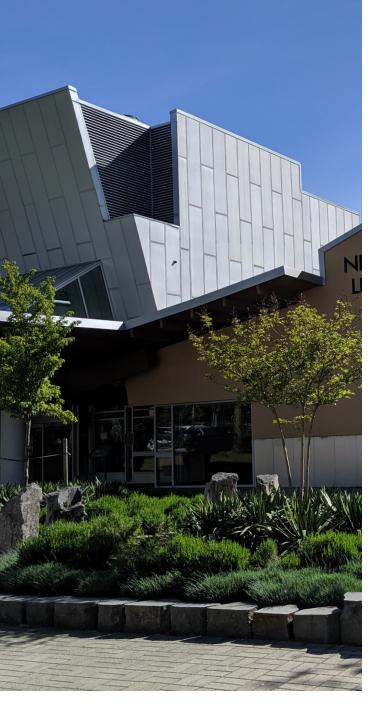
Newton Town Centre Plan









Newton Town Centre Plan Planning and Development, Engineering, and Parks, Recreation and Culture City of Surrey 13450 104 Avenue Surrey, British Columbia V3T 1V8

Approved By Council June 2020



Contents | Finding Things

Plan Summary	
Introduction	3
Section 1: Background and Context	9
Section 2: Plan Framework	19
Section 3: Land Use	27
Section 4: Transportation	57
Section 5: Parks and Natural Areas	91
Section 6: Community Amenities1	05
Section 7: Utilities and Servicing	113
Section 8: Implementation1	23



Newton Town Centre I Plan Summary

Newton Town Centre Plan

Newton Town Centre forms a significant Urban Centre within the Metro Vancouver Regional Growth Strategy ("RGS"). It is the commercial, recreational, and cultural heart for the larger Newton community.

Originally adopted in 1990, the Newton Town Centre Plan was updated in 2020. The updated Plan focused on the portion of the town centre south of 72 Avenue.

The Plan represents a clear strategy to integrate land use and sustainable transportation systems, while addressing concerns around the supply of housing, support of local businesses and employment, and planning for community amenities and school capacity.



Did You Know?

WHAT'S A LAND USE PLAN?

Land use plans designate what can be built and where. They guide the height, use, and look of new buildings, as well as locations and funding for new streets, parks and other public services.

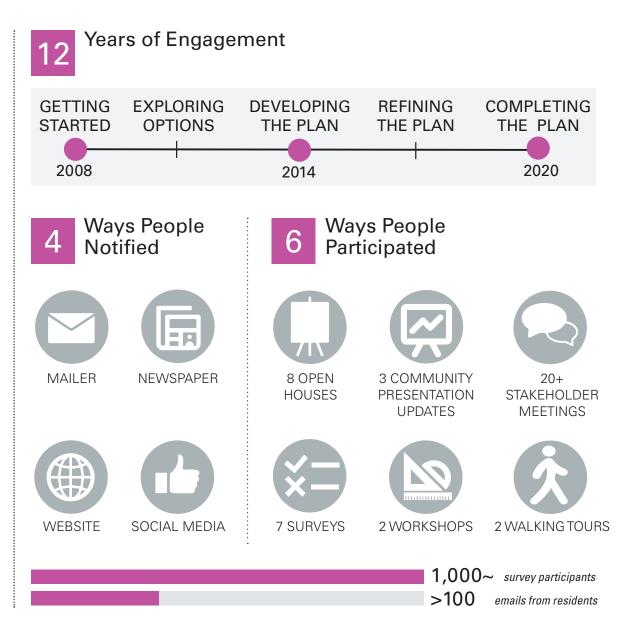
HOW WILLTHE PLAN IMPROVETHE NEIGHBOURHOOD?

Many public facilities and services are used daily by residents. These include community centres, cultural spaces, childcare facilities and libraries. When new development and rezoning occurs in an area with a land use plan, developers must make contributions to help fund these amenities. They are also required to upgrade sidewalks and other infrastructure.



Community Engagement

The planning process was supported through a comprehensive program of public and stakeholder consultation. A broad range of residents and stakeholders were consulted from across the Plan Area and the surrounding community. Here is a summary of outreach.



Growth Objectives

Growth is concentrated around the core and future rapid transit. Density and building heights transition away from the core towards the lower density periphery and existing neighbourhoods.

Core Areas

- Locate higher density close to future rapid transit.
- Establish mixed use with shops and services required at ground level and residential above.
- Preserve commercial core in the town centre.

Transition Areas

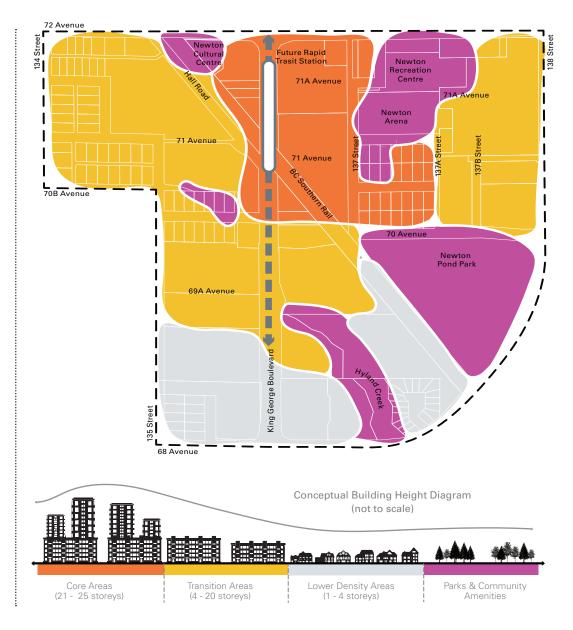
- Focus on multiple family residential.
- Transition density and building height from the core to lower density areas.
- Encourage a mix of housing types within walking distance of transit and amenities.

Lower Density Areas

- Maintain lower density commercial and residential in the southern portion of the town centre.
- Preserve neighbourhood character.

Parks and Community Amenities

- Establish environmental areas to protect wildlife and fish habitat.
- Reinforce key community and cultural facilities and services.



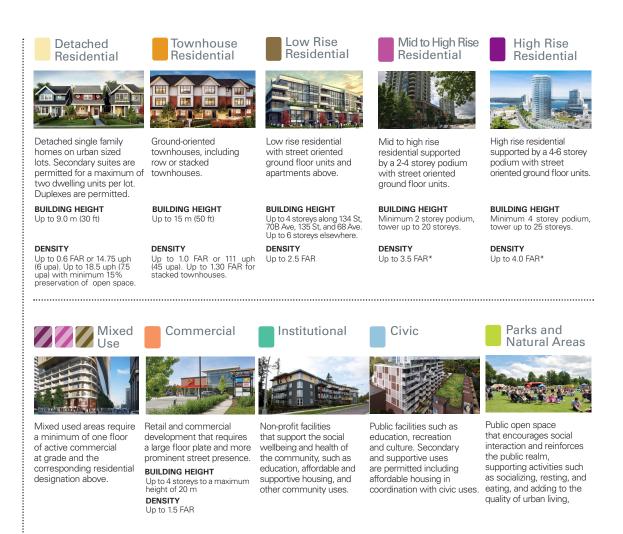
Newton Town Centre | Plan Summary

Land Use Strategy

The plan is centered on a mixed-use core, supported by a variety of commercial and civic uses. The highest densities are located around a future rapid transit station on King George Boulevard. Medium and lower density mixeduses transition away from the centre and are located along arterial roads where frequent pedestrian traffic is expected.

