic Plan undertaken by the District of Stewart Council:

- Enhance economic development, including revitalization of the downtown area.
- Improve the livability of the community, including:
 - Promote recreation and tourism;
 - Develop a Trails Master Plan;
 - Review the 2020 Housing Needs Assessment;
- Enhance and establish partnerships with First Nations, the Regional District of Kitimat-Stikine, and industries such as mining;
- Asset management, including upgrading aging infrastructure.

3.3.2 OFFICIAL COMMUNITY PLAN (2014)

The OCP undertaken in 2014 outlines policies and goals for community development and land use. The OCP presents goals and priorities in key areas including residential, commercial, industrial, civic, environmentally sensitive areas, open space, sand and gravel, development permit areas, economic development, infrastructure, environmental stewardship, community safety, social needs, general community development, and housing.

Several community goals were identified as part of the 2014 OCP that relate to the lenses used in the Complete Communities analysis: housing, transportation, daily needs, and infrastructure.

Housing:

- Encourage the development of affordable housing, housing for seniors, and a variety of housing types in the community.
- Encourage higher density housing, including multi-family units in and around the downtown area.
- Encourage housing accessibility.
- Encourage the retrofit and renovation of existing homes, where feasible, to improve the housing stock.
- Encourage the construction of new homes on vacant serviced residential lots in existing blocks.

Transportation:

- Consider the needs of pedestrians and cyclists as part of the future road works including the construction of new roads and the rehabilitation of existing roads.
- Support reduced use of motor vehicles by encouraging the development of a community car share program, encouraging shared transportation to nearby service centers, and encouraging active transportation in the community.
- Continue to support active transportation in the community.
- Maintain and improve the existing trail system to promote recreation and good community connectivity.
- Partner with various regional, provincial, industry and non-government organizations to enhance the quality of trails and natural areas.

Daily Needs:

- Improve food security
- Improve access to recreation and sports
 - Promote greater use of the arena and support the development of community sports organizations.
 - Maintain existing sports facilities such as the baseball field and tennis court.
 - Support the implementation of parks and recreation programs to encourage a healthy and active lifestyle for people of all ages.

- Improve Access to Other Daily Needs
 - Provide programs and support needed for seniors to reside in their homes in Stewart longer, without having to move to a larger community.
 - Review opportunities to recruit health professionals such as physiotherapists, chiropractors, optometrists, orthodontists, dieticians and dentists to establish part-time services in Stewart.

Infrastructure:

- Sewage System Improvements: Address inflow and infiltration issues to reduce wastewater at treatment plants.
- Water System Upgrades: Implement a leak detection program and consider water meters for industrial and commercial users.

3.3.3 DOWNTOWN VISION AND ACTION PLAN (2024)

The Plan outlines strategies for revitalizing the downtown based on core values such as walkability and sense of place. Several The following community goals were identified:

- Mixed Land Uses: Encourage a compact mix of land uses to provide access to places to live, shop, interact, play, work, and eat
- Community Identity: Foster enhancements that reflect Stewart's history and celebrate its community identity
- Small-Town Lifestyles: Embrace downtown as a place supporting various small-town lifestyles and cultures
- Public Realm: Shape the public realm to serve as an active community space
- Infrastructure Investment: Invest in infrastructure to support the future needs of Stewart residents
- Green Spaces: Incorporate green spaces into streetscapes and public places that reflect the beauty of surrounding natural areas
- Creativity and Innovation: Welcome creativity and innovation in downtown redevelopment and cleanliness efforts
- Vibrant Atmosphere: Promote a vibrant and inviting atmosphere that supports businesses, entrepreneurs, tourism, and talent, providing diverse employment opportunities

3.3.4 HOUSING NEEDS ASSESSMENT (2020)

This work helped the District understand future housing needs in the community. The following needs were identified:

- Affordable Housing: Rising housing values contribute to increasingly unaffordable living conditions.
- Rental Housing: There is a need for additional rental housing options within the community.
- Housing for People with Disabilities: The community has a need for supportive and accessible housing for people with disabilities.
- Housing for Seniors: There is a need for specialized housing that accommodates aging in place, tailored to individual needs.
- Housing for Families: The lack of full-time employment opportunities and access to essential services negatively impacts families' ability to afford housing and maintain their residence in the community.

3.3.5 STEWART AGE FRIENDLY ASSESSMENT COMMUNITY PLAN (2020)

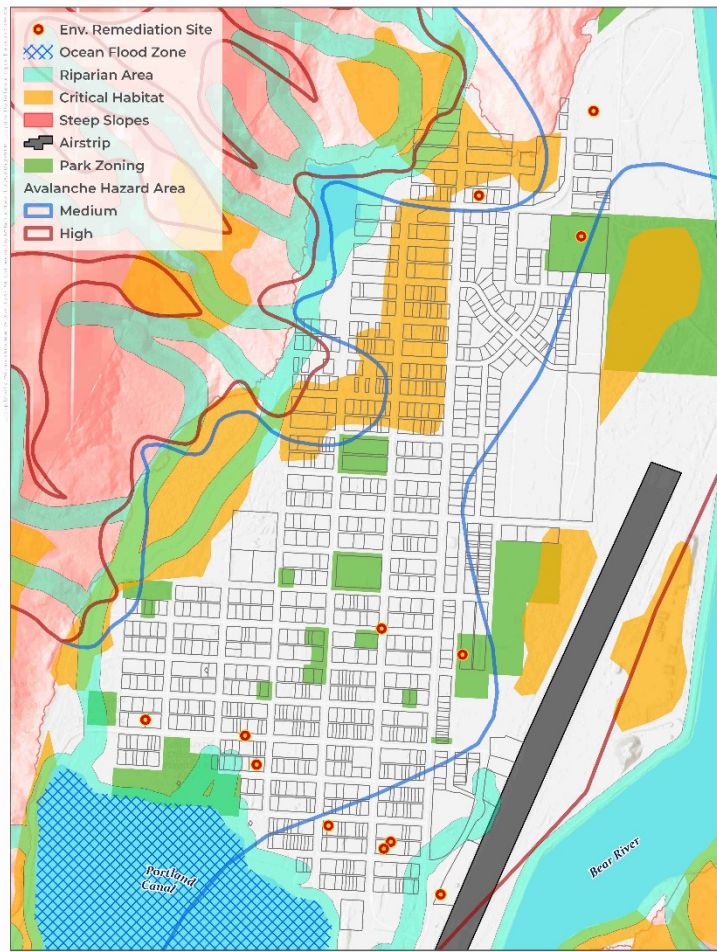
The work assessed the community's current level of age friendliness, or ability for seniors to live comfortably in the community. The assessment provided recommendations to meet the needs of seniors and increase quality of life, which include the following:

- More accessible transportation options
- Increase access to health services
- Housing and home support services
- Accessible walkways and building entrances

3.4 DEVELOPMENT CONSTRAINTS

There are several physical and regulatory constraints which impact land use and development in Stewart. The OCP includes Development Permit Area Guidelines and policy statements aimed at ensuring development in Stewart considers, and mitigates against, these various hazards and regulatory requirements. A high-level overview of these constraints is provided below and illustrated on Figure 3.1. Since nearly the entirety of the townsite is within the 20 year floodplain of the Bear River, this floodplain is not shown on Figure 3.1. The extents of the potential tsunami inundation are also not known at this time and are not illustrated on this map.

Figure 3-1 - Development Constraints



TOPOGRAPHY

Stewart is surrounded by rugged mountains and steeply sloping terrain, making portions of the townsite at risk of rock fall, landslip and similar hazards where soil stability is a concern. Development Permit Area Guidelines in the OCP recommend these lands remain free of development. The use of lands that are adjacent to such hazard areas and that could be adversely affected by, or could increase, these inherent hazards should similarly be limited and subject to professional assessment.

FLOODPLAIN

Nearly the entirety of the townsite is within the 20-year floodplain of the Bear River. While the community is protected by flood protection works in the form of a dike along the river, the risk still remains. Regulations outlined in the OCP do require that the habitable portions of buildings be located above the 20-year floodplain.

WETLANDS AND RIPARIAN AREAS

Stewart receives a significant amount of precipitation in the form of both rain and snow. As a result of these climactic conditions, there are several streams and wetlands throughout the District. Low-lying areas within the community are also prone to seasonal flooding. Any future construction and development in Stewart will need to consider these risks, especially as increased precipitation, and associated flooding risks, are anticipated to increase due to the on-going impacts of climate change.

AVALANCHE

The surrounding steep mountains combined with high winter snowpacks make Stewart vulnerable to avalanches. In 2019, the District undertook a Townsite Avalanche Hazard and Risk Assessment. This assessment provides updated avalanche hazard zone mapping, including the delineation of areas of high and moderate avalanche risk. While development in areas of high risk should be avoided completely, it is recommended that any development in moderate risk areas be subject to professional assessment. The District is scheduled to update its OCP in 2025 and will incorporate recommendations from the avalanche hazard and risk assessment into the updated plan.

TSUNAMI

Located at the head of the Portland Canal, the townsite of Stewart is susceptible to tsunamis. While flood mapping from 1993 indicates a Portland Canal flood level of 5.4 metres, the extent of a potential tsunami inundation area is not fully known. The District is looking to work with senior government to identify the tsunami inundation area for Stewart, as well as undertaken initiatives to educate residents and visitors on the tsunami risk. Additional studies are needed to help the District to better understand tsunami hazards within the townsite, as well as develop guidelines to mitigation tsunami risks.

ENVIRONMENTAL CONSIDERATIONS

There are areas of biological and ecological significance within the Stewart, including the Bear River and associated estuary, Rainey Creek, and stands of old growth forests. Several wildlife species, such as grizzly bears, black bears, mountain goats and wolves are also commonly observed in Stewart. The Bear River, Rainey Creek and several of their tributaries are salmon bearing and as a result, these habitats are protected under federal legislation.

There are also mapped critical habitats for the marbled murrelet, a federally listed species at risk. While the delineation of these critical habitats does not constitute an automatic “protection” designation, further environmental requirements, including an assessment by a Qualified Environmental Professional, may be required prior to any future development.

CONTAMINATED SITES

A search of Provincial contaminated sites databases revealed 19 registered contaminated sites within the District of Stewart municipal boundary. While a search of the Treasury Board of Canada database resulted in no federally contaminated sites within the townsite, there are 3 such sites situated south of the townsite within, and adjacent to, the Portland Canal.

The BC Contaminated Sites Regulation will have to be adhered to for all developments in Stewart. The options for the remediation of contaminated sites varies depending on site specific considerations, including but not limited to, the proposed use and types of contaminants located on the site.

3.5 RELATIONSHIP WITH THE NISGA'A NATION

Stewart is within the traditional territory of the Nisga'a Nation. In recent years, the Nation has relayed an interest in advancing their presence in Stewart through various economic development initiatives. Strengthening the relationship with the Nisga'a Nation and seeking to more fully understand their vision and plans for Stewart is a priority for the District. While general communications have been on-going, more in-depth discussions are being planned for Spring 2025 through a Community-to-Community forum.

4.0 COMPLETE COMMUNITIES ASSESSMENT

The Province's Complete Communities program was formed to support communities to undertake geospatial assessments to understand opportunities for making their community more 'complete'. A complete community, in this sense, refers to a community in which residents can easily access their daily needs, enhancing quality of life. An example of a complete community may be a neighbourhood where a resident can feasibly choose active transportation to reach their grocery store, place of work, and a park, all from their home.

The local context, small size, and remote nature of Stewart make the community a unique place. Some of the issues facing urban centres are irrelevant in Stewart, and some issues facing Stewart would be irrelevant in an urban area. Because of this, a tailored approach was required to undertake a meaningful assessment of Stewart.

The Complete Communities framework uses four lenses to assess existing issues and opportunities for growth to become a more complete community. The four lenses are housing, daily needs, infrastructure, and transportation.

The methodology produced by the provincial government in the *Complete Communities - A guide to geospatial land use assessments for British Columbia's communities*, that this project followed, included an overall approach of preparing, assessing, and acting. To prepare, background research was conducted and community engagement was undertaken to understand current conditions. To assess, geospatial analysis was undertaken to measure various indicators related to all four lenses. Additionally, five scenarios were selected to analyze the anticipated impact of certain actions such as infrastructure upgrades and policy changes. Finally, to act, key recommendations and actions were summarized based on the findings of the analysis.



5.0 HOUSING LENS

All people deserve housing that is affordable, adequate, suitable, and safe. As Stewart works to becoming a more complete community, the District can focus on providing housing that meets the needs of all types of community members who have varying incomes, ages, family compositions, and mobility. Incentivizing development of a diverse housing stock, with an array of single family and multi-unit housing and options for renting and owning homes can help with this process. This section uses the housing lens to analyze Stewart's current community completeness and future needs.

5.1 EXISTING CONDITIONS

The Statistics Canada Census outlines the following housing conditions in Stewart:

- The housing stock is largely composed of older single-family homes, similar to other rural communities in BC.
- Stewart has 337 private dwellings, with 256 occupied by usual residents.. 235 of these occupied dwellings are single-detached houses. Stewart also has 15 apartment units and 5 duplex units. The average household size in Stewart is 2.0 people per household, which is lower than BC's average household size of 2.4 people per household.
- Stewart's housing stock is relatively aged, with 140 homes (57% of the housing stock), constructed between 1961 and 1980. 50 homes were constructed prior to 1960. Since 1980, there have been 40 additional homes constructed in Stewart. There are 30 homes in need of major repairs.
- Most homes in Stewart are owned by their occupants. 2021 census data estimates that there are 200 owners and 45 renters in Stewart, or 82% owners and 18% renters.
- Some residents in Stewart face housing affordability issues, with 14% of households spending 30% or more of their income on housing costs. 8% of households are in core housing need.
- The majority of homes in Stewart are homes for families. 33% of dwellings have four bedrooms, 39% have three bedrooms, 22% have two bedrooms, and only 6% of dwellings are one-bedroom units.

Stewart's key housing needs include the following:

Housing Affordability – Increased housing affordability and affordable housing options are needed to support the population in core housing need.

Diverse Housing Types – Stewart has a high proportion of large single family homes with multiple bedrooms. There may be a need for denser housing, such as multi-unit housing and one-bedroom housing for single people and seniors who wish to downsize.

Seniors' Housing – Stewart lacks housing suitable for seniors. The majority of homes are large two or more storey homes. There is a need for smaller accessible units, multi-unit housing, and one-bedroom units. A significant gap is an assisted living facility or accommodations with in-house care and support.

Rental Housing – There is a need to increase rental housing options in the community.

5.2 KEY CONSIDERATIONS

Below is a summary of some of the key issues and considerations facing housing in Stewart.

LAND AVAILABILITY

Development in Stewart is limited by a number of physical and regulatory constraints. There is a need to identify lands within the District which are relatively free from these constraints to help meet the existing and projected housing and development needs of the community. The District has evaluated and identified several Crown land parcels for potential acquisition. The acquisition of these parcels would require the District to submit a Crown land tenure application.

Risks associated with the various hazards, and in particular tsunamis, is not fully understood. The District should work with other levels of government to undertake assessment to more clearly outline the natural hazards within the townsite and potential impacts to development.

LAND USE

Housing development must consider and align with the direction as outlined in the District's OCP and Zoning Bylaw. Relevant OCP policies regarding housing are outlined in Section 3.3.2. There are some concerns with housing being developed adjacent to incompatible land uses. For example, the downtown area south of 5th Ave contains a mix of residential homes and industrial land uses. Another area where residential development has been considered is adjacent to a potential off-road vehicle trail, which may cause noise and disturbances.

HOUSING NEEDS

As per recent legislative changes, the District must complete an interim Housing Needs Report by the end of 2024. To assist local governments in this endeavour, the Province released a housing needs calculator in June 2024. This calculator outlines a need for 34 housing units in the community within the next 5 years and 66 units over the next 20 years. In 2025, the District will undertake an update to its OCP and Zoning Bylaws to outline how and where the community can accommodate this growth.