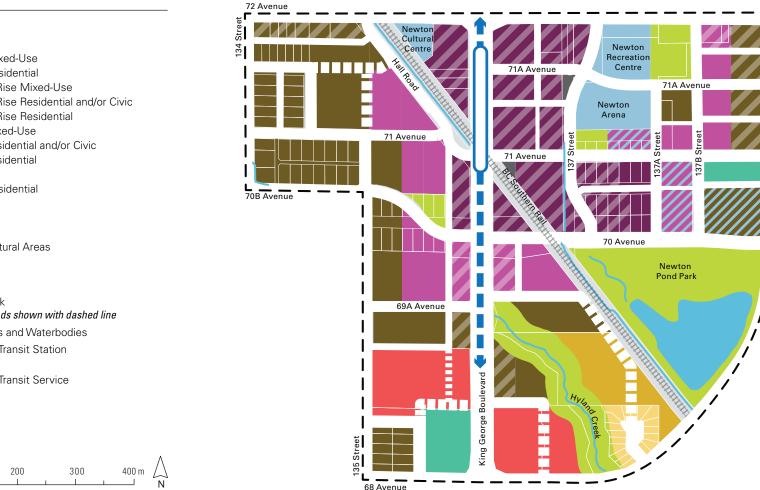
New land uses are supported by a finer-grained and pedestrian friendly street network which serves local businesses and services, and offer a variety of public gathering spaces that encourage social cohesion and helps build community wellbeing.

Land use designations define future land uses that the City will encourage over time. Each land use designation outlines what may be possible on sites with that designation. They provide a clear intent and development parameters to guide future growth.



Building height and density may be increased in certain designations where additional community benefit is being provided in accordance with City policies. See Section 3 for details.

Newton Town Centre | Plan Summary



Legend Land Uses High Rise Mixed-Use High Rise Residential Mid to High Rise Mixed-Use Mid to High Rise Residential and/or Civic Mid to High Rise Residential Low Rise Mixed-Use Low Rise Residential and/or Civic Low Rise Residential Townhouse Detached Residential Commercial Civic Institutional Parks and Natural Areas Plaza Other Features Road Network Long Term Roads shown with dashed line Watercourses and Waterbodies Future Rapid Transit Station

Location TBD Future Rapid Transit Service Route TBD



Transportation Strategy

The Plan proposes new roads, transit, cycling and pedestrian connections to create a walkable town centre accessible by various modes of transportation.

The future road network will be a finer-grained grid road network to support walkability, well-connected cycling infrastructure, and convenient access to transit. It also provides alternative route options that help disperse traffic and decrease congestion, improving access to and from the town centre and connectivity within the town centre. Green lanes have been added throughout the plan area. Green Lanes include a sidewalk and boulevards to encourage both pedestrian and service vehicle connections. With grass and trees, they provide added greenery and opportunities for storm water absorption. Green Lanes also create smaller blocks which allow for increased walkability throughout the plan area.

Legend

	Arterial
	Collector
	Local
	Green Lane
	Pedestrian Street
	Green Connector
••••	Festival Street
	Future Rapid Transit Station
	Location TBD
	Future Rapid Transit Service
	Route TBD
Т	Future Transit Exchange

Long Term Roads shown with dashed line

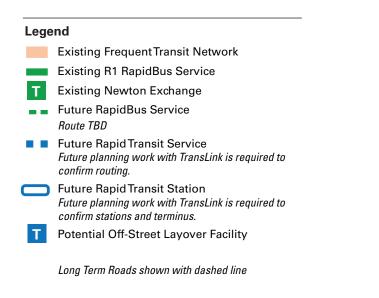


Newton Town Centre | Plan Summary

Transit Network

The future transit network includes various forms of transit, including future rapid transit, B-Line, and local bus service. In the long term, future rapid transit along King George Boulevard will connect City Centre to Newton Town Centre and potentially beyond towards South Surrey. A future rapid transit station along King George Boulevard better facilitates this connection.

In the interim, upgrades are planned for the existing 96 B-Line bus service that runs from the town centre to City Centre.





Cycling and Pedestrian Network

All roads within the plan are planned to be Complete Streets with wider sidewalks on both sides. Arterial and collector roads will also have one-way protected cycling facilities on both sides. The Complete Street approach will both encourage active transportation trips within the town centre and improve comfort and safety for vulnerable road users which is a key safe systems principle of Vision Zero Surrey.

In addition to the on-street pedestrian and cycling network, the plan includes off-street multi-use pathways and park pathways to further improve connectivity throughout the plan.

Legend



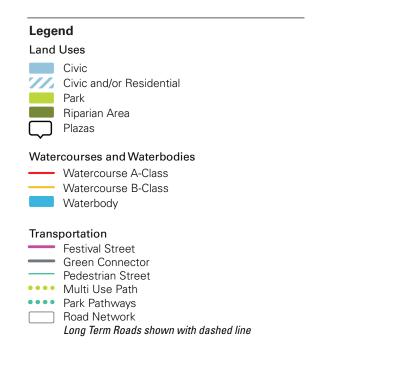
Long Term Roads shown with dashed line



Parks and Community Amenities

The Plan includes a range of new parks and community amenities, including enhancing the existing central community park, and adding small pocket parks and plaza spaces. The Plan also calls for the protection of riparian areas around the headwaters of Hyland Creek, which is an important fish habitat. This riparian area will be secured and protected as parkland as land is developed.

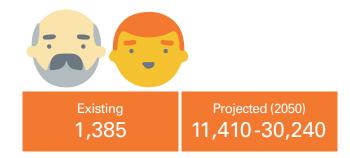
In the future, all residents will be within a short walk of a park. Parks and open spaces will be linked by a network of pedestrian and cycling routes that feature extra wide sidewalks and separated cycle tracks. In the long term, the Newton Ice Arena will be expanded into a new community centre, the existing Wave Pool will be expanded to include additional aquatic amenities, and the Newton Library will be expanded or redeveloped to provide more space for a growing community.





Population Projections

The Plan will accommodate considerable population growth over several decades. However, given current market conditions it is acknowledged uptake of new development will be slow, and may require a catalyst such as rapid transit investment. As such, annual growth rates are challenging to forecast. Assuming eventual build-out over many decades, the plan could result in up to 30,240 residents. To accommodate this increase in population the plan designates additional parkland and envisions new community amenities.



Housing Projections

The plan supports housing diversity within the broader Newton community by providing apartment and townhouse opportunities. High-rise mixed use and mid-rise apartments will support the intent of the plan by attracting new residents and supporting new and existing local businesses. Transitional mid and low-rise development will provide a buffer between the core area and lower density residential neighbourhoods. A greater variety of housing will support a full range of housing needs within walking distance of the core. In total, the number of dwelling units will increase from the existing 445 (2020) up to 13,700.



Newton Town Centre | Plan Summary

Employment Projections

The plan supports local business by adding residents and providing new commercial space. Mixed-use development within the core area will provide commercial retail units at street level with potential office or institutional uses above. Commercial lands along King George Boulevard, and north of the plan area, will continue to provide a diverse range of services that leverage the Town Centre's central location in Surrey. The area will evolve to support new institutional and commercial uses that will support the intent of a vibrant and active town centre. Total jobs within the plan area will more than double from the existing 1,310 (2020) to almost 3,235.



Active Parkland Projections

The Plan includes enhancing the existing Newton Pond Park, expanding "The Grove" into a larger park, and adding two new mini neighbourhood parks. The Plan also includes small public plazas to support retail and recreational uses, and active and vibrant streetscapes. Together, these active park sites total approximately 6.7 hectares (16.5 acres), located to ensure all residents are within a short walk of parkland.



"Looks good, something for everybody..."

Online Survey Response, Newton Town Centre Plan Process, 2018-2019

Introduction Why a plan for Newton?