The District's Housing Needs Assessment also outlines a need for more diverse housing forms in the community, including; rental housing, housing for seniors housing for people with disabilities; and housing for families.



Photo by: Camus Photography

REDEVELOPMENT OF DOWNTOWN CORE

Most of the services and amenities in Stewart are located in the downtown core. This area also factors significantly into District tourism and economic development initiatives. For these reasons, the development of a vibrant downtown core is essential in the pursuit of making Stewart a more complete community.

There are two potential redevelopment initiatives being explored for the downtown core:

1. General Commercial Zone: South of 5th Avenue

The areas south of 5th Avenue currently contains a mix of light industrial, service commercial, and low-density residential uses. There is a sentiment within the community that such industrial uses are not suitable within the downtown and these parcels could be better leveraged through encouraging mixed commercial and higher-density residential developments.

Lands suitable for industrial and service commercial uses are limited within the townsite. As part of this project, the District explored options for the development of a potential industrial park along the highway 37A corridor.

It should also be noted that lands in the downtown area are adjacent to the Portland Canal and the potential risks associated with tsunamis are not fully known. These risks should be further assessed prior to encouraging further densification of this area.

2. Downtown Commercial Zone: Surrounding 5th Avenue

The housing density analysis as illustrated in Stewart's housing stock was analyzed to understand housing density. Housing density generally refers to total housing units per hectare in a study area. In this case, the entirety of Stewart's townsite was used as the study area.

The purpose of measuring housing density is to inform future residential and commercial developments. A vibrant downtown is strongly linked to housing density. Retail commercial businesses are more likely to thrive when they are located near high density residential, as it means there are more potential customers and employees within a 15 to 20 minute walk. Increasing housing density, especially through infill development, can make better use of existing infrastructure and guide where to invest in new infrastructure. shows that, while the downtown core contains the majority of services and amenities in Stewart, it currently has a low housing density. In particular, the parcels designated as Downtown Commercial in the District's OCP have been identified as having potential for mixed commercial and higher-density residential developments.

INCENTIVIZING HOUSING

There are large, private parcels suitable for residential developments within the townsite, however to-date, property owners have been reluctant to develop these lands. There are also several larger lots which could accommodate a secondary residential dwelling. It is important that the District engage residents, community groups and developers to identify existing barriers to development and outline potential options to incentivize property owners to increase the housing stock. These options could include, but not be limited to:

- Property tax exemptions;
- Secondary suite incentive program;
- Developing educational materials to promote secondary suites;
- Affordable housing funds;
- Density bonuses; and
- Facilitating/working with housing providers.

LACK OF TRADES/SKILLED LABOUR

A lack of trades (electricians, plumbers, etc.) and construction services (home builders, roofers, framers, etc.) has been identified by community members as a barrier to housing construction and renovations. Such services are often procured from Terrace and Smithers, resulting in increased costs in the building and maintaining of homes and service buildings.

Residents have suggested that the District evaluate options for a communal approach to bringing and keeping services in the community (such as roofers, furnace repairs, and other home maintenance). This will allow the costs to be shared between a variety of groups to reduce costs and make home maintenance more efficient and affordable.

SMALL LOTS

Stewart is unique in that the community's cadastral fabric is comprised of several rather small parcels. These parcels are 9 metres wide by 36.5 metres deep (or 30 feet by 120 feet) and have a total area of 330 m². It is suspected that these parcels are a carrying over from Stewart's foundation as a mining community.

The current Zoning Bylaw does not permit the construction of a single unit dwelling on these parcels and the OCP promotes the consolidation of these lots over the long-term. However, recent housing availability and affordability challenges, as well as the rise in popularity of tiny homes, has the District considered permitting single unit dwellings on these smaller lots. During initial engagement with residents on the matter, concerns were raised regarding snow storage (Stewart receives significant snow levels) and general concerns surrounding neighbourhood character.

Development on these small lots is a scenario evaluated under the viability testing component of this project.

POTENTIAL MINING PROJECTS

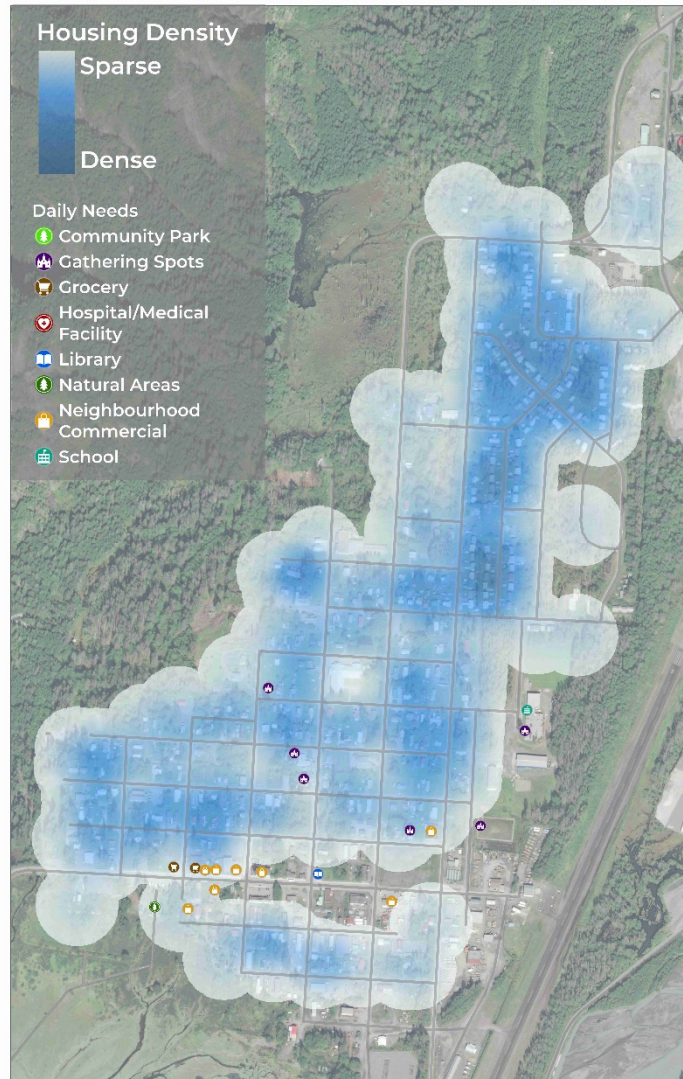
Similar to many small, industry dependant communities in the province, Stewart has a history of boom-and-bust population cycles. In Stewart, these population cycles are centred around the mining industry.

While population projections based on recent community trends show minimal growth, or even a population decline, through 2030, there are currently several mining projects in various stages of approval and development in the region that have the potential to drastically impact Stewart's population. One mining company has recently purchased the former elementary school and converted it to worker accommodations.

It will be important for the District to keep in regular contact with industry to stay apprised of their plans regarding expansion of operations, status of operations, and potential need for additional worker accommodations. This will assist the District to better quantify future housing needs and mitigate the potential socio-economic impacts associated with an influx of workers to the community. The District is also exploring the potential acquisition of provincial Crown lands within the Stewart townsite to better prepare the District for a potential rapid population influx.

5.3 ANALYSIS

Figure 5-1: Housing Density



5.3.1 HOUSING DENSITY

Stewart's housing stock was analyzed to understand housing density. Housing density generally refers to total housing units per hectare in a study area. In this case, the entirety of Stewart's townsite was used as the study area.

The purpose of measuring housing density is to inform future residential and commercial developments. A vibrant downtown is strongly linked to housing density. Retail commercial businesses are more likely to thrive when they are located near high density residential, as it means there are more potential customers and employees within a 15 to 20 minute walk. Increasing housing density, especially through infill development, can make better use of existing infrastructure and guide where to invest in new infrastructure.

What does this map show?

Stewart's housing stock was analyzed to understand housing density. Housing density generally refers to total housing units per hectare in a study area. In this case, the entirety of Stewart's townsite was used as the study area.

The purpose of measuring housing density is to inform future residential and commercial developments. A vibrant downtown is strongly linked to housing density. Retail commercial businesses are more likely to thrive when they are located near high density residential, as it means there are more potential customers and employees within a 15 to 20 minute walk. Increasing housing density, especially through infill development, can make better use of existing infrastructure and guide where to invest in new infrastructure. illustrates the gradient of varying housing densities in Stewart. Higher density areas are depicted in blue while more sparse areas are depicted in white.

The map also shows common daily needs such as parks, grocery stores, the school, and more, to highlight the proximity of dense residential areas to these daily needs.

Key Considerations

- Based on the analysis, the densest residential areas are located in the north of the townsite. This area of the community is furthest from the downtown, where the majority of the services and amenities are located.
- Relatively dense residential areas can be found in the middle and southwest areas of the townsite.
- The downtown core has some of the lowest housing densities. Directing future housing to this area aligns with the key elements of a complete community, including promoting walkability and a vibrant downtown.

5.3.2 LAND DEVELOPMENT SUITABILITY ANALYSIS

This analysis measures the relative prospect of a parcel of land being developed. This assessment was based on various factors including building age, lot and building value, development constraints, and whether or not the parcel is vacant. A higher suitability score indicates that a given lot is more likely than other lots within the District to be redeveloped, while lower scores suggest less likelihood relative to other lots. This analysis is not a predictor of development and does not include economic conditions such as financial feasibility or market potential. It is a relative ranking of lots across the District based on known influencers of development potential.

Many factors influence development. For instance, interest rates affect the cost of borrowing money for development, while the availability of skilled trades determines whether there are enough workers to complete construction projects. The condition and age of existing structures also play a role; for example, homes built after 1980 are less likely to be demolished, and older homes that have been recently renovated are also less likely to be redeveloped. Construction costs and market preferences also play a strong role.

Understanding these development considerations helps identify areas where infill housing could be built sooner. By determining which parcels meet the necessary criteria and are more likely to be redeveloped, the District can identify infrastructure and daily needs opportunities and constraints.

The likelihood of redevelopment for each parcel was assessed by evaluating five criteria:

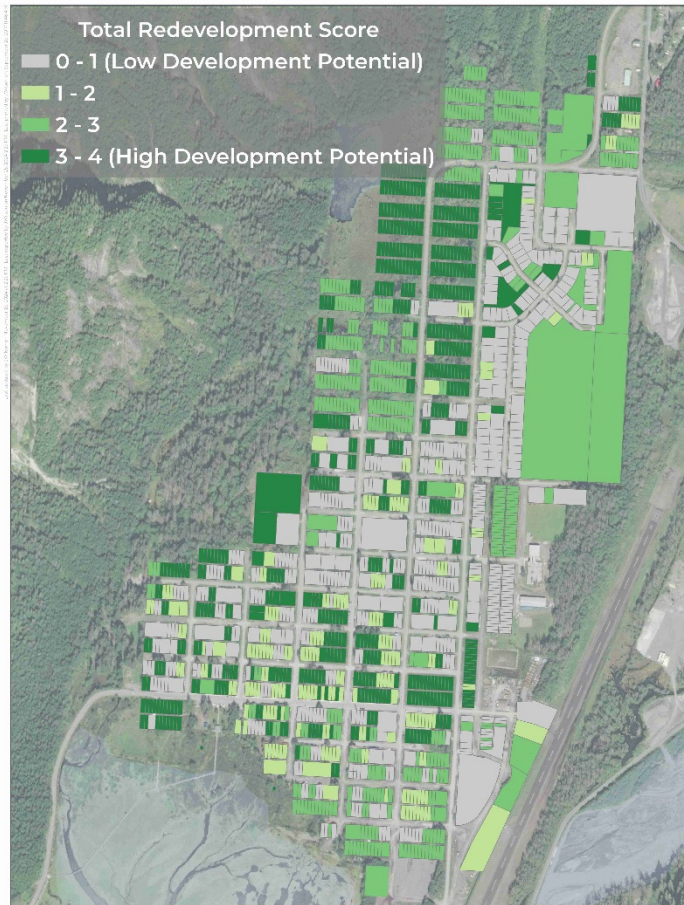
1. Building Age;
2. Improvement ratio;
3. Building Value Improvement Rank per square metre;
4. Land Value Improvement Rank per square metre; and
5. Whether the lot is vacant.

This suitability analysis also considers several physical constraints, including avalanche hazards and steep slopes. Additional studies are required to fully evaluate the tsunami inundation area. Due to a lack of data, tsunami risks were not factored into the analysis.

The map on the following page provides the summation of the development suitability analysis. The five pages that follow the next page summarize the analysis for the five criteria.



Figure 5-2: Overall
Land Development Suitability Analysis



What does this map show?

This map shows Each parcel's development suitability, which is a culmination of the five criteria that were analyzed.

Results are represented by a score ranging from 0 to 4.0. Parcels shown in grey have low scores of 0 to 1, indicating the lowest suitability for development relative to the other parcels assessed. Parcels shown in light green have relatively low development potential, with scores of 1-2. Parcels shown in slightly darker green have medium development potential, with scores of 2-3. Parcels in dark green have a high suitability for development, with scores of 3-4.

Higher concentrations of dark green on the map indicate areas of higher suitability of redevelopment. This analysis is not a predictor of development, but rather suggests which lots are more likely to be redeveloped than others based on the criteria noted above.

Key Considerations

Stewart has land suitable for redevelopment for housing distributed throughout the townsite. Areas that are particularly suitable for redevelopment include:

- The entire block bordered by 5th Avenue, 6th Avenue, Railway Street and Conway Street (Hwy 37A).
- The two blocks on either side of Conway Street between 13th and 14th Avenue.
- The vacant parcels on the block bordered by 5th Avenue, 6th Avenue, Conway Street and Brightwell Street.
- The east side of Railway Street between 7th Avenue and 5th Avenue, where Ascot Resources Ltd. is currently located.
- The forested lands across from the school, between 9th Avenue and 11th Avenue.

The lands in the vicinity of Copper Crescent have also been identified as having moderate redevelopment potential. These lands do contain abandoned row housing developments and have previously been considered for potential worker accommodations.

5.3.2.1 BUILDING AGE

Figure 5-3: Building Age



What does this map show?

Figure 5.3 illustrates **Building Age** as obtained through BC Assessment. The analysis assumes the older a building is, the more likely it is to be renovated or redeveloped.

Buildings constructed prior to 1950 were assigned a high likelihood of redevelopment ranking, while those constructed between 1950 – 1987 a medium ranking. A post-1987 construction date was assigned a low likelihood of redevelopment ranking.

Key Considerations

- Older buildings are more commonly situated in the southern portion of the townsite.
- Given their proximity to the downtown core, older buildings with a higher likelihood of redevelopment include:
 - The vicinity of 7th Avenue and Columbia Street;
 - 9th avenue between Victoria Street and Brightwell Street; and
 - The west end of 4th Avenue and 3rd Avenue
- Although they were constructed after 1980, there are multi-unit row housing developments in the vicinity of Yukon Drive and Glacier Drive that have since been abandoned.

5.3.2.2 IMPROVEMENT RATIO

Figure 5-4: Improvement Ratio



What does this map show?

Figure 5.4 displays **Improvement Ratio**, which compares the assessed land value to the building value of a given parcel. Instances where the assessed land value significantly exceeds (double or more) the building value have been assigned a high ranking for redevelopment. A land value ratio of double, or higher, the building value serves as a baseline for development suitability.

$$\text{Improvement Ratio} = \text{Building Value (\$)} / \text{Land Value (\$)}$$

Parcels with a high likelihood of redevelopment, depicted in dark green, have an improvement ratio of less than 0.5. These parcels have buildings with a value of less than half of the land value.

Parcels with a medium likelihood of redevelopment, depicted in light green, have an improvement ratio between 0.5 and 1. These parcels generally have a building value lower than or comparable to the land value.

Parcels with a low likelihood of redevelopment, depicted in yellow, have an improvement ratio greater than 1. On these parcels, the building value is greater than the value of the land.