SECTION 1

SECTION 2 SECTION 3

SECTION 4

SECTION 5 SECTION 6

CTION 7 SECTION 8

The Newton Town Centre Plan has been developed through extensive community consultation, with support from residents, stakeholders, agencies, and City staff. The intent of the plan is to guide the development of a vibrant, compact, and transit-oriented town centre over the next 30 years. The original Newton Town Centre Plan was approved in 1990 to coordinate growth and reinforce the area's unique role as a community and civic hub. The 2020 plan is a contemporary update. It reflects the original intent of fostering a community and civic hub, while presenting updated land uses, infrastructure and amenities to support another 30 years of growth.

The plan is organized into the following sections:

- **1. Background & Context** provides an overview of the planning context and process.
- **2. Plan Framework** provides the shared vision, guiding principles, growth concept and projections.
- **3. Land Use** outlines each land use and associated design guidelines.
- **4. Transportation** outlines new road connections and active transportation initiatives.
- 5. Parks & Open Space identifies parks and natural areas and outlines development considerations.
- **6. Community Amenities** identifies recreation and cultural amenities, schools, and libraries.
- 7. Utilities & Servicing details infrastructure improvements.
- **8. Implementation** outlines policies and financing required to build out the plan.

POLICY CONTEXT

Planning in Surrey is guided by the Official Community Plan (OCP) and the Sustainability Charter. Both provide the policy framework for growth and translate the broader direction from Metro Vancouver's Regional Growth Strategy (RGS).



OFFICIAL COMMUNITY PLAN

"The City of Surrey will continually become a greener, more complete, more compact and connected community that is resilient, safer, inclusive, healthier and more beautiful."

The OCP identifies five long-term sustainability goals to help address the challenges of urban growth, climate change and demographic shifts:



LONG-TERM SUSTAINABILITY GOAL 1:

Accommodate population growth by maximizing the efficient use of urban land while minimizing the impacts of change in existing neighbourhoods.

LONG-TERM SUSTAINABILITY GOAL 2:

Improve the balance of local jobs to population to reduce commuting time, traffic congestion, greenhouse gas emissions, and the burden of property taxes on residential properties by diversifying the local tax base.



LONG-TERM SUSTAINABILITY GOAL 3:

Reduce automobile reliance by re-orienting land use patterns to include higher density, mixed use developments with access to transit, cycling and walking.

LONG-TERM SUSTAINABILITY GOAL 4:



Promote a compact urban form that supports transit while reducing costly infrastructure extensions and avoiding development in environmentally sensitive areas.

LONG-TERM SUSTAINABILITY GOAL 5:

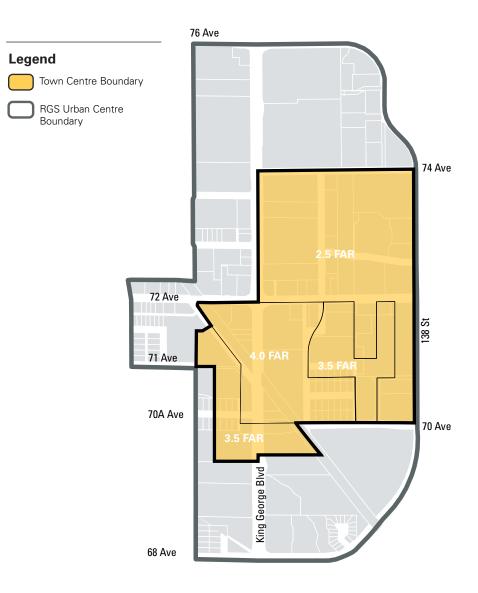
Serve the needs of the city's population by providing housing diversity and community programs to support all ages and socio-cultural groups.

4 I CITY OF SURREY

REGIONAL GROWTH STRATEGY

The Regional Growth Strategy (RGS) provides direction for growth in the Metro Vancouver region. It designates Newton Town Centre as a Municipal Town Centre (Urban Centre). This designation denotes the area as a municipal and regional hub, intended to be one of the region's primary focal points for concentrated growth and transit service. Urban Centres are located within 800 m of a rapid transit station or 400 m of TransLink's Frequent Transit Network (FTN). They are typically characterized by high and medium density housing, services, and community and cultural activities oriented to the local needs of surrounding communities.

The Newton Town Centre plan boundary encompasses the south half of the Newton Municipal Urban Centre within the RGS. Future land use planning will incorporate the northern portion of the Urban Centre designation. The OCP densities have been updated to correspond with the land use designations within this plan.





CLIMATE CONTEXT

Newton Town Centre will grow and take shape within the context of a changing climate. As this planning process neared its final stages, the City declared climate change as an emergency, committed to reducing community-wide greenhouse gas emissions to net-zero before 2050, and began work to develop a new Climate Change Action Strategy to guide these efforts. The ongoing planning, design, and development of the community will need to account for this context by embedding low carbon resilience principles with guidance provided through the updated Climate Change Action Strategy (expected in 2021).

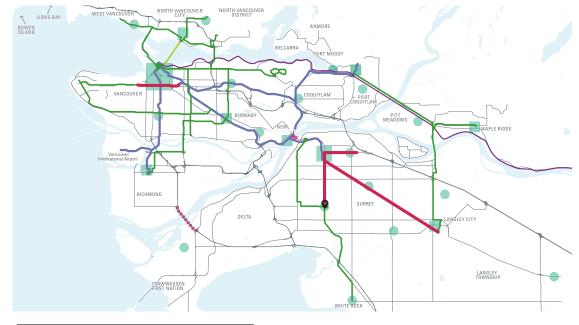
Top - Electric Vehicle Charging Station Bottom -Green Building

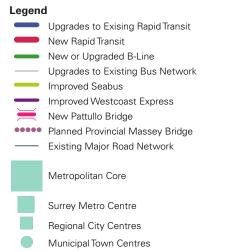
RAPID TRANSIT CONTEXT

Rapid Transit has been planned on King George Boulevard since the 1990's when Bus Rapid Transit was included in the Greater Vancouver Regional District (GVRD) Transport 2021 plan. In 2014, the Mayor's Council Vision identified 27km of New Rapid Transit on three corridors for Surrey, King George Boulevard, 104 Avenue, and Fraser Highway.

Currently the technology, timing, and implementation is still to be determined as part of the updated South of Fraser Rapid Transit Strategy.

This plan identifies and protects for Rapid Transit on King George Boulevard. In doing so the plan establishes the framework and rationale for transit oriented development.



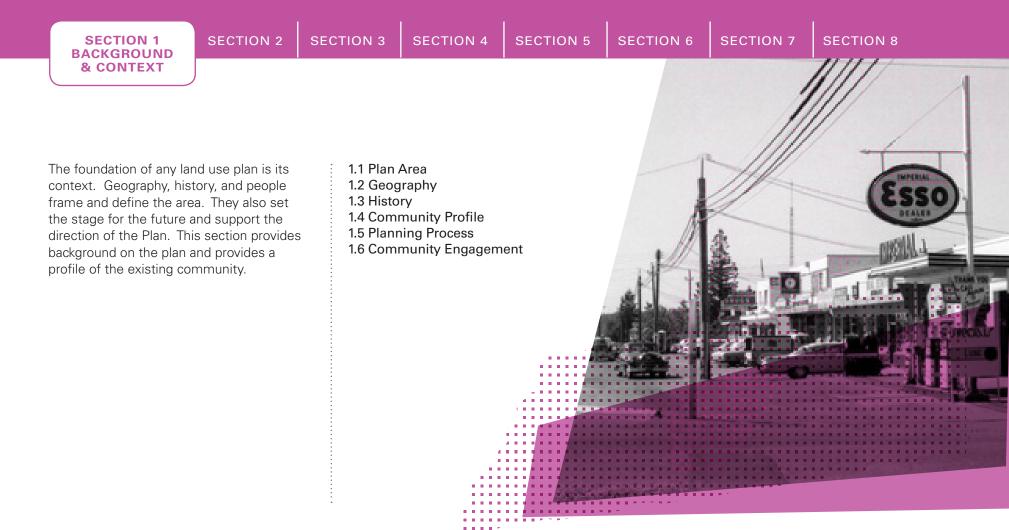


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"Newton needs a face lift. This plan looks great!!"

Online Survey Response, Newton Town Centre Plan Process, 2018-2019

1 Background & Context1 How We Got Here

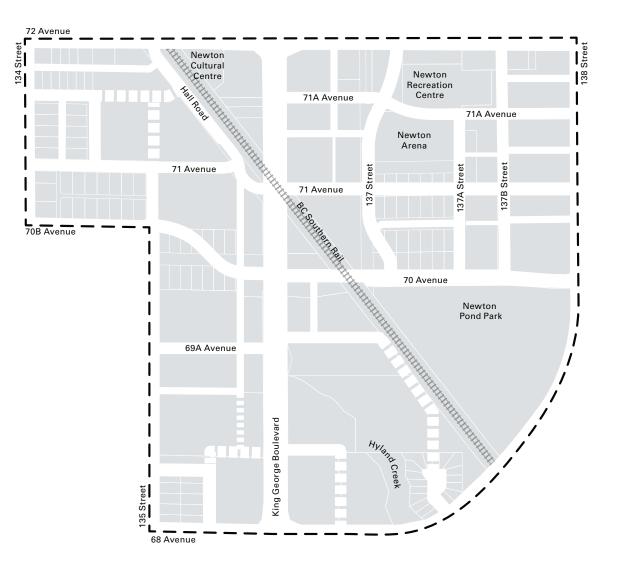


1.1 PLAN AREA

The Newton Town Centre plan area encompasses approximately 61 hectares (151 acres) on the west side of Surrey, bounded by 72 Avenue to the north, 138 Street to the east, 68 Avenue to the south, and 135 Street/70B Avenue/134 Street to the west.

The 2020 plan boundary encompasses the south half of the Newton Municipal Urban Centre identified within the RGS. Future updates to this plan, or a subsequent land use plan, will incorporate the northern portion of the Urban Centre designation.





1.2 GEOGRAPHY

The plan area is relatively flat, with a gentle downward slope in a southeasterly direction of less than 2% in most areas.

Hyland Creek is a fish-bearing watercourse that runs through the southern portion of the plan area. Other watercourses, which include ditches, channelized streams and ponds, run along the BC Hydro corridor, and into the constructed ecosystem within Newton Pond Park.

Newton Pond Park includes habitat areas surrounding a network of ponds that help manage stormwater and aid in flood protection. Together these streams and ponds are critically important for fish species throughout their life cycle.



Right - Newton Pond Park







1.3 HISTORY

The Newton area, like all other areas of Surrey and the Lower Mainland, is situated on the traditional territory of the Coast Salish people, including the Katzie, Kwantlen and Semiahmoo nations who have ancient and ongoing ties to this place.

This upland area of Surrey was once abundant with coniferous forest. As newcomer settlement began to take place in the late 19th century, logging and land clearing began to make room for farms, homes, and roads. Settlement increased considerably following the end of World War I. Settler farmers of the area were known as stump farmers, with homes, outbuildings, and crops built around and among the stumps which remained.

The area is named after Elias John Newton, a settler with a homestead along 72 Avenue (known as Newton Road, ca. 1890-1957) near 124 Street (southern boundary of Newton Athletic Park). The Newton name was more firmly recognized in 1910 following the establishment of Newton Station on the B.C. Electric Railway line. In 1914, Newton Elementary opened on the northwest corner of the intersection of today's King George Boulevard and 72 Avenue. This intersection would gradually become the main commercial district of the area, particularly after the completion of King George Boulevard in 1940.

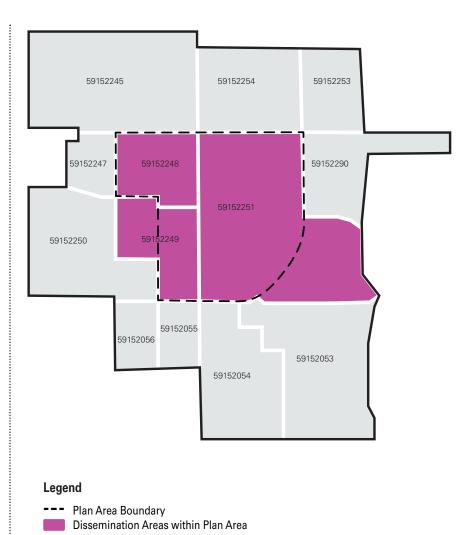
Numerous businesses opened in the vicinity of 72 Avenue and King George Boulevard, and gradually municipal services and amenities were established, including the Newton Library, Unwin Park, Newton Arena (1973), Newton Athletic Park, and Newton Wave Pool (1987). Princess Margaret Secondary School (1951) was the first high school to open in the area, followed by Frank Hurt Secondary School (1973). The population of the area began to increase substantially in the 1980s. In 2016 the broader Newton community was home to over 149,000 residents, making it the most populous community in Surrey.

Top - Fire Hall Number10, 1962 Middle - Newton School Crossing, 1951 Bottom - Newton Plaza, 1958 Right - King George Boulevard and 168 Street Looking South, 1962



1.4 COMMUNITY PROFILE

The plan area is not currently home to a significant population. Therefore, data was also collected from adjacent Census dissemination areas to help develop a demographics profile. Current demographic trends from this area include a slow growth rate, an aging population, and small household sizes. Based on the 2016 Census data the population grew at a much slower rate (5%) than the overall City (11%). The population increased from 10,060 in 2011 to 10,590 in 2016. The area also has a larger proportion of seniors age 65 and over (18%) than citywide (14%). The senior population increased 26% from 2011 to 2016. In addition, the area has a larger proportion of 1-2 person households (54%) than citywide (48%).



14 | CITY OF SURREY



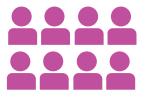
SMALLER HOUSEHOLDS

54% of households consist of 1-2 people compared to 48% citywide.



AGING POPULATION

18% of the population in the plan area are age 65 and over, compared to 14% citywide.



.

SLOW GROWTH

Population growth in the plan area grew by 5% between 2011 and 2016, compared to the City's overall growth rate of 11%.



MAINLY APARTMENTS

61% of residential units are apartments compared with 42% citywide. The remaining 39% is split between single family and duplex (18%), townhouse units (16%) and other (5%).

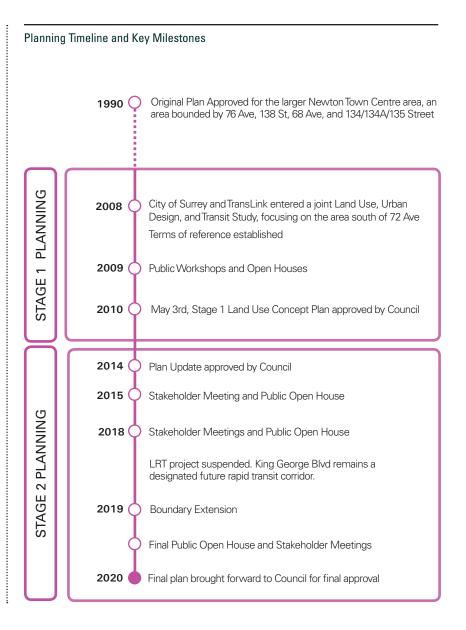
1.5 PLANNING PROCESS

The process of updating the Newton Town Centre plan was initiated by Council in 2008. It began with the City and TransLink undertaking a joint planning process to explore opportunities for transit-supportive development. The goal of the planning study was to develop a liveable, sustainable, transit-oriented urban centre for Newton, in concert with significant enhancements to transit facilities and services in the area.