Key Considerations

- The analysis did capture some parcels that should likely be excluded, including:
 - The former elementary school (now being used for worker accommodation);
 - The community pavilion (which is a community park); and
 - Lands at the airport.
- Significant areas of interest included:
 - The vicinity of 3rd Avenue and 2nd Avenue between Conway Street and Railway Street;
 - Along 10th Avenue between Columbia Street and Brightwell Street; and
 - 11th Avenue between Conway Street and Railway Street.

5.3.2.3 ASSESSED BUILDING VALUE IMPROVEMENT RANK

Figure 5-5: Assessed Building Value Improvement Rank



What Does This Map Show?

This map displays **the Building Value Improvement Rank**. This is a rank that measures a parcel's likelihood of redevelopment based on the building's assessed value per square metre of the building foundation area.

This analysis assumes that buildings with a lower assessed value per square metre are more likely to be redeveloped as opposed to buildings with a higher assessed value per square metre.

$$\text{Building Value Improvement Rank} = \frac{\text{Assessed Building Value (\$)}}{\text{Building foundation area (m}^2\text{)}}$$

High Rank (depicted in dark green) (high likelihood of being redeveloped) = parcels with a building value less than \$500 per square metre

Medium Rank (depicted in light green) (medium likelihood of being redeveloped) = parcels with a building value of \$500 to \$1,000 per square metre

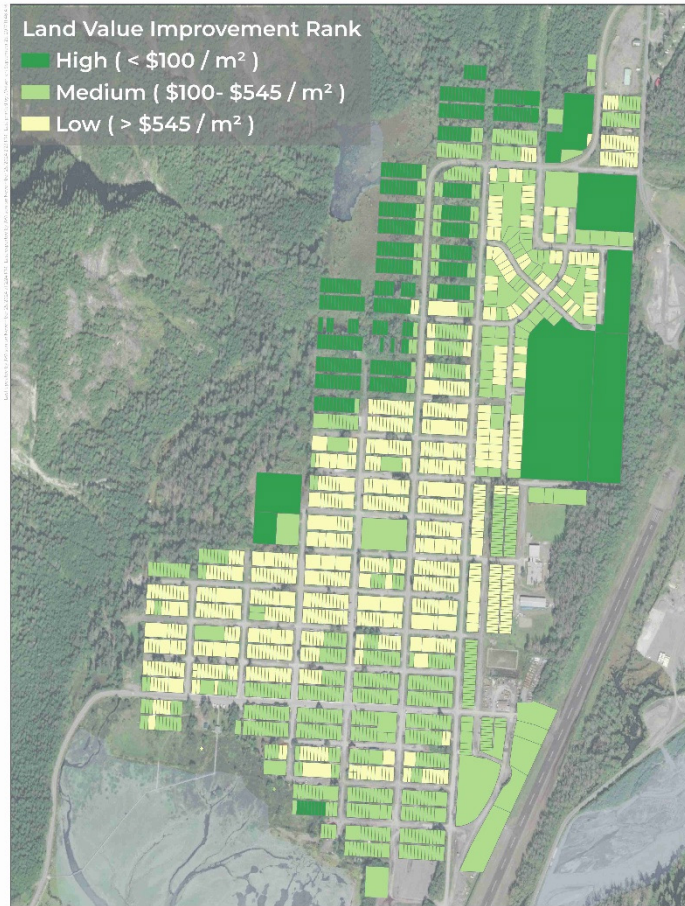
Low Rank (depicted in yellow) (low likelihood of being redeveloped) = parcels with a building value higher than \$1,000 per square metre

Key Considerations

- Properties likely to be redeveloped under this metric are fairly evenly distributed throughout the townsite.
- Significant areas that are likely to be redeveloped include:
 - The parcel at the intersection of 5th Avenue and Victoria Street
 - The vicinity of 3rd Avenue and 2nd Avenue between Conway Street and Railway Street
 - Parcels on 6th Avenue near Victoria Street
 - Parcels on 6th Avenue near Conway Street

5.3.2.4 ASSESSED LAND VALUE IMPROVEMENT RANK

Figure 5-6: Assessed Land Value Improvement Rank



What Does This Map Show?

Figure 5.6 displays the **Land Value Improvement Rank**. This is a rank that measures a parcel's likelihood of redevelopment based on the parcel's assessed land value per square metre of the parcel. This analysis assumes that properties with a lower assessed land value relative to their size will be more likely to be redeveloped.

$$\text{Land Value Improvement Rank} = \frac{\text{Assessed Parcel Value (\$)}}{\text{Parcel Area (m}^2\text{)}}$$

High Rank (depicted in dark green) (high likelihood of being redeveloped) = parcels with a land value less than \$100 per square metre

Medium Rank (depicted in light green) (medium likelihood of being redeveloped) = parcels with a land value of \$100 to \$545 per square metre

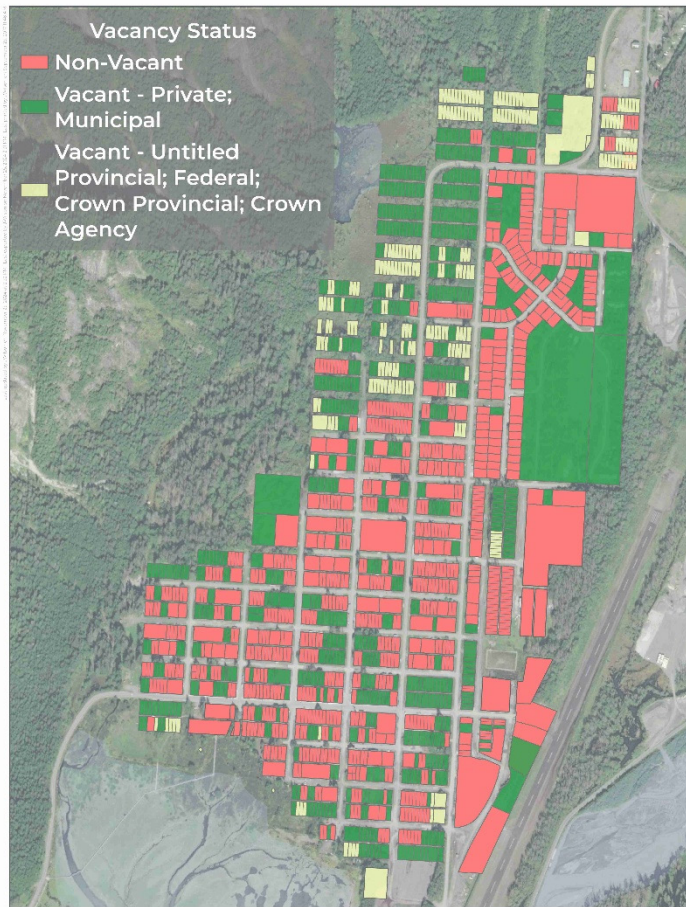
Low Rank (depicted in yellow) (low likelihood of being redeveloped) = parcels with a land value higher than \$545 per square metre

Key Considerations

- The majority of the parcels that are likely to be redeveloped under this metric are located in the northern and western portions of the townsite.
- Several of the higher ranking parcels are subject to significant development constraints, such as steep slopes, high water table, avalanche risk, and more.
- The large parcel of land located in the vicinity of Glacier Drive and Copper Crescent is a notable site for development.

5.3.2.5 VACANT LANDS

Figure 5-7: Vacant Lands



What Does This Map Show?

Figure 5.7 highlights **Vacant Lands throughout the townsite**. It also identifies non-vacant parcels, private and municipal owned vacant lands, and provincial or federal vacant Crown lands. Vacant lands were assumed to have a higher likelihood of redevelopment as compared to occupied parcels. A breakdown by ownership (Crown lands vs. fee simple properties) has been provided, as the pathway to developing these different ownership categories differs.

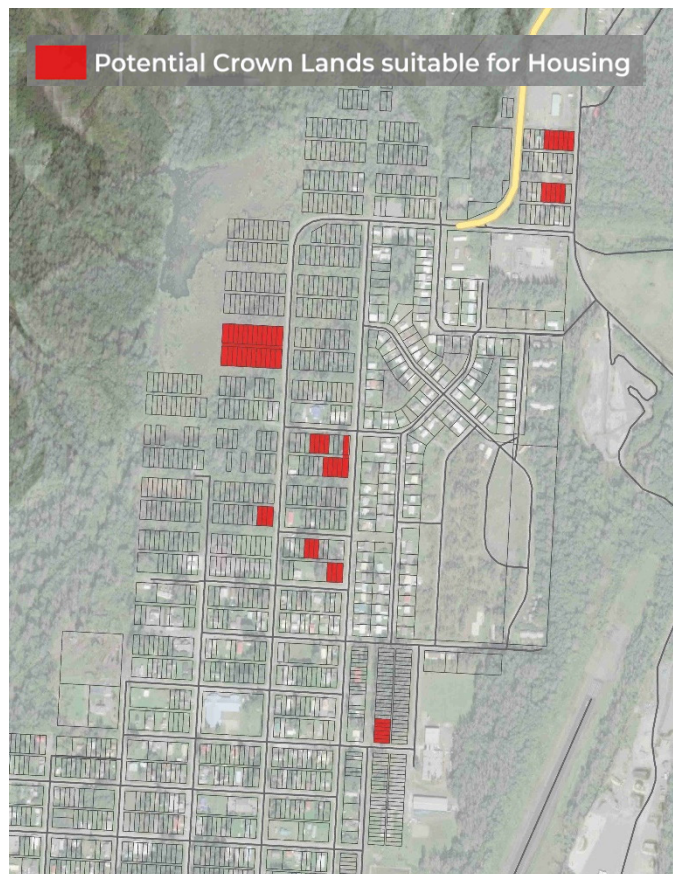
Key Considerations

- While vacant lands are found throughout the townsite, they are found at higher densities along the periphery.
- The majority of the vacant lands in the northwest are current Crown lands.
- There appears to be sufficient vacant land within the District to meet the projected 5-year and 20-year housing needs.
- Lands in the northwest portion of the townsite do not currently have water and sanitary infrastructure servicing.
- Vacant lands of note include:
 - the entire block north of 5th Avenue between Conway Street and Railway Street;
 - the north side of 5th Avenue between Conway Street and Brightwell Street;
 - the east side of Railway Street between 5th Avenue and 7th Avenue;
 - along 6th Avenue between Victoria Street and Conway street;
 - the lands between Conway Street and Railway Street north of 13th Avenue; and
 - the large parcel of land in the vicinity of Glacier Drive.

5.3.3 ADDITIONAL LANDS FOR HOUSING

There is potential for new mining operations in the area, with two significant mining projects in various stages of development. The former elementary school was changed to mine worker housing and there are on-going discussions between the District and mining companies regarding additional worker accommodation needs. Should new mines in the region become operational, there is the potential that Stewart may experience a substantial population influx. This potential housing need would place additional burden on existing housing challenges. Given these considerations, the District has identified a need to identify suitable lands to accommodate future growth and development.

Figure 5-8: Crown Land within the Townsite that may be Suitable for Development



There are undeveloped, surveyed parcels within the townsite that are Crown lands. As part of this project, the District sought to evaluate these lands as a potential means to help address existing and future housing needs. A spatial analysis, which considered the various development constraints, was utilized to evaluate and rank the potential developability of the Crown lands. This was followed by a site visit to confirm the desktop analysis. 20 Crown land parcels were identified for additional consideration. These parcels are illustrated on Figure 5-8 and described in further detail below. Should the District wish to pursue the acquisition of these lands, a Provincial Crown tenure application would be required. The suitability of these lands for future development still needs to be confirmed through detailed field investigations.

What Does This Map Show?

Figure 5-8 identifies Crown lands for potential acquisition by the District to meet housing needs. These sites were identified through spatial analysis which considered various development opportunities and constraints.

Key Considerations

- 9 areas (comprised of 60 subdivided parcels) totalling approximately 2.1 hectares (5.3 acres) may be suitable to meet the existing and future housing needs.
- While these sites were visited, more detailed field investigations are required to confirm the suitability of these sites for development.
- Further prioritization of these parcels may be required, depending on the anticipated land and housing needs.
- If the District wishes to pursue the acquisition of these lands, a Provincial Crown ensure will be required. The Crown tenure application process includes the development of a management plan.
- The Crown tenure application process will require collaboration with senior levels of government, including local first nations.
- The acquisition of Crown lands should be identified as a priority in the District's OCP.

5.3.4 REDEVELOPMENT OF THE DOWNTOWN GENERAL COMMERCIAL (SOUTH OF 5TH AVENUE)

The lands south of 5th Avenue between Columbia Street and Railway Street have an OCP land use designation of General Commercial and are currently used for service commercial and light industrial uses. Situated within the District's downtown core, there is a sentiment in the community that these lands might be appropriate for redevelopment to accommodate additional housing or mixed used developments. However, it is also recognized that there is a shortage of industrial land within Stewart. If the District were to pursue a rezoning of these lands to promote residential and/or mixed use developments that do not permit industrial uses, additional lands appropriate for such industrial development should be identified. This need for additional industrial lands is recognized in the District's 2014 OCP, with Section 7.5.2 stating:

'Review options for working with the province to identify and utilize Crown land to create and market a heavy industrial park north of the town area along Highway 37A.'

As part of this project, lands along the Highway 37A corridor, north of the townsite, were evaluated for the potential development of an industrial park. The development of additional industrial lands outside of the townsite could help to facilitate the re-development of the downtown core over the long term, which would align with community goals related to enhancing the vitality of the downtown, promoting a diverse range of housing types, improving walkability and improving the overall townsite aesthetic. A redevelopment of the downtown core would also advance the District's efforts towards being a more complete community.

Figure 5-9: Downtown Redevelopment Area (south of 5th Avenue)



Figure 5-10: Potential areas for Industrial Park



What Does This Map Show?

Figure 5.10 illustrates the **lands with potential to accommodate development**, which could potentially incorporate industrial development. While key spatial datasets such as steep slopes, water features and the presence of natural hazards were utilized in this siting analysis, the appropriateness of these locations for industrial uses still needs to be confirmed through field investigations.

Key Considerations

- Some lands along Highway 37A are currently being utilized for industrial purposes, including a log storage and handling yard.
- The spatial analysis resulted in approximately 154.185 hectares (381 acres) of land with the potential to accommodate future development along the highway corridor.
- The identified lands are currently considered Crown lands and a Crown tenure would be required to accommodate industrial development.
- Development of an industrial park along the Highway 37A corridor would require collaboration with various levels of government, including federal, provincial and local first nations.
- There is high surface water in some areas along the highway corridor. Along with significant environmental values, these water features could also result in site design and construction challenges. It is noted that the Bear River and its tributaries are salmon bearing.
- The Contaminated Site Regulation would have to be adhered to in the re-development of the existing industrial lands in the downtown. The specific past commercial and industrial uses on the various parcels and potential mitigation requirements are not known at this time.
- A rezoning would be required to promote residential and/or mixed-use developments that do not permit industrial uses in the downtown.
- The District should further evaluate and consider the potential redevelopment of the downtown in the next OCP update.

5.3.5 REDEVELOPMENT IN THE DOWNTOWN COMMERCIAL AREA

Stewart's Downtown Commercial Area, as seen on Figure 5.11, is the townsite hub, with shops, restaurants, hotels, library, post office, and housing. The District's 2014 OCP outlined uses and policies for the Downtown Commercial Area, including the following policies:

7.3.2. Encourage higher density residential development in and adjacent to the Downtown Commercial Area.

7.3.3. Encourage the development of mixed-use buildings with commercial use on the ground floor and residential above the commercial use, in the Downtown Commercial Area.

The housing density analysis, as illustrated in Stewart's housing stock was analyzed to understand housing density. Housing density generally refers to total housing units per hectare in a study area. In this case, the entirety of Stewart's townsite was used as the study area.

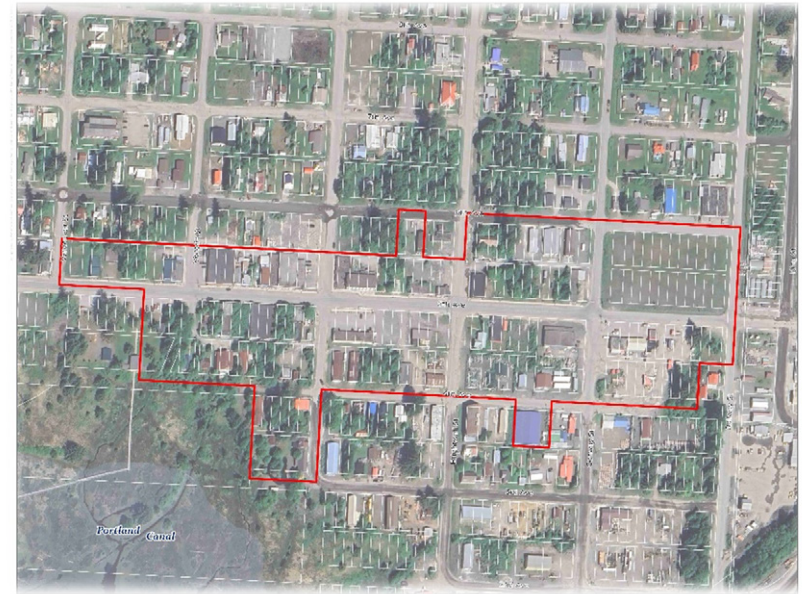
The purpose of measuring housing density is to inform future residential and commercial developments. A vibrant downtown is strongly linked to housing density. Retail commercial businesses are more likely to thrive when they are located near high density residential, as it means there are more potential customers and employees within a 15 to 20 minute walk. Increasing housing density, especially through infill development, can make better use of existing infrastructure and guide where to invest in new infrastructure., shows that while the downtown core contains the majority of services and amenities in Stewart, it currently has a low housing density. In particular, the parcels located north of 5th Avenue between Conway Street and Railway Street have been identified as having potential for mixed commercial and higher density residential developments. This Plan proposes high density residential and commercial mixed uses on vacant lands located within the Downtown Commercial Area. This would align with OCP and Complete Communities objectives of developing housing close to daily needs.

The scenario of building out the vacant lands in this area for residential and commercial mixed use is visualized and tested for anticipated impact in Section 10.2.

Key Considerations

- As many of the vacant parcels in this area are privately owned, redevelopment would depend on willingness from the property owners.
- The risks associated with tsunamis is not fully known. Additional studies and assessments should be undertaken to more fully understand these risks and the potential impacts to development in the townsite.
- As noted above, the densification of the downtown is supported by the current OCP, however this should be further evaluated in the 2025 OCP update.
- Another factor impacting the vibrancy of the downtown is the recent loss of key businesses and services (such as the community's only financial institution). While recruiting businesses and services to Stewart is outside the purview of this project, it is something that should be explore by the community through other initiatives.

Figure 5-11: Downtown Redevelopment Area (Town Commercial)



6.0 DAILY NEEDS LENS

Daily needs are the resources and services people access daily to maintain a good quality of life. The Complete Communities analysis aims to promote access to daily needs by ensuring that housing is located near daily needs and ensuring strong transportation connections from residential neighbourhoods to those areas. In particular, the analysis encourages land use planning that supports the ability for people to walk or use active transportation to travel between their home and locations where they access their daily needs.

6.1 EXISTING CONDITIONS

Proximity of housing to daily needs such as parks, health care services and food and commercial services, is an important characteristic of a complete community. The entirety of the Stewart townsite spans a length of approximately 2.5 km, and the downtown core, which contains the vast majority of the services and amenities, is situated in the southern portions of the community. While traffic issues often associated with larger centres, may not be applicable to smaller communities such as Stewart, living closer to daily core needs can still promote walking and contribute to residents' overall wellbeing. The lack of transit in the community may further emphasize the benefits and importance of being within a reasonable walking distance to the downtown core, especially for those with mobility issues.

Several of the current higher density areas are situated away from the downtown core. There is a desire to further densify the lands surrounding downtown, in particular the lands bordered by Columbia Street, Railway Street, 4th Avenue and 6th Avenue.

6.2 ANALYSIS

The purpose of the walkshed analysis is to understand the population's proximity to daily needs, which is important for creating a more complete community. When people are located far from their daily needs, they must commute which results in greater GHG emissions, reduced physical activity, and decreased parking availability. Decreased parking availability may not seem like a significant issue in a small community, but parked cars impact issues like snow clearing and having convenient parking for tourists.

A walkshed analysis was undertaken to determine the distance of each residential lot to key daily needs, including parks, health care services, the school and downtown core. Walking distances were measured at intervals of 400 metres, 800 metres and 1200 metres, which represents approximate 5, 10 and 15 minutes walking times respectively.

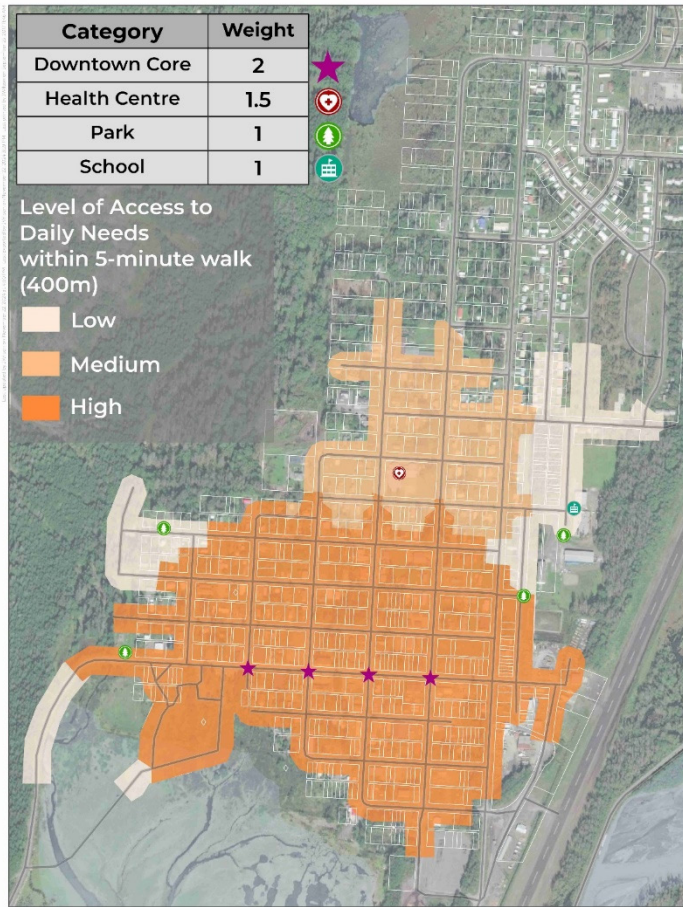
In addition to outlining walksheds for the four identified daily needs components (downtown, parks, health facility and school), parcels were also assigned an overall daily needs score. These scores were determined using a weighted approach, with higher priority needs resulting in higher scores. Proximity to the downtown core was assigned the highest priority, proximity to the health centre a moderate priority and proximity to parks and schools a lower priority. Considerations that factored into this approach and prioritization include:

- All residents access the services and amenities in the downtown core on a near daily basis;
- Stewart has an older and aging population compared to Provincial averages, which places a greater emphasis on shorter walking distances and proximity to the health centre; and
- The District's Housing Needs Report outlines a specific need for housing for individuals with mobility issues.

Stewart's largest major activity cluster is the Downtown Commercial Area, a hub that includes the majority of Stewart's commercial and retail businesses. Activity clusters draw people to a location for employment, shopping, or other purposes. The analysis measures the population's proximity to the downtown activity cluster.

6.2.1 DAILY NEEDS WALKSHED

Figure 6-1: Daily Needs Walkshed



Note: Weight values indicate the importance of the needs category. These weights are added together to determine average accessibility to all needs at any given position.

What Does this Map Show?

Figure 6.1 shows the **walkshed of daily needs** in Stewart, including the downtown core, the health centre, parks, and the school. A weighted score was assigned to each of these daily needs locations based on the proportion of the population who uses them and their importance level.

The downtown core was assigned a relative weight of 2 due to its high level of use by most community members. The health centre was assigned a relative weight of 1.5 because it is a highly important resource, but it is not used by the majority of the population on a daily basis. The District's three parks were assigned a relative weight of 1 because it is less of a crucial need than the health centre. The school was assigned a relative weight of 1 because, although it is a very important need, it is not used by a large proportion of the population.

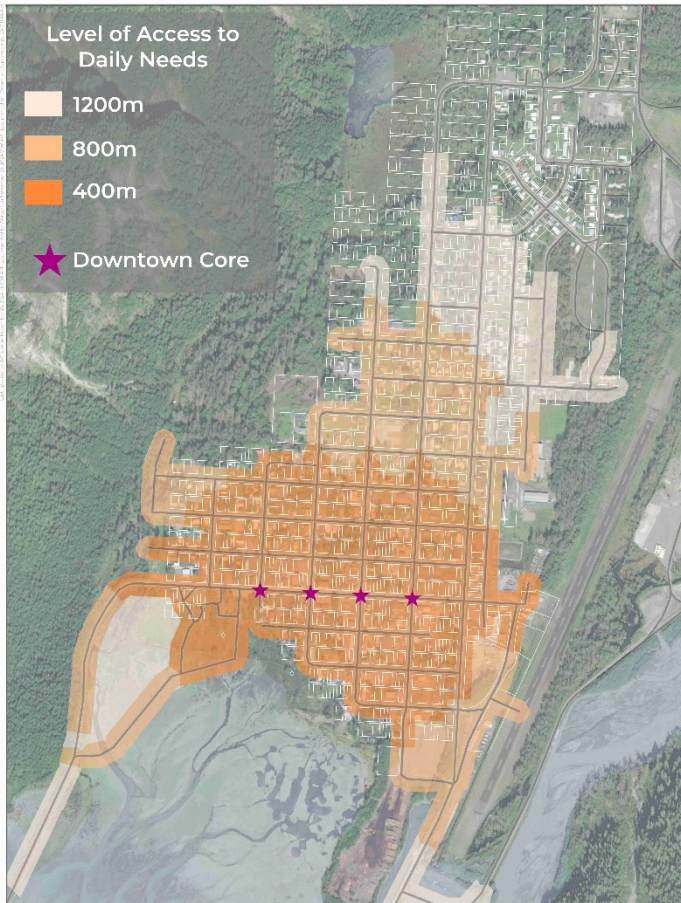
Each property was scored based on the total score for the daily needs that are within a 400 m distance (approximately 5 minute walk at an average walking pace).

Key Considerations

- The southern portion of the townsite is within a 5-minute walkshed of weighted daily needs.
- Notably, the northern portion of the townsite is outside of the 15-minute walkshed of their weighted daily needs. This is a concern considering the northern portion of the townsite has some of the highest housing densities in the townsite.
- The southern portion of the town would be suitable for new residential development as it would mean more of the population would be living within walking distance of their daily needs.

6.2.2 THE DOWNTOWN CORE

Figure 6-2: Downtown Core walkshed



What Does this Map Show?

As previously noted, the vast majority of services and amenities, including grocery stores, restaurants, convenience stores and retail stores are located within an approximately 3 block stretch along 5th Avenue. Figure 6.2 represents the **walkshed of the downtown core**.

The distance of properties from the downtown core were classified as follows:

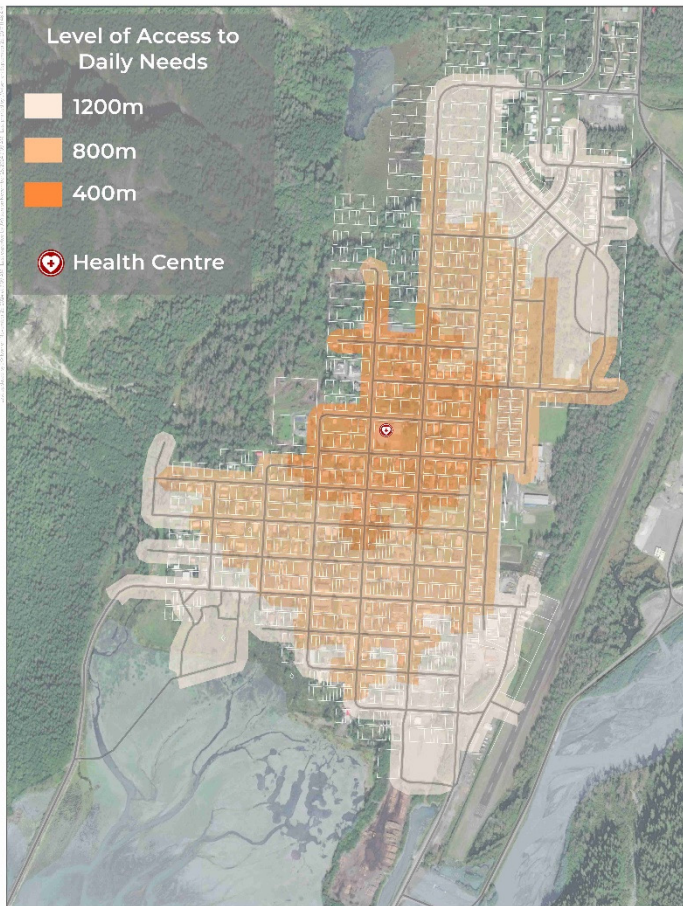
- Within a 400-metre (five minute) walk
- Within an 800-metre (ten minute) walk
- Within a 1200-metre (15 minute) walk

Key Considerations

- The vast majority of the townsite is within a 15-minute walk of the downtown, with a notable exception being the northeast corner of the community.
- Lands surrounding the downtown core currently have a lower housing density as compared to other areas of the townsite. A redevelopment and densification of the downtown would help to improve walkability in Stewart and create a more vibrant downtown core.
- The downtown is located adjacent to the Portland Canal and the risks associated with tsunamis is not fully known. Additional studies and assessments should be undertaken to more fully understand these risks and the potential impacts to development in the townsite.

6.2.3 HEALTH CARE FACILITY

Figure 6-3: Health Care Facility Walkshed



What does this Map show?

Figure 6.3 illustrates the **walkshed of the Stewart Health Centre**, located on Brightwell Street.

The distance of properties from the health centre were classified as follows:

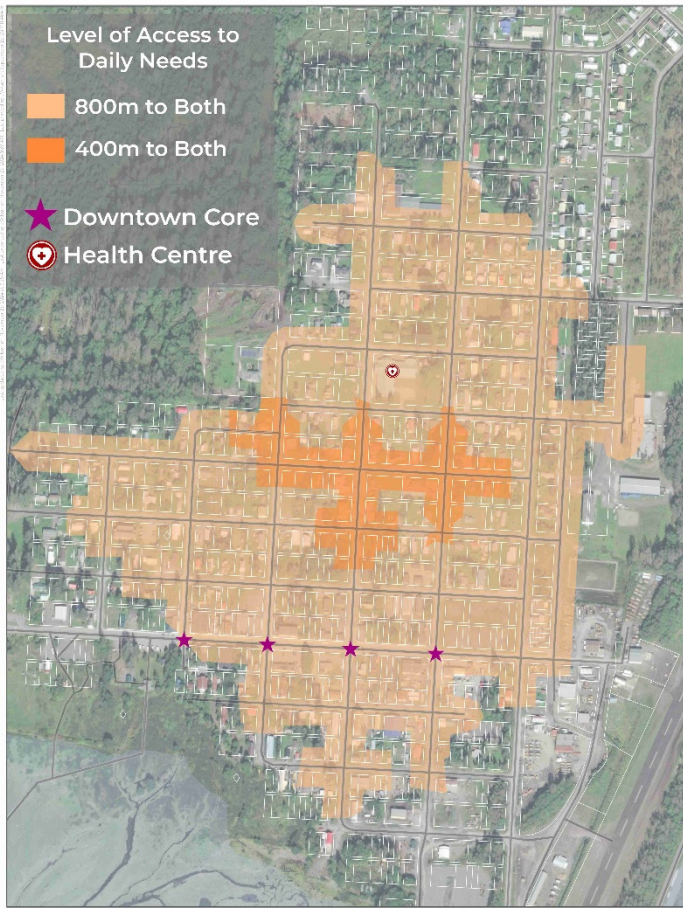
- Within a 400-metre (five minute) walk
- Within an 800-metre (ten minute) walk
- Within a 1200-metre (15 minute) walk

Key Considerations

- Centrally located within the townsite, nearly the entirety of the community is within a 15 minute walk of the health centre.
- Future housing for seniors should be encouraged within a 5 – 10 minute walk of the health centre

6.2.4 DOWNTOWN CORE AND HEALTH CARE FACILITY

Figure 6-4: Downtown Core and Health Care Facility Walkshed



What does this Map show?