The planning process included community engagement aimed at understanding the values and priorities of residents and stakeholders. Background analysis was conducted to evaluate and advise on transportation and economic conditions. These studies informed the Stage 1 draft land use plan, which was endorsed by Council in 2010.

Following Council endorsement of the Stage 1 Land Use Plan, the City and TransLink began early work on plans for improved transit service along King George Boulevard. This work culminated in 2013 with the adoption of the Regional Transportation Strategy (RTS) which confirmed a vision for future rapid transit for King George Boulevard to Newton. The RTS also established a principle of supporting rapid transit investment with employment and housing to support increased transit service.

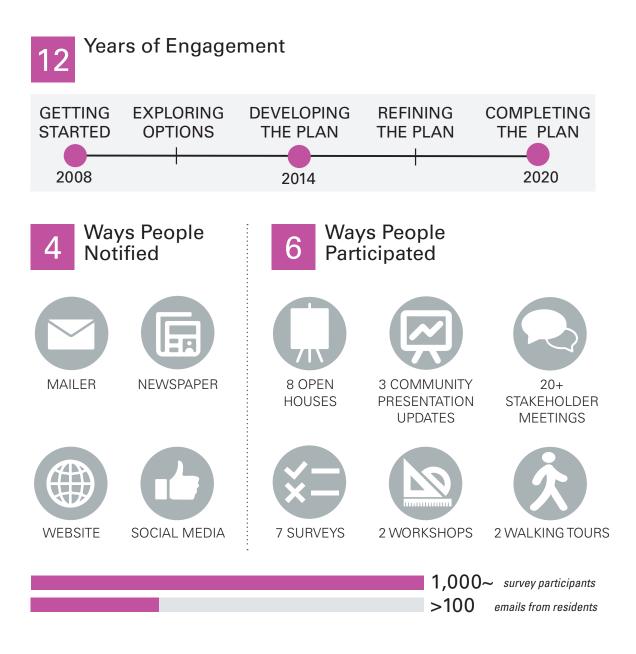
Finally, infrastructure servicing needs were identified based on proposed land use designations, and financing strategies, urban design guidelines and related policies and strategies were developed to support future development. The final plan was endorsed by Council in 2020.



1.6 COMMUNITY ENGAGEMENT

An integrated community and multistakeholder approach was used to identify and prioritize land use planning principles and decisions. A broad range of residents and stakeholders were consulted from across the plan area and the surrounding community. Engagement activities included open houses, online surveys, workshops, stakeholder meetings, inter-agency meetings and city advisory committee meetings.

Community input identified a strong desire to improve public safety and perception of safety, and to do so through improved civic facilities, services and programs. There was a clear desire to encourage and support more local business and new mixed use development to create a vibrant centre for Newton. Parks and recreation opportunities also ranked high among community priorities. Other desires included improved cycling and pedestrian infrastructure and streetscape improvements, such as public arts, plazas and urban design elements.



"Growth should be within walking distance to the future rapid transit."

Online Survey Response, Newton Town Centre Plan Process, 2018-2019

2 Plan Framework | What We Did







2.1 VISION

The vision statement embodies the values and priorities of residents and stakeholders as well as the City's growth and sustainability goals.

"Newton Town Centre is a safe, thriving, complete, transit-oriented community. It is green with its protected creeks and park spaces. It minimizes impact on carbon pollution and is designed to be resilient in the context of a changing climate. It is rich with choice, and a variety of housing, shops and services, cultural amenities, and civic spaces. It offers a sense of welcome and access for people of all ages, abilities, incomes, and backgrounds.

With many transportation options, it provides connection to other parts of the city and region. Residents choose to walk, cycle, and take transit because they are the most convenient, sustainable and pleasant ways to get around. Residents connect with neighbours and prosper in one of the region's most vibrant places."



2.2 PLANNING PRINCIPLES

Building from the vision, the plan is framed around six planning principles. These were developed based on City and regional policy, planning best practices and community engagement.

These principles drive the strategic direction, policy framework, and implementation strategies that shape growth. They are enshrined within the growth concept and support the transformational vision for a safe, thriving, complete community.



SUPPORT TRANSIT ORIENTED DEVELOPMENT

Integrate transit seamlessly into the town centre.



FOSTER A VIBRANT CORE

Build density and mixeduse strategically, with a high quality public realm and active streetscapes.



BUILD COMMUNITY HEART

Plan for improved and expanded community and cultural facilities, and placemaking opportunities to foster social connectivity.



CONNECTION WITH NATURE

Create urban parks, new trails, outdoor recreation, and improvements to local natural areas.



STREET CONNECTIVITY

Design streets for multiple modes to improve the connectivity and flexibility of the street network.



SAFE AND RESILIENT COMMUNITY

Encourage a safe, healthy, low-pollution community well into the future.

2.3 GROWTH CONCEPT

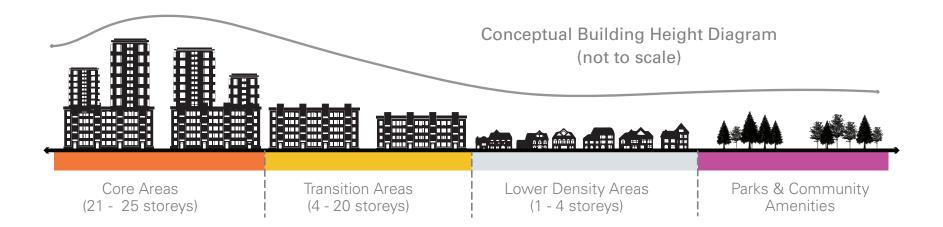
Density in the town centre will be highest in the core area, concentrated around future rapid transit. Density and building heights transition away from the core towards the lower density periphery and existing neighbourhoods. Mixed-use development around the core will build energy and activity that support a more animated, livable and thriving environment.

Development will be guided by urban design guidelines that will support a public realm

that is vibrant, attractive, and active. Design will foster a safe, healthy, and resilient community by incorporating principles of Crime Prevention Through Environmental Design (CPTED), Vision Zero Surrey principles, universal accessibility, and lowcarbon resilience.

A finer grained multi-modal street network will support development, increase connectivity and encourage transportation choice. The network will support various forms of transit that converge in the Town Centre, including regional rapid transit and bus service.

Community facilities, parks and open spaces will reinforce the Town Centre's role as a local and city-wide recreational hub, and a focal point of community activity. Community amenities will foster social engagement, wellness, and sense of community.



Core Areas

- Locate higher density close to future rapid transit.
- Establish mixed use with shops and services required at ground level and residential above.
- Preserve commercial core in the town centre.

Transition Areas

- Focus on multiple family residential.
- Transition density and building height from the core to lower density areas.
- Encourage a mix of housing types within walking distance of transit and amenities.

Lower Density Areas

- Maintain lower density commercial and residential in the southern portion of the town centre.
- Preserve neighbourhood character.

Parks and Community Amenities

- Establish environmental areas to protect wildlife and fish habitat.
- Reinforce key community and cultural facilities and services.