Figure 6.4 illustrates the **overlapping walksheds** of the Stewart Health Centre and the downtown core.

The distance of properties from both the downtown core and the health centre were classified as follows:

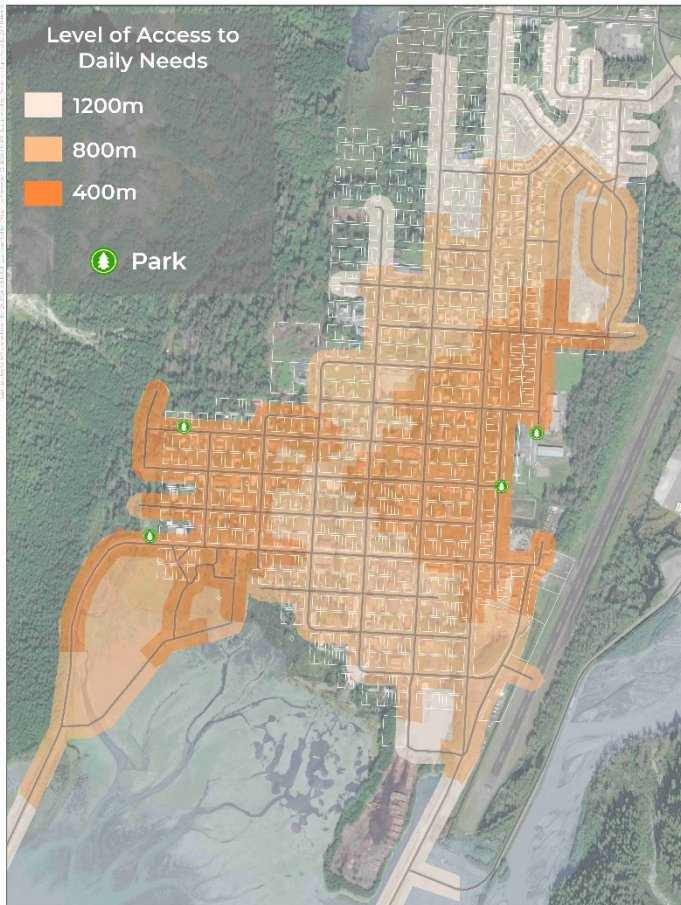
- Within a 400-metre (five minute) walk
- Within an 800-metre (ten minute) walk

Key Considerations

- Housing for those with mobility issues, including seniors and people with disabilities, should be encouraged within the areas of overlap between the health centre and downtown core walksheds.

6.2.5 COMMUNITY PARKS

Figure 6-5: Community Parks Walkshed



What does this map show?

Figure 6.5 illustrates the geographic distribution of community parks in Stewart and their associated walksheds. Playgrounds are located at the school and at the west end of 5th Avenue, while tennis courts are located on 8th Avenue near the Rainey Creek Campground. In addition to the playground, a baseball ball diamond, arena and mini-golf course is situated just south of the school yard, making this area a key recreational focus of the community.

The distance of properties from any park were classified as follows:

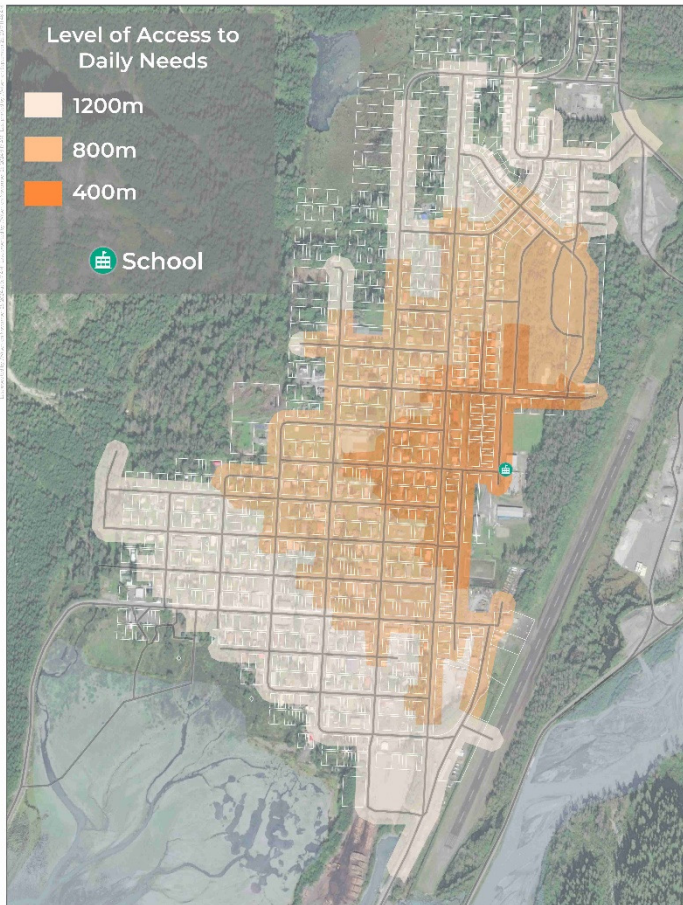
- Within a 400-metre (five minute) walk
- Within an 800-metre (ten minute) walk
- Within a 1200-metre (15 minute) walk

Key Considerations

- The 2023 Downtown Plan recommended renewing and upgrading equipment in Ian McLeod Memorial Park to create a destination playground with shaded areas, seating and a ground drinking fountain.
- While the majority of the community parks in Stewart are within a 10-minute walk of most properties, considerations for future parks locations include:
- North of 11th Avenue, in particular if future housing be developed between Brightwell Street and Railway Street, on the large lot in the vicinity of Glacier Drive, or on the Crown parcels west of Brightwell Avenue; and
- The southeast portion of the townsite, should the downtown east of Columbia Street be redeveloped to include a higher housing density.

6.2.6 BEAR VALLEY SCHOOL

Figure 6-6: Bear Valley School Walkshed



What does this map show?

Figure 6.6 illustrates **the walkshed of the District's only school**; the Bear Valley School.

The distance of properties from the school were classified as follows:

- Within a 400-metre (five minute) walk
- Within an 800-metre (ten minute) walk
- Within a 1200-metre (15 minute) walk

Key Considerations

- The eastern portion of the townsite is within a 5-minute walkshed of the school.
- While the majority of the townsite is within a 15-minute walk, the northern portion of the townsite is an exception.
- Conway Street is considered a highway and is the main thoroughfare through the community. Walking to the school from the properties west of Conway Street requires a highway crossing. Consideration of safe route to school guidelines should be considered, in particular for the crossing of the highway.

7.0 INFRASTRUCTURE LENS

Infrastructure is an essential component of a complete community. Future growth must align with municipal infrastructure capacity. By understanding existing conditions of infrastructure and future growth goals, the District can plan for future infrastructure upgrades, investments, and mitigate risks.

This section analyzes Stewart's existing infrastructure and upgrade needs to support future growth. The key infrastructure being analyzed are the water and sanitary systems within the main townsite. There is no expectation by property owners for connection to the water and sanitary networks outside of that area.

7.1 WATER

The District of Stewart is responsible for providing and maintaining the water infrastructure for consumers of potable water in the community. The District operates two wells to supply potable water and maintains the local distribution system to deliver water to customers for consumption and for use during fire protection.

7.1.1 EXISTING CONDITIONS

The existing wells are not in need of major upgrades/enhancements for next 10 years or longer. Well #4 and Well #5 were constructed in 2016 and 2017 respectively. Upgrades to the electrical and SCADA controls were also completed in 2017 and Well #4 pump was replaced in 2022 so they are expected to function appropriately for the next decade without more than routine upgrades and maintenance. Each well can produce in the order of 20 to 30 L/s when operated alone. Therefore, each well can supply more than double the current maximum daily demand. This is encouraging as the supply can accommodate additional growth and can operate with one well out of service.

The quality of the groundwater meets Canadian Drinking Water Guidelines. No water treatment or chlorination is provided.

Northern health has noted the expectation for the District accommodating an annual system disinfection and emergency disinfection procedures. The future potential treatment expectations are outside the scope of this current analysis as it is not driven by community growth or housing needs.

A reservoir was constructed in 2021 to help improve the reliability of the system and to help level out system pressures. As recommended in the 2020 Water Master Plan, prepared by Urban Systems Ltd., the reservoir was sized to accommodate the 20 year estimated growth of the community. The reservoir can also accommodate a fire flow of 90 L/s for 2 hr. 90 L/s was selected as the fire flow since that was just above the capacity of the Fire Department pumping equipment.

Distribution system leak detection and repairs occurred in 2018 with results showing that there were some leaks, but they were not extensive. It is also recommended that the District not make too firm of assumptions about condition of water mains as limited structural condition information is available. However, the extent of leakage and limited water main breaks help to predict that the existing distribution system can continue to serve the community for the next 10 to 20 years without major capital replacement needs.

Other key considerations related to the District's water infrastructure include the following.

WATER CONSERVATION

Conserving water will help to reduce pump run hours and electrical costs once the new reservoir is in service. It will also delay future investments in water supply should growth occur and to account for the diminishing output of wells as they get older.

PROMOTE STEWARDSHIP OF STEWART'S WATERSHED

The two wells used to supply Stewart's drinking water are within an unconfined aquifer that interacts with the Bear River. It is suggested the District continue to participate in watershed management. Advancing

this process involves engaging with a variety of stakeholders to promote responsible stewardship as the watershed extends beyond the District's jurisdiction. Thus far reviewing development proposals within the watershed tends to be the trigger for the District's involvement.

SUPPLY OF BULK WATER

The District's system also provides water for heavy industrial customers. This is an important service as those companies support economic development in the region. The water system is able to accommodate that bulk water service and it provides an additional source of income.

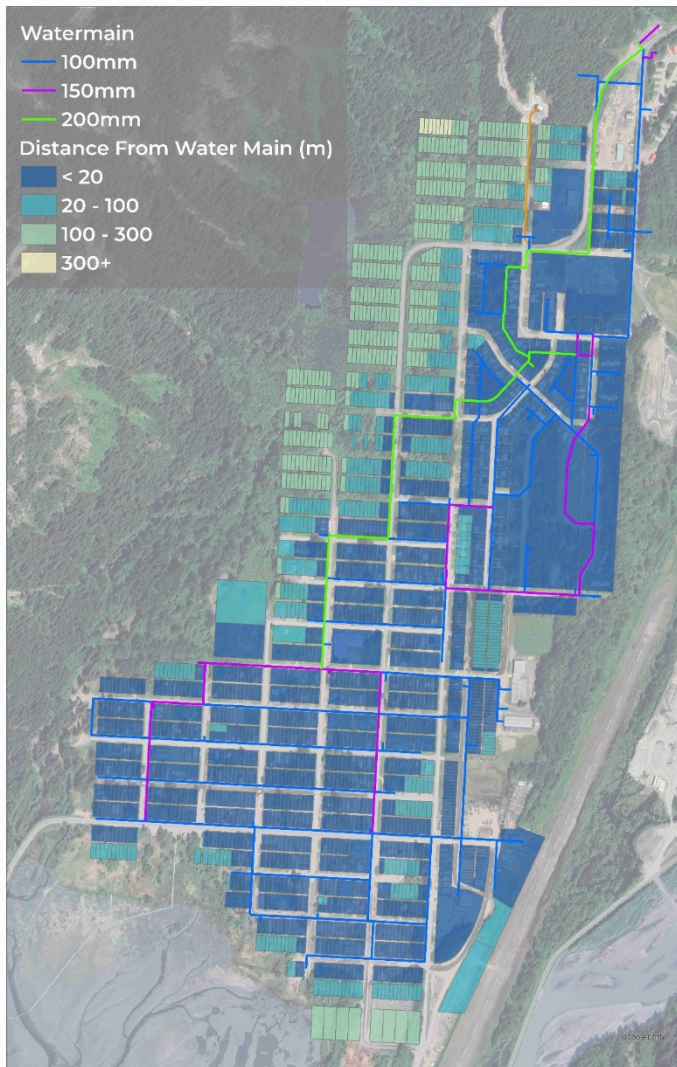
7.1.2 ANALYSIS

With the wells continuing to provide water to the community, the reservoir being suitably sized to accommodate a fire flow of 90 L/s and the system generally being in suitable condition to serve the community for the coming years, the focus of the analysis is:

1. The provision of water to properties (distance to water service)
Extending service to a property increases the cost of development. This work involved considering how far a property is from an existing water main as an indicator of if providing water will only involve extending a water service to the property or a minor pipe extension compared to if a more extensive water main extension would be expected.
2. Providing suitable fire flow to developments (fire flow analysis)
This work involved identifying the available fire flow throughout the community by considering the highest fire flow within 90 m of each property. It did not limit the analysis to the current fire hydrant spacing as additional hydrants could be installed to improve fire flows for specific properties.

7.1.2.1 DISTANCE TO WATER SERVICE

Figure 7-1: Water Servicing Analysis



What does this map show?

Figure 7.1 presents the **distance of properties from a municipal water main**.

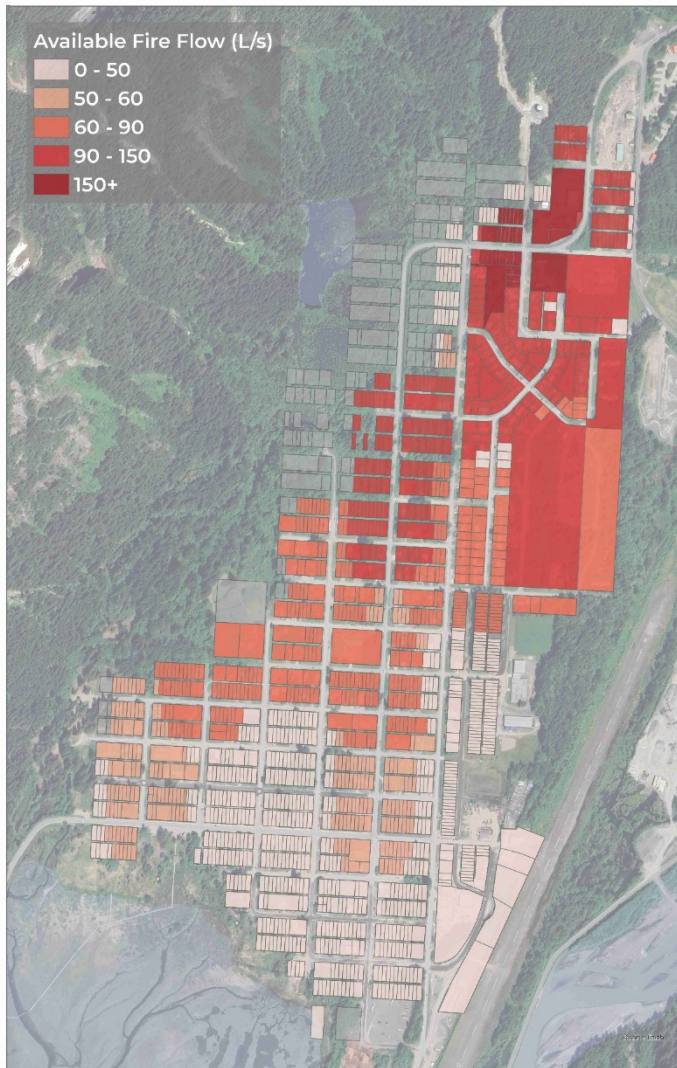
The lots coloured darker blue have a water main within 20 m of property line, indicative of those lots having close access to a pipe to make a service connection. The lighter blue lots would require a longer pipe extension to obtain water service.