Vewton Cultura Ccotre Trasit Station 71A Avenue 71 Avenue 70B Avenue

Figure 2.3 Growth Concept

72 Avenue



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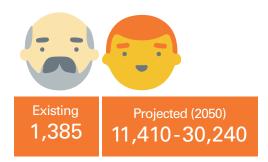
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71A Avenue

2.4 GROWTH PROJECTIONS

2.4.1 Population Projections

The Plan will accommodate considerable population growth over several decades. However, given current market conditions it is acknowledged that uptake of new development will be slow, and may require a catalyst such as rapid transit investment. As such, annual growth rates are challenging to forecast. Assuming eventual build-out over many decades, the plan could result in up to 30,240 residents, which is greater than the population of White Rock. To accommodate this increase in population the plan designates additional parkland and envisions new community amenities.



2.4.2 Housing Projections

The plan supports housing diversity within the broader Newton community by providing apartment and townhouse opportunities. High-rise mixed use and mid-rise apartments will support the intent of the plan by attracting new residents and supporting new and existing local businesses. Transitional mid and low-rise development will provide a buffer between the core area and lower density residential neighbourhoods. A greater variety of housing will support a full range of housing needs within walking distance of the core. In total, the number of dwelling units will increase from the existing 445 (2020) up to 13,700.



2.4.3 Employment Projections

The plan supports local business by adding residents and providing new commercial space. Mixed-use development within the core area will provide commercial retail units at street level with potential office or institutional uses above. Commercial lands along King George Boulevard, and north of the plan area, will continue to provide a diverse range of services that leverage the Town Centre's central location in Surrey. The area will evolve to support new institutional and commercial uses that will support the intent of a vibrant and active town centre. Total jobs within the plan area will more than double from the existing 1,310 (2020) to almost 3,235.



2.4.4 Active Parkland Projections

The Plan includes enhancing the existing Newton Pond Park, expanding "The Grove" into a larger park, and adding two new mini neighbourhood parks. The Plan also includes small public plazas to support retail and recreational uses, and active and vibrant streetscapes. Together, these active park sites total approximately 6.7 hectares (16.5 acres), located to ensure all residents are within a short walk of parkland.



"I like and support a mix of heights and housing styles. Retail and commercial at the street level is good."

Online Survey Response, Newton Town Centre Plan Process, 2018-2019

3 Land Use | What We Are Doing







3.1 URBAN DESIGN CONCEPT

The built environment reflects the vision of its residents. It is guided by an urban design strategy and guidelines intended to create a compact, vibrant, and livable urban environment.

This strategy recognizes that individual projects are the building blocks of great streets and neighborhoods. This requires attention to the way buildings meet the sidewalk, and how they acknowledge and contribute to the public realm. A delightful and memorable environment is generated from purposeful design.

The following design principles are meant to be used in coordination with the design guidelines outlined within the land use designations.

RESILIENT AND ADAPTABLE

A variety of use, form, character and scale, will allow the urban fabric to be woven naturally, as a dynamic pattern of buildings, streetscapes and gatherings spaces.

- Flexible scales of building space accommodate a wider range of users. With smaller spaces, continuous occupancy can fill in gaps of activity along the street.
- Building frontages will provide clear connections to the street to enhance the quality of interaction between inside and outside.
- Interactive and visually open building interfaces with the street encourage a vibrant and active urban realm.
- Timeless design is created with quality that is honored from one generation to the next. It remains relevant, useful, attractive and provides compatibility between the existing and future context.
- Durable materials stand the test of time and contribute to a sense of permanence. This represents stability and deeper substance that give buildings a sense of belonging to the community.

SAFE AND RESPECTFUL SPACES

To foster cultural and social diversity in our public spaces, we must create places that champion social justice and equity, and that are accessible and safe for all.

- The design of all buildings and open spaces should incorporate CPTED principles to allow surveillance and discourage crime. The implementation of CPTED principles should not be disruptive to living or undertaken at great expense to the public realm.
- Public spaces must allow for all individuals to interact safely and respectfully.

ORDER TO EDGES

A sense of order gives clarity to how neighbourhoods are organized. This eases navigation and offers familiarity despite changes over time.

- Streetwalls will enclose the street environment with a continuous vertical plane of buildings to provide points of reference and offer pedestrians a feeling of protection.
- A common facade datum, or reference point, will apply across buildings on the same block to provide the appearance of uniformity while allowing variation and individualization of buildings to greet the street.
- Podium heights are proportional to the width of the street. Wide streets have tall podiums whereas narrower streets have shorter podiums. This maintains the sense of enclosure with a streetwall that does not overwhelm pedestrians as the scale of street changes.
- Detailed design guidelines within the plan provide structured principles of building separation and connectivity to ensure compatible development.
- Clear and purposeful connectivity to commercial uses north of 72 Avenue ensure a cross flow of vibrancy.
- Setback areas are intended to form a complete public realm in conjunction with the street typologies (see Section 4.2).

PLACES FOR PEOPLE

Streets, plazas and open spaces are where public life happens. These spaces are where residents connect with the city and with each other. It's where community is created.

- Ensure spaces are designed using the human scale as measurement. This makes streets and buildings more relatable, easier to use and comfortable for pedestrians.
- Building should include details in small scale and fine grain textures along the street. This reinforces the human scale and visually stimulates and enriches the pedestrian experience.
- Seasonal landscaping provides the dimension of time and refreshes the scenery.
- Active building frontages animate the street with life that spills out into the street.
- Compact block spacing allows services and amenities to be clustered together efficiently with high levels of connectivity, exposure and ease of travel for residents.
- New development should contribute to existing and planning public spaces, and offer new opportunities with pedestrian focused details and opportunities for placemaking.







3.2 LAND USE STRATEGY

The Plan is centered on a vibrant mixed-use core, supported by a variety of commercial and civic uses. The highest densities are located around a future rapid transit station on King George Boulevard. Medium and lower density mixed-uses transition away from the centre and are located along arterial roads where frequent pedestrian traffic is expected. New land uses are supported by a finer-grained and pedestrian friendly street network which serves local businesses and services.

Land use designations define future land uses that the City will encourage over time. Each land use designation outlines what may be possible on sites with that designation. They provide a clear intent and development parameters to guide future growth.

Implementation of the Plan's vision and planning principles is intended to take place through applications for rezoning and development permits. Zoning regulations specify permitted land uses and densities on a property-byproperty basis and are intended to be generally consistent with the provisions outlined in this section. Not all sites/properties will be able to meet the maximums outlined in the designation due to limitations created by context (e.g. road dedications, adjacent uses) and site constraints (e.g. lot depth and shape, grade, riparian areas). New proposed zoning will be reviewed at the time of development application submissions on a case-by-case basis.

Table 3.1: Land Use Designation Summary



BUILDING HEIGHT

Up to 4 storeys along 134 St,

70B Ave, 135 St, and 68 Ave.

BUILDING HEIGHT Up to 9.0 m (30 ft)

DENSITY

Up to 0.6 FAR or 14.75 uph (6 upa). Up to 18.5 uph (7.5 upa) with minimum 15% preservation of open space

Mixed

DENSITY

BUILDING HEIGHT Up to 15 m (50 ft)

stacked townhouses.

Up to 6 storeys elsewhere. DENSITY Up to 1.0 FAR or 111 uph (45 upa). Up to 1.30 FAR for Up to 2.5 FAR

BUILDING HEIGHT Minimum 2 storey podium,

tower up to 20 storeys. DENSITY Up to 3.5 FAR*

BUILDING HEIGHT Minimum 4 storey podium,

tower up to 25 storeys

DENSITY Up to 4.0 FAR*

Parks and Commercial Institutional Civic Natural Areas

Mixed used areas require a minimum of one floor of active commercial at grade and the corresponding residential designation above.

Retail and commercial development that requires a large floor plate and more prominent street presence. BUILDING HEIGHT Up to 4 storevs to a maximum height of 20 m

DENSITY Up to 1.5 FAR Non-profit facilities that support the social wellbeing and health of the community, such as education, affordable and supportive housing, and other community uses.