Key Considerations

- The majority of the townsite, and all developed properties, are in close proximity to a water main.
- Some properties do not have water mains fronting them, therefore providing water service would require a more extensive system extension.
- The construction of some of the water mains will also result in fewer dead end pipes, which will help with water circulation.
- Deciding on the route and diameter of potential water mains should consider system hydraulics, elimination of dead ends and cost.

7.1.2.2 FIRE FLOW ANALYSIS

Figure 7.2: Existing Fire Flow



What does this map show?

Figure 7.2 identifies **the fire flow available to each property**. The fire flow was determined by employing a hydraulic model of the water system, completed using WaterCAD, to determine the highest available fire flow with 90 m of each property.

60 L/s is commonly considered the minimum recommended fire flow for single-family residential buildings. Higher fire flows are recommended for some buildings. 90 L/s was selected as the higher fire flow limit since that was just above the capacity of the Fire Department pumping equipment.

Key Considerations

- Hydraulic analysis notes that this fire flow cannot be delivered to all areas of the community due to hydraulic restrictions in the pipe network.
- The highest fire flows are in the north of the townsite, closest to the reservoir.
- There are many properties that have fire flows that are less than recommended value. Some key areas include:
 - The school
 - The downtown area
 - The industrial and commercial area to the south of downtown
- The distance to a building on a property could be more than 90 m from the water system in some instances.
- Each property should be analyzed for fire flow requirements and appropriate distance to fire hydrants during the site development design and approvals process.

7.2 SANITARY

The District collects and treats municipal wastewater from the community. This involves maintaining a gravity sewer system and three sewage lift stations to convey from to the wastewater treatment plant. The lagoon system treatment plant improves effluent quality using to meet their provincial operating permit, and the treated volume is disposed via ground infiltration via two rapid infiltration basins.

7.2.1 EXISTING CONDITIONS

The District's permit (Permit 343) issued by the Province for the wastewater treatment plant stipulates the following:

- The average authorized rate of discharge is 1,200 cubic metres per day
- The maximum authorized rate of discharge is 1,950 cubic metres per day

Unfortunately, the District has surpassed these volumetric restraints, even though the treatment plant is still able to achieve the permitted effluent quality. The high flows require the lift station to operate longer and at times the capacity of the largest lift station (Lift Station #3) will be surpassed.

Other key considerations related to transportation in Stewart include the following.

WATER CONSERVATION

Reducing indoor water use will also reduce sanitary sewer volumes. As with the water system, conserving water will reduce pump run hours and electrical costs and can delay investments to increase the capacity of lift stations, pipes and the treatment plant.

REDUCE INFLOW AND INFILTRATION INTO THE GRAVITY SEWER SYSTEM

A more significant factor than indoor water use on the ability of the sanitary system to accommodate growth is the high volumes groundwater and surface water that enter into the gravity sewer system.

ACCEPTANCE OF SEWAGE FROM OUTSIDE THE TOWNSITE

The District accepts municipal quality sewage from heavy industrial customers. This is an important service as those companies support economic development in the region.

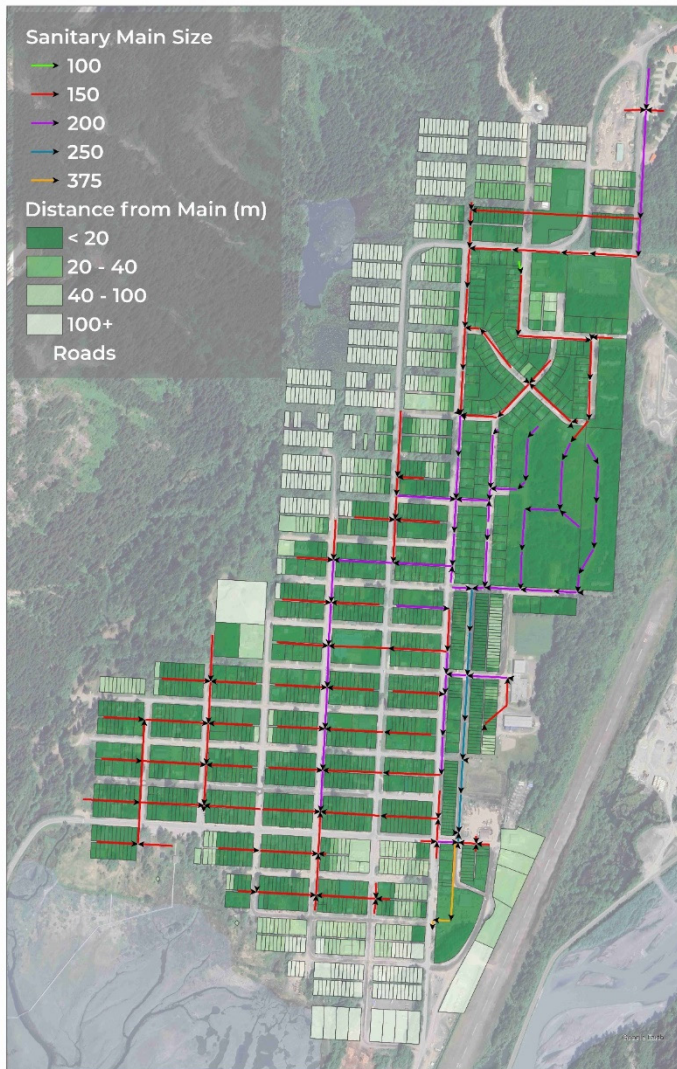
7.2.2 ANALYSIS

While the intrusion of groundwater and surface water is a system-wide issue, what has a more direct influence on the viability and preferences for housing development is the cost to provide sanitary sewer service to properties.

Extending service to a property increases the cost of development. This work involved considering how far a property is from an existing sewer main as an indicator of if providing sewer service will only involve extending a sanitary service pipe to the property or a minor pipe extension compared to if a more extensive sewer main extension would be expected.

7.2.3 DISTANCE TO SANITARY SERVICE

Figure 7.3: Sanitary Servicing Analysis



What does this map show?

Figure 7.3 presents the **distance of properties from a municipal sewer main.**

The lots coloured darker green have a sewer main within 20 m of property line, indicative of those lots having close access to a pipe to make a service connection. The lighter coloured properties would require a longer pipe extension to obtain sewer service.

Key Considerations

- The majority of the townsite, and all developed properties, are in close proximity to a sewer main.
- Reducing wastewater flows involves reducing the amount of potable water that is discharged to the sewer system as well as reducing the amount of inflow and infiltration that enters the system. The reduction of potable water use is a factor that customers can influence. Avoiding the discharge of private sump pumps is also a potential flow reduction, but that would come with capital investments to provide a storm sewer to provide an alternative discharge method. Reducing leaks and locations of inflow within the community collection system are investments that the District should continue to make.
- The further a property is from the existing collection system, the higher the likelihood that gravity service cannot be provided. If gravity service cannot be provided then a pumped system would be required, which would include higher cost of development on additional operations and maintenance investments over the long term.

8.0 TRANSPORTATION LENS

Transportation is a vital component of a complete community. It is important to build and maintain strong community connectivity between residential areas and daily needs, including roads and active transportation. Stewart does not have any public transportation options, and community members rely on roads, sidewalks, and the trail network to travel throughout the townsite. The transportation analysis component of this Plan aims to increase the quality and accessibility of active transportation options in the community in order to reduce vehicle reliance, which has associated benefits related to reducing greenhouse gas emissions and improving public health. This section examines the presence of adequate sidewalks in Stewart. The number of sidewalks is a common metric used for measuring walkability and transportation. Areas with large and well-connected sidewalks encourage pedestrian environments, which supports interaction with commercial areas and areas with employment and services.



8.1 EXISTING CONDITIONS

Sidewalks within Stewart are limited to along 5th Avenue and portions of Brightwell Street. Given the low traffic volumes, high snow loads, and rural nature of Stewart, there is a limited desire amongst District staff and residents for a more fulsome sidewalk network outside of these areas. It is noted however that while the sidewalks in the downtown core are in excellent condition, the sidewalks extending north from the downtown along Brightwell Street are in various states of disrepair (see Figure 8.1). Since Brightwell Street is an important pedestrian corridor linking the downtown core to the health centre and key civic buildings (District office and museum), consideration should be given to improving the sidewalks along this street.

Another potential area for improvement is the crossing of Conway Street, which also Highway 37A and the main thoroughfare through the community. As noted in the walkshed analysis for the Bear Valley School in Section 6.2.6, a large portion of the residential lots within the townsite are located west of Conway Street, resulting in some students crossing the highway when walking or biking to school. There is currently only a single controlled crosswalk in Stewart, located at the intersection of Conway Street and 12th Avenue. While this crosswalk was installed to promote safe passage to and from the former elementary school, it is not well positioned to serve the current school. Consideration should be given to the installation of a second controlled crosswalk along Conway Street, preferably at 9th Avenue, to better accommodate the safe passage of students to and from the Bear Valley School.

Figure 8-1: Sidewalks on Brightwell Street



Other key considerations related to transportation in Stewart include the following.

TRAIL NETWORK PLAN

The District is currently undertaking a Trail Network Plan, which was informed through community engagement and site visits. In addition to an inventory of the existing network, this plan includes proposed improvements.

DOWNTOWN ACTION PLAN

In 2023, the District undertook a Plan for the downtown core (5th avenue). This Plan outlined several proposed actions items related to transportation, including:

- Provide sidewalks along 5th Avenue;
- Renew aging parts of boardwalk and add more trail links to downtown network;
- Provide a universally accessible connection from downtown to the ball diamond;
- Provide visible and safer pedestrian crossings on 5th Avenue;
- Connect trail from Rainey Creek Campground to downtown businesses;
- Introduce enhanced sidewalk treatments on 5th Avenue that reflect historical conditions with modern durable materials;
- Improve drainage on 5th Avenue;
- Improve lighting throughout downtown;
- Create year-round fire circle gathering space;
- Maximize width of sidewalks to allow retail and dining to spill outside; and
- Establish a Historical Walk connecting important historical buildings around the downtown and pathways.

WILDLIFE

One factor impacting walkability in Stewart is the presence of wildlife. Stewart, as well as neighbouring Hyder Alaksa, are renowned for their bear viewing opportunities. Grizzly and black bears are often seen within the Stewart townsite. So, while active transportation is encouraged, there are unique precautions that need to be considered during times of the year when bears are active.

WINTER WEATHER

Extreme temperatures and snowfall in the winter pose barriers to walkability in the winter months. On average, 572 cm or 18.75 feet of snow falls in Stewart each winter. Snow, ice, and extreme cold are common conditions in the winter.

ROAD IMPROVEMENTS

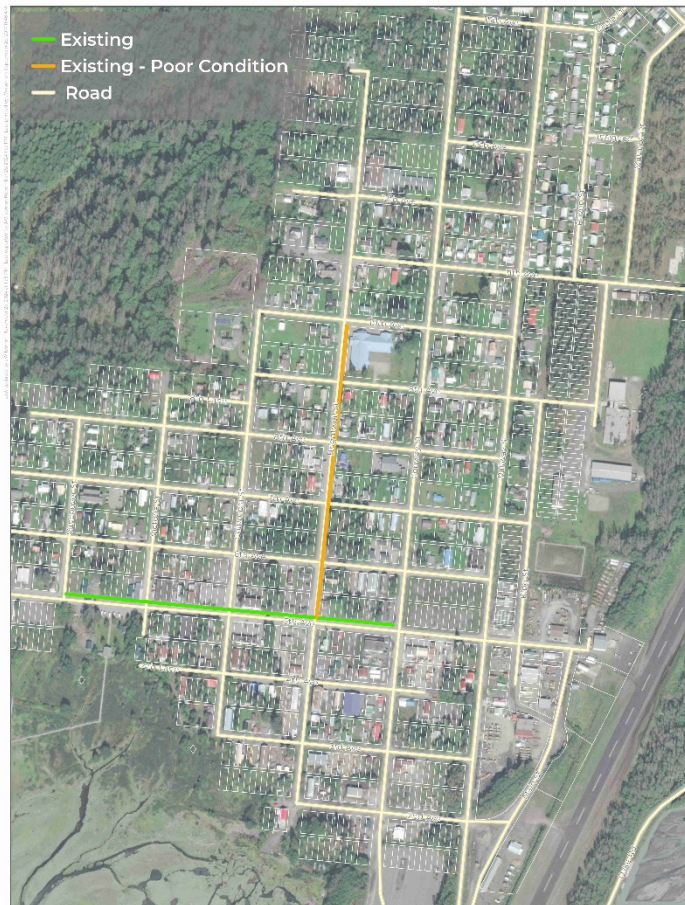
Some roads adjacent to the downtown are gravel. If a densification or redevelopment of the downtown is to occur, it may provide an opportunity to pave these roads.

8.2 ANALYSIS

Active transportation was examined using a sidewalk analysis. The total length of roads with a sidewalk on at least one side was identified. Given that the sidewalks along Brightwell Avenue are in various stages of disrepair and not entirely functional, they were not included in the analysis. The ratio of the road network with at least one side of sidewalks was found to determine walkability.

8.2.1 RESULTS

Figure 8-2: Existing Sidewalks in Stewart



What does this map show?

Figure 8.2 shows **existing sidewalks** in Stewart. The sidewalk network in Stewart is limited, and as a result only 529.69 metres of road have a functional sidewalk on at least one side. This represents approximately 2.23% of the road network within the townsite.

Key Considerations

- 5th Avenue, between Vancouver Street and Conway Street is the only street within the townsite with a functional sidewalk.
- While there is a sidewalk along Brightwell Street between 5th Avenue and 10th Avenue, it is in various stages of disrepair and not entirely functional. Given that this is a potential area for densification, including for seniors and those with mobility issues, the District should consider a reconstruction of this sidewalk.
- The 2023 Downtown Plan recommends an enhanced sidewalk from the downtown to the existing school and arena.
- Additionally, consideration should be given to the construction of a sidewalk along 9th Avenue between Brightwell Street and the Bear Valley School to facilitate a safe route to school. This would also include the installation of a controlled crosswalk at across Conway Street at 9th Avenue.

9.0 COMMUNITY COMPLETENESS SUMMARY

While Sections 5 through 8 provide an overview of the four lenses individually, this section aims to explore the relationships between the lenses to identify opportunities to make Stewart a more complete community. Analyzing and reviewing the four lenses together also provided an opportunity to identify specific initiatives that would provide the most benefit to the District and advance community goals. General observations based on this review are outlined below:

DENSIFICATION OF THE DOWNTOWN CORE

The downtown core is the heart of Stewart, containing the majority of the community's services and amenities, a waterfront pavilion and the community's only functional sidewalks. However, despite these attributes, the downtown has some of the lowest housing densities in the community. Analysis undertaken as part of this project identified that this area contains a significant number of parcels with a high redevelopment potential.

These factors provide the District with a unique opportunity to be proactive in the future planning and development of the downtown core. Increasing the housing density in this area will not only help to relieve existing and projected housing challenges, but will also contribute to the development of a vibrant downtown. This should also be coordinated with water main improvements as outlined in the Water Master Plan to ensure that sufficient fire flow is available.

ADDRESSING IDENTIFIED HOUSING NEEDS

Stewart's current Housing Needs Report identifies a specific need for housing for individuals with mobility issues, including seniors. Analysis undertaken to evaluate the daily needs and transportation lenses suggest that such housing would be best suited in and adjacent to the downtown core, specifically between 5th Avenue and 9th Avenue. This area is within a 5-minute walking distance to the health center and downtown. To facilitate passage in this area for those with mobility issues consideration should be given to the re-construction of the sidewalk along Brightwell Street.