Public facilities such as education, recreation and culture. Secondary and supportive uses are permitted including affordable housing in coordination with civic uses. Public open space that encourages social interaction and reinforces the public realm, supporting activities such

as socializing, resting, and eating, and adding to the quality of urban living,

*Additional building height and density may be considered where additional community benefit is provided in accordance with the City's Density Bonus Policy (Policy 0-54). In such cases development is subject to urban design approval to ensure appropriate interface treatments and consistency with design guidelines.

Figure 3.1 Land Use Concept







3.3 MIXED-USE DESIGNATIONS

Mixed land uses are separated into three designations based on intended density and building form. Each require commercial or retail uses at grade with residential, office, or institutional use above. The mixed-use land designations include:

- High Rise Mixed-Use
- Mid to High Rise Mixed-Use
- Low Rise Mixed-Use

All development within these mixed-use designations should meet the design intent and principles outlined within the Urban Design Concept (Section 3.1), as well as the mixed-use design designations outlined in Section 3.3.4.



3.3.1 High Rise Mixed-Use

Located in the Town Centre core, this designation is the highest density permitted in the plan. Development in this area will allow a greater number of residents access to shopping, recreation, and employment, and also support walking, cycling, and transit use. Transit facilities will be incorporated in a comprehensive development at the future rapid transit station node. Development within this designation will meet the intent and principles of the plan, including:

- Planning Principle 1: Support Transit Oriented Development
- Planning Principle 2: Foster a Vibrant Core
- Planning Principle 3: Build Community Heart
- Planning Principle 6: Safe and Resilient Community

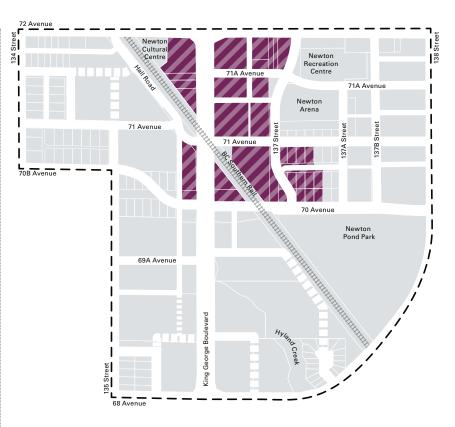
INTENT

Development within this designation is intended as high rise supported by a 4-6 storey mixed-use podium. Active street-level retail and commercial uses are required in all development in this area. Office or residential is permitted above.

DEVELOPMENT PARAMETERS:

Building Height:	Minimum 4 storey podium, tower up to 25 storeys*	
Density:	Up to 4.0 FAR*	
Parking:	Underground only	
Design:	Refer to Mixed-Use Design Guidelines. Commercial at grade required, office or residential above.	

* Additional building height and density may be considered where additional community benefit is provided in accordance with the City's Density Bonus Policy (Policy 0-54). In such cases, development is subject to urban design approval to ensure appropriate interface treatments and consistency with design guidelines.



3.3.2 Mid to High Rise Mixed-Use

Like High Rise Mixed-Use, this designation supports the Town Centre core by providing transit-supportive densities and uses. The designation also serves to begin a downward transition of heights and density towards the periphery of the plan. Development within this designation will meet the intent and principles of the plan, including:

- Planning Principle 1: Support Transit Oriented Development
- Planning Principle 2: Foster a Vibrant Core
- Planning Principle 6: Safe and Resilient Community

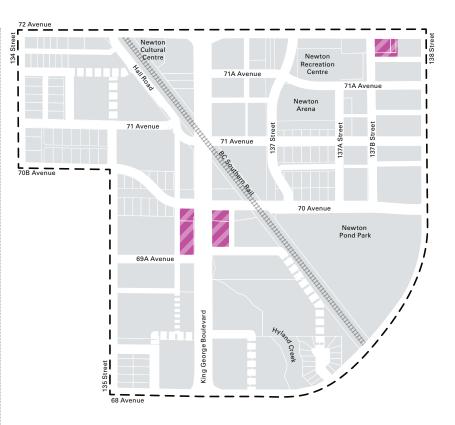
INTENT

Development within this designation is intended as mid to high rise supported by a 2-4 storey mixed-use podium. Active street-level retail and commercial uses are required for all primary road frontages in this area. Office or residential is permitted above.

DEVELOPMENT PARAMETERS:

Building Height:	Minimum 2 storey podium, tower up to 20 storeys*	
Density:	Up to 3.5 FAR*	
Parking:	Underground only	
Design:	Refer to Mixed-Use Design Guidelines. Commercial at grade required, office or residential above.	

* Additional building height and density may be considered where additional community benefit is provided in accordance with the City's Density Bonus Policy (Policy 0-54). In such cases, development is subject to urban design approval to ensure appropriate interface treatments and consistency with design guidelines.



3.3.3 Low Rise Mixed-Use

This designation is an extension of the walkable core area, which combines a mixture of active commercial storefronts with office or residential above. Land with this designation is located along arterial roads where frequent pedestrian traffic is expected to support commercial and retail and create a more vibrant streetscape. The designation completes a transition of heights and density from the core outwards to the periphery of the plan. Development within this designation will meet the intent and principles of the plan, including:

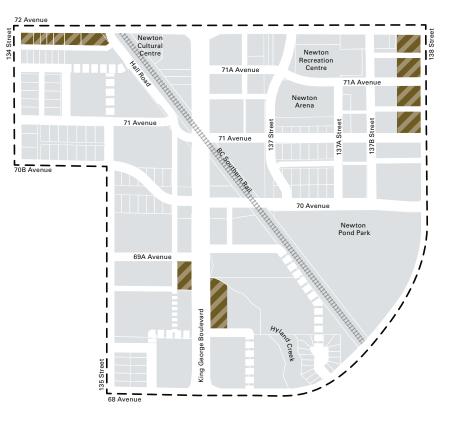
- Planning Principle 1: Support Transit Oriented Development
- Planning Principle 5: Street Connectivity
- Planning Principle 6: Safe and Resilient Community

INTENT

Development within this designation is intended as low rise with streetlevel commercial and retail. Office or residential is permitted above.

DEVELOPMENT PARAMETERS:

Building Height:	Up to 4 storeys along 138 Street. Up to 6 storeys along 72 Avenue and King George Boulevard.	
Density:	Up to 2.5 FAR	
Parking:	Underground only	
Design:	Refer to Mixed-Use Design Guidelines. Commercial at grade required, office or residential above.	









3.3.4 Mixed-Use Design Guidelines

OPEN AND WELCOMING PUBLIC REALM

- Clearly acknowledge the public realm through building and site design.
- Maintain clear sightlines between buildings to important neighbourhood sites and features.
- Orient commercial towards the active streets and residential towards quieter frontages.
- Expose and connect all commercial retail units directly to the street or plaza.
- Locate primary building entrances along important thoroughfares.
- Increase pedestrian permeability through sites and enhance routes along the periphery.
- Avoid using overt security measures at storefronts, such as bars on windows or bollards; instead, integrate hidden measures into the building.

STREET ACTIVATION

- Wrap ground floor retail around building corners along intersecting streets.
- Express ground floor commercial retail unit heights at least 4.5 m floor to floor.
- For 'Active Frontages,' include small unit storefronts with flexible space.
- Storefronts should express unit individualization that is distinct from its neighbours.
- Minimize interrupting commercial frontages with residential lobbies.
- Show human scale building proportions.
- Use cladding materials that have a sense of permanence.
- Select and locate building and site lighting to avoid glare, light spill and light pollution.
- Cover walkways and storefronts with weather protection canopies at least 1.8 m deep on arterial and collector streets, and plazas; and at least 1.5 m on local streets.
- Incorporate mechanical vents into the building facade when facing the public realm. Mechanical vents should be located on non public facing building sides where possible.
- Incorporate at-grade street planters and ensure generous soil volumes for landscaping.
- Locate parking underground. Locate any above-grade stalls (e.g. car-share, drop-off) behind buildings, away from streets and open spaces.
- Commercial setbacks are as follows. Setback dimensions and details may be subject to change during review by staff for development applications.