GEOGRAPHIC DISTRIBUTION OF PARKS

The northern portions of the community, in the vicinity of Glacier Drive and Eagle Drive, has among the highest housing density in the Stewart townsite. This area however does not contain a park or other recreational facilities, with the closest park being an approximate 15-minute walk. This area does contain two parcels totaling 24 acres in size that have previously been identified for future development. If development is to proceed on these parcels, considerations should be given to the establishment of a neighborhood park.

DEVELOPMENT IN THE NORTHWEST

The District has previously identified the vacant Crown and fee simple lands along Conway Street in the northwest portion of the townsite as an area for potential future growth. While the housing analysis undertaken as part of this project did identify these parcels as having a high suitability for development, analysis under the daily needs, infrastructure and transportation lenses did identify some important considerations for development in this area, including:

- These parcels are not currently serviced with community water and sanitary infrastructure;
- Some of these parcels are a further walk from the downtown core, some community parks, school and the health centre; and
- Parcels to the west and north of Conway Street face various physical development constraints.

While these lands should still be considered for future development, encouraging infill development of serviced lots closer to the downtown core better promotes the development of Stewart as a complete community.

10.0 DEVELOPMENT SCENARIOS

Based on the key findings and recommendations outlined in Sections 5.0 through 9, several scenarios were selected to test the impact of each action or initiative. Testing scenarios is an important step in assessing which priority actions that will have the greatest impact on the community.

10.1 HOUSING: ZONING BYLAW AMENDMENTS (SMALL LOT DEVELOPMENTS)

The District's current Zoning Bylaw does not permit development on a single, standard Stewart lot. These standard lots are small in size (330 m²) and the current R1 (Residential Single Family) Zone outlines a minimum parcel size of 350 m². There has been discussion in the community regarding amending the Zoning Bylaw to permit development on these smaller lots, however District staff and residents are apprehensive about such an amendment. Concerns raised focus primarily around changes to neighbourhood character in permitting such an increased density. Concerns were also raised about snow storage since providing driveway access to such narrow lots will provide minimal road length along those properties to store snow.

This scenario aims to evaluate the potential density impacts in permitting development on these small parcels. The base case scenario is based on the current zoning and assumes that two side-by-side, vacant small-lots would need to be consolidated in order to be developed. The test scenario assumes all vacant residential small lots could be developed. The results are illustrated on Figure 10.1 and Figure 10.2.

In the base case, potential new single unit homes are calculated under the existing Zoning Bylaw. Parcels facing significant development constraints, including steep slopes, high avalanche risks or those overlapping with water features, were filtered out of the analysis. Because there are 572 developable, vacant small lots that border another small lot, 286 additional houses could be built on the consolidated small lots, and an additional 31 units on regular vacant parcels. It was assumed that of the new residential developments, approximately 7% would incorporate a secondary suite such as a basement suite or garden suite, which would account for 22 additional units.³

In total, the base case has the potential to support the development of 317 new housing units.

The scenario map shows the potential for new residential development if the Zoning Bylaw was amended to permit small-lot developments. There are 628 existing, developable vacant small lots that would result in 628 potential new housing units and an additional 43 units if 7% incorporated a secondary suite. In total, this scenario has the potential to support 671 additional housing units.

As noted in Section 5, the District's 2024 interim Housing Needs Report identified a 5-year housing need of 34 units and 20-year need of 66 units. These projected needs can be met under either small lot scenario. It is recommended that this analysis be used to inform community discussions regarding small lot development in Stewart through the 2025 Official Community Plan and Zoning Bylaw updates.

³ There is no available data to indicate how much demand there would be for secondary suites, however, statistics show urbanized communities in Northern BC have 7-8% of the occupied housing stock as apartment or flat in a duplex (e.g. 7% in Terrace, 8% in Prince George).

Figure 10-1: Small Lot Development – Base Case Map Analysis

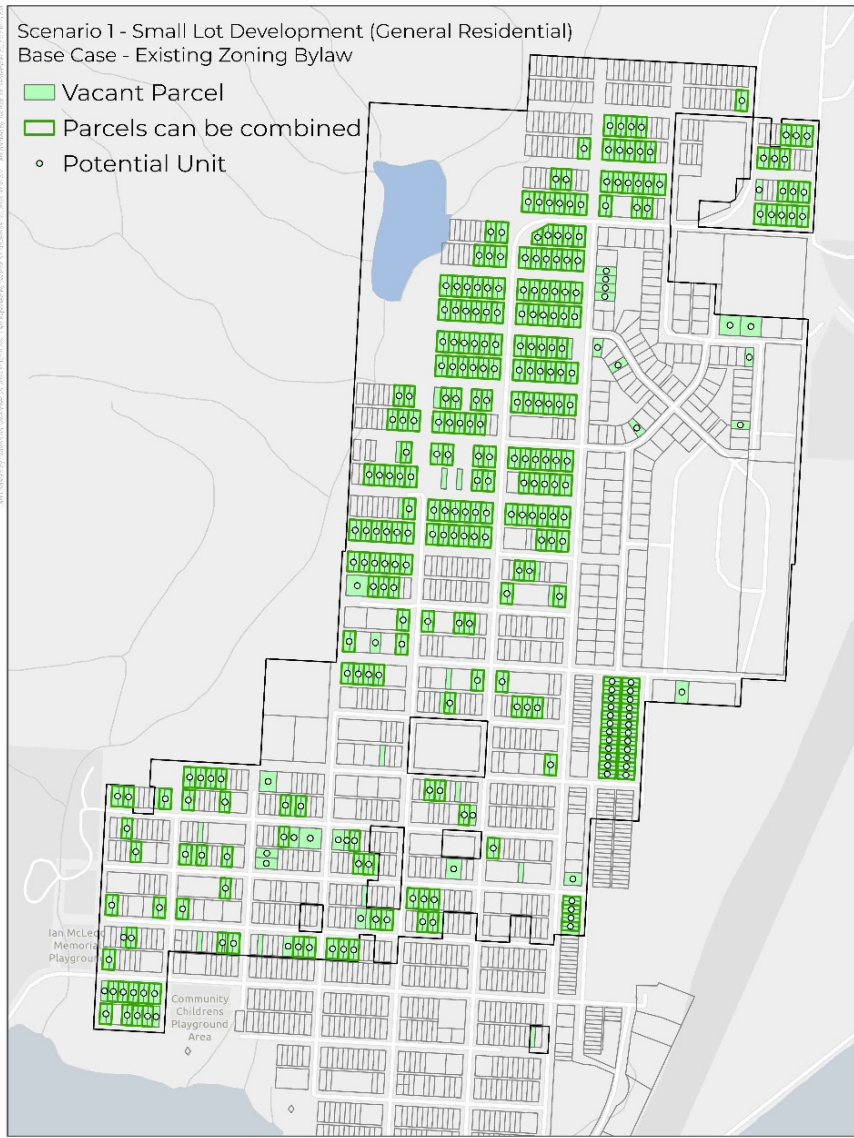
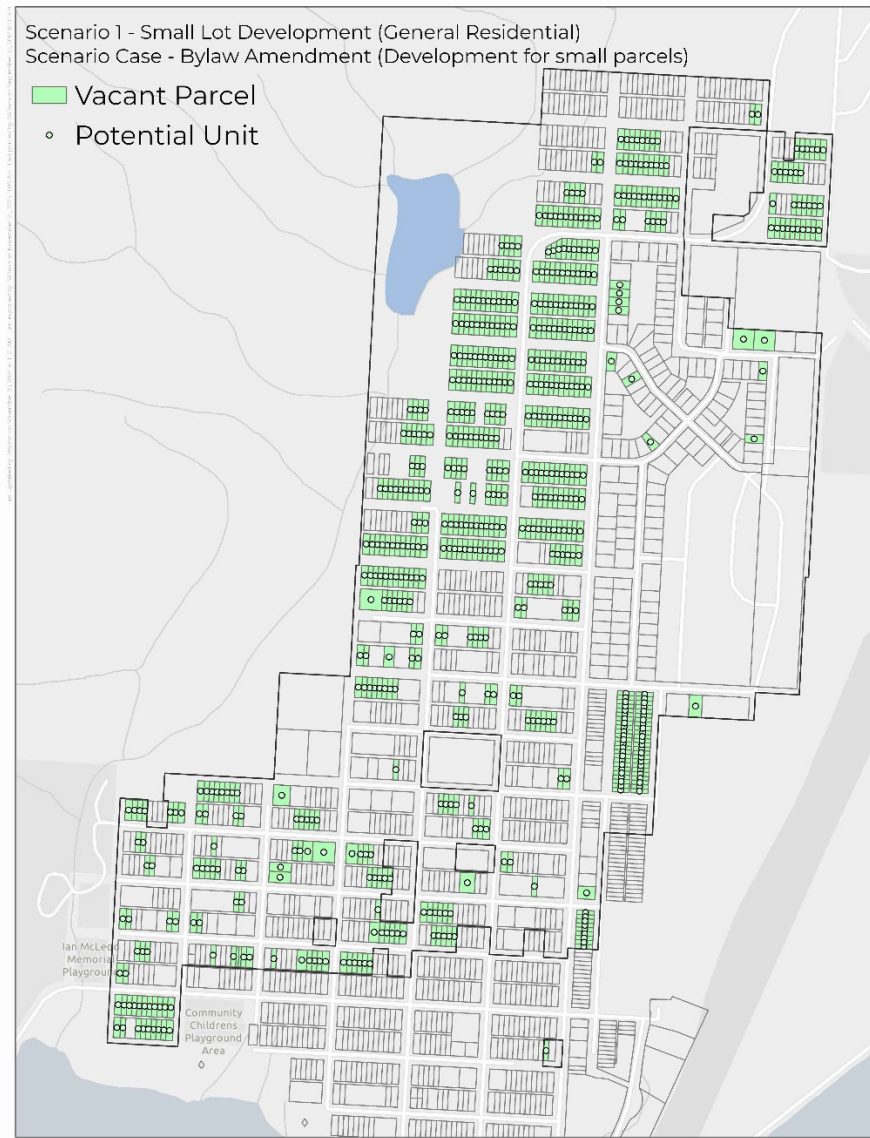


Figure 10-2: Small Lot Development – Scenario Map



This analysis does not consider all site specific factors that may constrain development and the actual developability of a given parcel will need to be confirmed on a case-by-case basis.

10.2 HOUSING & DAILY NEEDS: REDEVELOPMENT OF THE DOWNTOWN (TOWNSITE COMMERCIAL)

A densification of the downtown core is supported through the housing, transportation and daily needs analysis undertaken as part of this project. Encouraging the construction of higher density housing in and adjacent to the downtown area is also a policy outlined in the District's OCP. This area currently has one of the lowest housing densities within the townsite, despite the several positive attributes. This scenario explores increasing the housing density of the downtown core north of 5th Avenue.

The land development suitability analysis identified several parcels in the downtown core, north of 5th Avenue, as having a high redevelopment suitability ranking. Some of these parcels are currently vacant. This scenario explores potential impacts in the development of these vacant lots.

The current density of the of the subject area as outlined in Figure 10.3 varies between 1 to 4 units per hectare. A scenario was run in which the vacant lands in this area were developed at a density of 40 units per hectare, which is consistent with the District's Zoning Bylaw. The analysis results include the addition of 40 new units in the downtown core, shifting the housing density of the area from one of the lowest in the townsite to one of the highest.

Figure 10-3: Base Case: Redevelopment of the Downtown Commercial

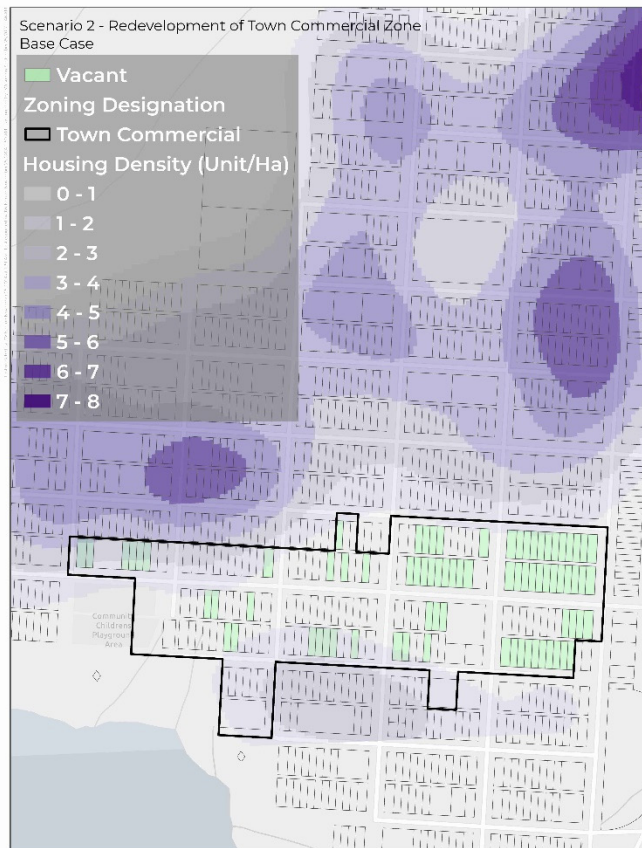
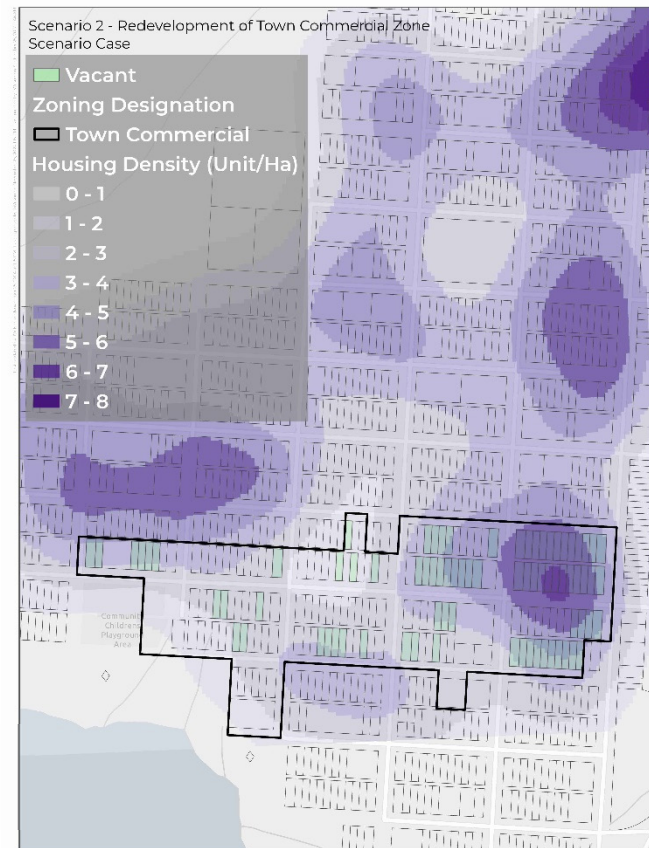


Figure 10-4 Scenario Case: Redevelopment of the Downtown Commercial



Additional
Residential Units:
40 @ 40 units/ha

10.3 HOUSING & DAILY NEEDS: REDEVELOPMENT OF THE DOWNTOWN (GENERAL COMMERCIAL)

The lands south of 5th Avenue as illustrated on Figure 10.5 are currently comprised of a mix of residential, commercial and industrial uses. Given the proximity of these parcels to the downtown core, there is a sentiment in the community that these lands would be better suited for mixed commercial and higher-density residential uses. The redevelopment of this area would require the providing other lands suitable for industrial uses. The OCP identifies the Highway 37A corridor north of the townsite as an area for a potential industrial park. Section 5.3.5 outlines potential lands for a potential industrial park along the highway. This scenario explores the potential redevelopment of the downtown core south of 5th Avenue.

The current density of the identified lands is approximately 1-3 units per hectare. For this analysis, it was assumed that 20% of the lands within the subject area would be redeveloped to a mix of commercial and residential uses. A density of 40 units per hectare was assumed based on the District’s Zoning Bylaw, resulting in an additional 36 units within the downtown core.

The potential risks due to tsunamis are not fully known and further assessments are required prior to promoting higher density developments in this area.

Figure 10-5: Base Case – Redevelopment of the Downtown General Commercial

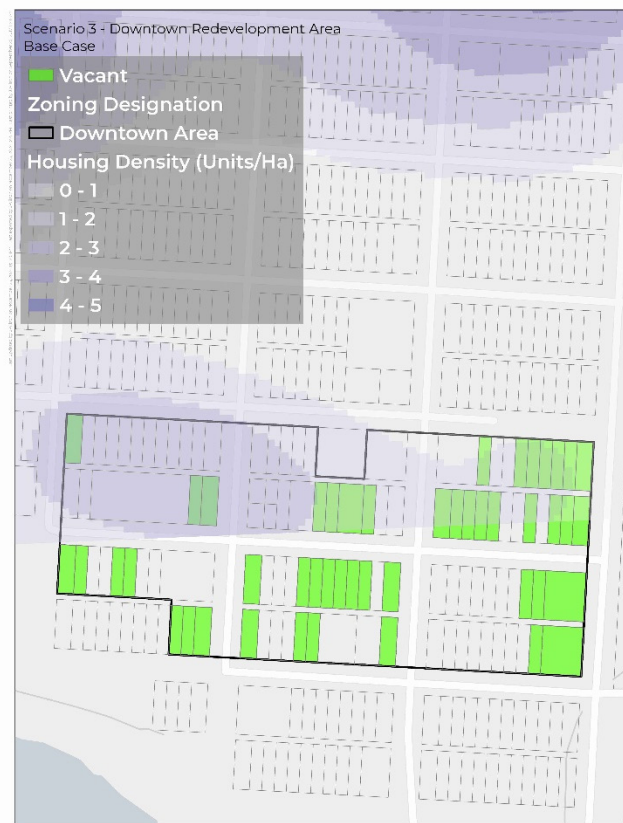
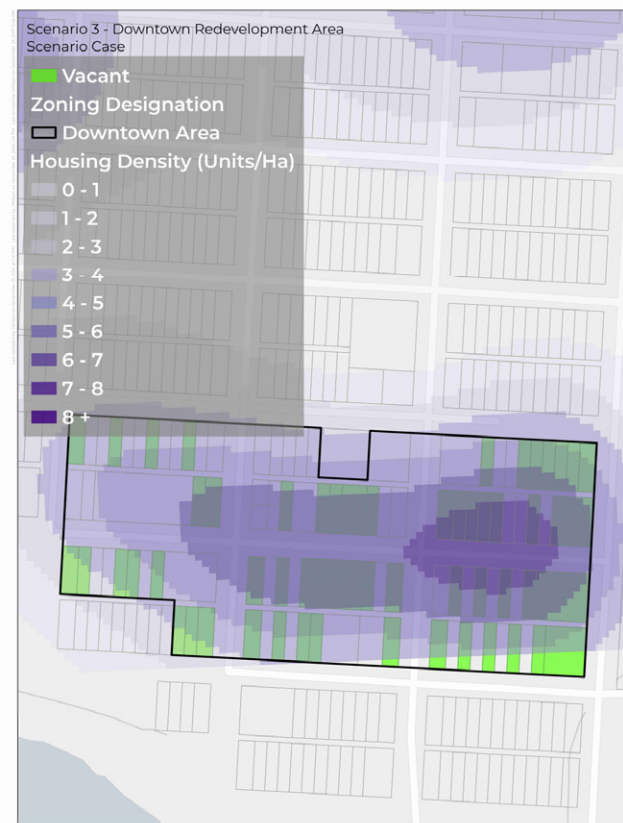


Figure 10-6: Scenario Case – Redevelopment of the Downtown General Commercial



Additional Residential Units:
 36 @ 40 units/ha

10.4 INFRASTRUCTURE: WATER DISTRIBUTION SYSTEM IMPROVEMENTS

The impact of completing water main upgrades as noted in the District's Water Master Plan were tested to identify the extent of the community that can be provided with additional fire flow. This scenario involved comparing existing conditions to system hydraulics after the identified water mains were in place.

Figure 10-7: Base Case – Existing Fire Flow

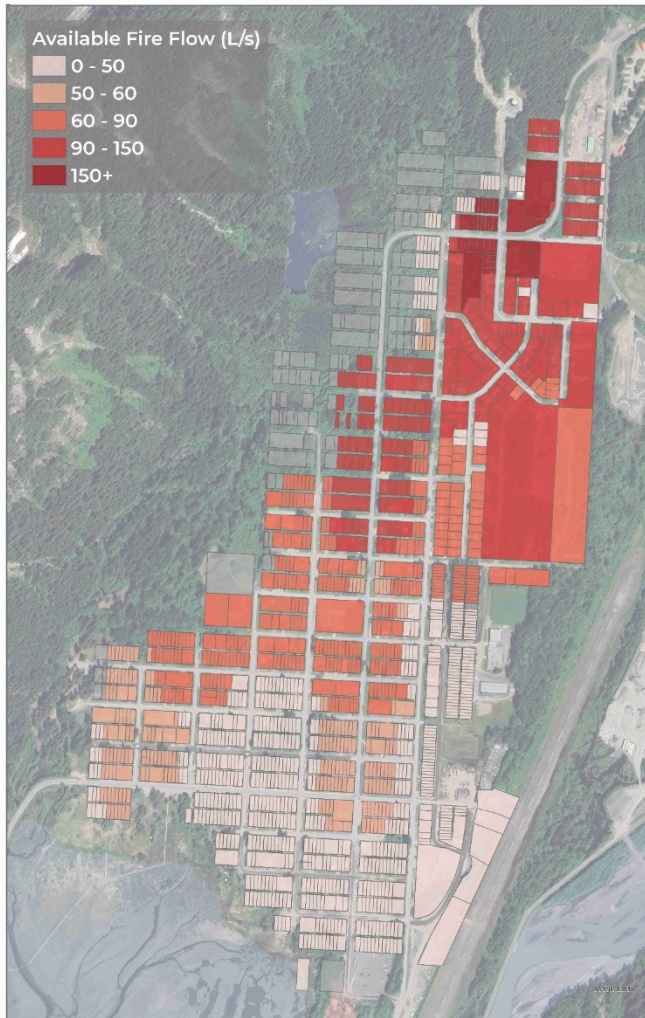
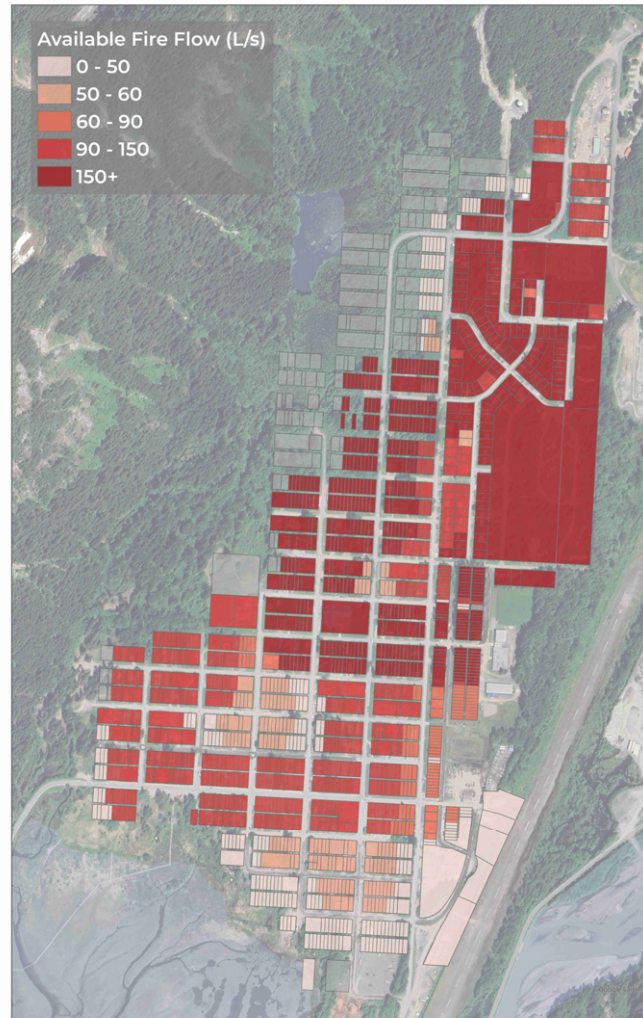


Figure 10.8: Upgrade Scenario – Resulting Fire



The upgrade scenario identifies that the proposed piping upgrades will provide at least 90 L/s of fire flow in key community areas, such as the downtown and near the school.

Additional scenarios were also developed to determine if fire flow could be further increased in portions of the community, such as properties fronting 4th Avenue and those fronting 7th Avenue. It was concluded that additional fire flow could be achieved in those locations, but it would require additional piping upgrades.

The watermain upgrades proposed in the Water Master Plan are therefore recommended to provide a significant fire flow benefit to the community. Should additional fire flow be justified for some other areas, the review of those development needs should consider additional water main upgrades.

10.5 TRANSPORTATION: WALKABILITY IMPROVEMENTS

The existing functional sidewalk network in Stewart is limited to 5th Avenue. The 2023 Downtown Plan proposed the development of an enhanced sidewalk from downtown to the arena/Bear Valley School area. To facilitate safe routes to schools and the development of a pedestrian corridor between the downtown and health centre, this project recommends the consideration of sidewalk construction along Brightwell Street and 9th Avenue, and further east on 5th Avenue and King Street. This scenario evaluates the impact these proposed sidewalk improvements would have on walkability in Stewart.

The sidewalk improvements as outlined on Figure 10.10 result in the replacement of 475 metres of sidewalks, and 830 metres of new sidewalks, increasing the proportion of streets with adequate sidewalks on at least one side from 2.23% of the townsite roads to 5.49%.

It is noted that the District's Subdivision Bylaw does require sidewalks be constructed as part of new developments. This requirement should be reviewed during the next bylaw update to ensure it reflects the current desire and expectations of the District.

Figure 10-9: Base Case – Walkability Improvements

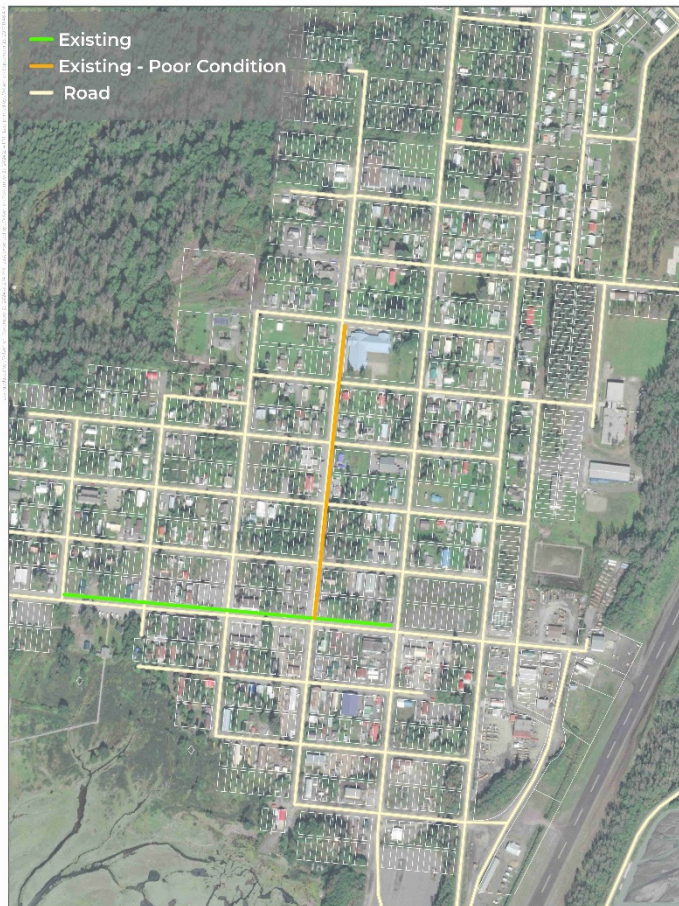


Figure 10-10: Scenario Case – Walkability Improvements



11.0 RECOMMENDATIONS

The following are key recommendations and actions resulting from this analysis.

LAND USE PLANNING

- Leverage the 2025 OCP and Zoning Bylaw updates to engage the community regarding:
 - Permitting development on the community's small lots (9 metres wide by 36.5 metres deep)
 - Densification / rezoning of the downtown
 - Establishment of an industrial park along the highway corridor
 - Increasing the permitted densities in the community to support more mixed-use and multi-family developments
- Consider developing a Development Cost Charges (DCC) bylaw to fund necessary infrastructure improvements required by development projects.
- Revisit the requirement for sidewalks in new developments during the next update of the District's Subdivision Bylaw.
- Finalize and Implement the Trail Network Plan.
- Implement the Downtown Revitalization Plan.
- Implement the recommendations as outlined in the District's 2020 Housing Needs Report and 2024 interim Housing Needs Report update.

CAPITAL UPGRADES AND INFRASTRUCTURE

- Complete key water main extensions to improve fire flow and to provide water service to lots as they develop
 - The District should consider the extent to which the cost of water system extensions are borne by the development community
- Reduce inflow and infiltration into the sanitary sewer system, which will provide capacity to service additional development
- Undertake improvements to the District's sidewalk network including:
 - An enhanced sidewalk between 5th Avenue and the arena and school
 - Sidewalk reconstruction along Brightwell Avenue to facilitate pedestrian movement between the downtown and the health centre
 - A controlled crosswalk across Conway Street/Highway 37A, preferably at 9th Avenue

COLLABORATION WITH THE NISGA'A

- Utilize the Community-to-Community discussions in the Spring of 2025 to gain a better understand of the Nisga'a Nation's vision and plans for Stewart, as well as outline how they would like to be involved in future District planning initiatives.

CROWN LAND ACQUISITIONS

- Consider submitting a Provincial Crown Land Tenure application to facilitate housing developments in the Stewart townsite and industrial developments along the Highway 37A corridor
- Further explore the feasibility and suitability of Crown land within Stewart to meet the future land needs of the District.
- Consider undertaking a land acquisition strategy which includes a technical analysis of the potential parcels for acquisition , as well as establishes a land sale, development phasing, cost recovery and servicing strategy. This strategy would also include extensive engagement with local residents, First Nations, and relevant stakeholders.

INCENTIVIZING DEVELOPMENT

- Explore the reasons for the lack of development in Stewart and evaluate the interest and feasibility of establishing incentives to encourage homeowners to contribute to increasing the housing stock. This may include:
 - a secondary suite incentive program
 - municipal revitalization tax exemptions
 - developing educational materials to promote secondary suites;
 - a grant program which incentivizes property owners to develop their lands
 - density bonusing for affordable units
 - facilitating/working with housing providers
- Evaluate options for a communal approach to bringing and keeping housing construction and maintenance services in the community (such as roofers, furnace repairs, and other home maintenance), with the aim of sharing costs between a variety of groups to reduce costs and make home maintenance more efficient and affordable.

COLLABORATION WITH INDUSTRY

- Engage local mining companies to better quantify their housing needs and mitigate the potential socio-economic impacts associated with an influx of workers to the community.
- Ensure on-going dialog with local industry to stay apprised of their plans regarding expansion of operations, status of operations, and potential need for worker accommodations.

DEVELOPMENT PROCESS CONSIDERATIONS

- Pursue funding to update and streamline the District's development approvals processes, bylaws and related materials.

PARTNERSHIP OPPORTUNITIES

- Explore partnerships with industry, non-profits and various government agencies, such as BC Housing and CMHC, with the aim of facilitating housing development in Stewart
- Work with property owners regarding the potential development of key vacant lands within the townsite.

ADDITIONAL DATA COLLECTION AND MONITORING

- Continue to undertake studies and assessments to ensure future development in Stewart considers, and mitigates against, the risks associated with the various natural hazards present in the community, including tsunamis, flooding, steep slopes and avalanche.
- Continue to pursue the dredging of the Bear River as a means of reducing the flood risk in the community.