ROAD	SETBACK	LANDSCAPE	HARDSURFACE
King George Boulevard, Transit Exchange	4.5 m	2 m	2.5 m
and Green Connector	1.0 111	2	2.0 111
72 Avenue	2.5 m	0	2.5 m
138 Street	4 m	2 m	2 m
Collector Street & Local Street	2 m	0	2 m
Festival Street, Pedestrian Street, Green Lane	3 m	0	3 m

- Locate parking access to minimize interruption of the public realm. Use lane access.
- Provide corner feature plazas that are at least 50 m² in area, exclusive of setbacks.

APPROPRIATE SCALE, FORM AND MASSING

- Express architecture and landscape design with a clear organizing concept.
- Create street enclosures with proportional street wall podium heights.

INTERFACE	# OF STOREYS
Arterial Streets	6 - 8
Collector Streets	4 - 8
Local Streets	3 - 4
Lanes	2 - 6
Plazas	3 - 6

- Avoid projecting floor areas past the floor below.
- Distinguish the tower from the podium base, and if possible, locate it flush with the podium on the street side, while maintaining tower separation to neighbours.
- Locate active living spaces, such as living rooms, dining rooms, and kitchens at the corner of buildings instead of bedrooms or bathrooms.
- Consider architectural detail of the underside of balconies and soffits from views below.
- Contain tower floor plates to 650 m².
- Tower separation: Minimum 50 m face to face and 30 m corner to corner.
- Minimize overlook to residential units.
- Screen parking ramps from views above.
- Use roof tops for roof patios, green roofs, high albedo roofing finishes, energy harvesting arrays, or a combination; avoid contributing to the heat island effect.
- Screen roof top equipment from street view and overlook from above.
- Screen and architecturally integrate wireless communication equipment into the building.

RESIDENTIAL INTERFACE

- Prioritize commercial uses along active street over residential uses.
- Residential entries should be located secondary to commercial entries.
- Design residential common entries to be distinct from commercial entries.
- For ground-floor residential units along a lane, provide a 3 m patio outside of the walkway and landscape boulevard.
- Refer to the Residential Design Guidelines for additional information on residential interfaces and setbacks.













SIGNAGE

- Integrate signage into building architecture, so that it is complementary, and does not dominate the building elevation or site.
- Free-standing signs are not supported.
- Wayfinding signage should not obstruct the pedestrian experience.

GROUND FLOOR INTERFACE

To facilitate pedestrian engagement and street-level vibrancy within mixed-use areas, two ground-floor use classifications (Active and Flexible) specify appropriate interfaces. Active uses are intended for smaller format retail units that animate the public realm. All ground floor use classifications must adhere to all additionall building design guidelines.

ACTIVE FRONTAGE

Active frontages are required in mixed-use core to generate a high degree of pedestrian street activity. In these areas, as illustrated in the Ground Floor Interface Map, "active" ground floor uses are required, including:

- Food and beverage uses such as restaurants, cafes, pubs and coffee shops.
- Retail commercial uses such as clothing stores, jewelers, florists and general retail.
- Personal service uses such as hair dressers, beauty parlors and shoe repair shops.
- Retail professional services, such as travel agencies, notary public, optical and insurance sales.
- Entertainment uses that generate demand during evening and weekends.
- Interactive uses that animate the streetscape, such as such as outdoor café spaces and merchandise displays (e.g. patios, flowers or produce).

FLEX FRONTAGE

Areas outside of the mixed-use core with lower pedestrian volumes can be considered for less active ground floor uses. In these areas, as illustrated in the Ground Floor Interface Map, 'Active Frontage' uses are permitted, as well as the following:

- Ground floor office such as lawyers, accountants, as well as general office use.
- Larger format commercial such as drug stores, grocery and liquor stores.
- Larger format service uses such as child care, fitness studios and medical clinics.
- Financial institutions such as banks and credit unions.
- Institutional uses such as places of worship, care facilities, supportive housing, and other civic and institutional uses.

Ground Floor Interface Map

Mixed-Use Areas

Active Frontage

Flex Frontage



135 Street

68 Avenue

Note:

Legend

On 'Active Frontages', provide small scale CRUs with a maximum frontage of 10 metres (33 ft.). At-grade large format CRUs should either be set behind smaller CRU or located on the 2nd floor with smaller retail at grade.

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3.4 RESIDENTIAL DESIGNATIONS

New residential development will be focused within walking distance of future rapid transit. This will attract new residents to support local business and provide a buffer between commercial areas and lower density residential neighbourhoods. A greater variety of housing types will support a full range of housing needs for young families, working professionals, and seniors.

Residential designations include a range of residential forms and densities, from high to mid rise apartments around the core to townhouses in peripheral areas of the plan. The gradual transitioning down in density from the core considers the interface with lower density existing neighbourhoods and environmentally sensitive areas along the edges of the plan. Residential land use designations include:

- High Rise Residential
- Mid to High Residential
- Low Rise Residential
- Townhouse
- Detached Residential

All development within these residential designations should meet the design intent and principles outlined within the Urban Design Concept (Section 3.1), as well as the residential design designations outlined in Section 3.4.7.

3.4.1 High Rise Residential

Located along the western side of 137A Street, between 71 Avenue and 70 Avenue, the High Rise Residential designation is a continuation of the Town Centre core. It allows for the highest residential density in the plan. Development within this designation will meet the intent and principles of the plan, including:

- Planning Principle 1: Support Transit Oriented Development
- Planning Principle 2: Foster a Vibrant Core
- Planning Principle 4: Connection with Nature
- Planning Principle 5: Street Connectivity
- Planning Principle 6: Safe and Resilient Community

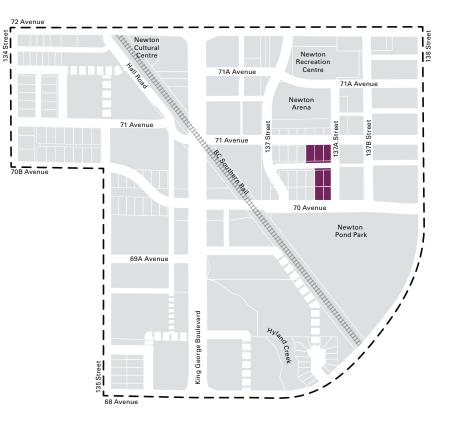
INTENT:

Development within this designation is intended as high rise residential supported by a 4-6 storey podium. The podium should include ground floor residential with front door access to the street.

DEVELOPMENT PARAMETERS:

Building Height:	Minimum 4 storey podium, tower up to 25 storeys*	
Density:	Up to 4.0 FAR*	
Parking:	Underground only	
Design:	Refer to the Urban Design Strategy	

* Additional building height and density may be considered where additional community benefit is provided in accordance with the City's Density Bonus Policy (Policy 0-54). In such cases, development is subject to urban design approval to ensure appropriate interface treatments and consistency with design guidelines.



3.4.2 Mid to High Rise Residential

The Mid to High Rise Residential designation provides a transition in density between the mixed-use core and lower density residential designations. It may include a mix of building forms including high rise adjacent to the core and mid rise farther from the core. Development within this designation will meet the intent and principles of the plan, including:

- Planning Principle 1: Support Transit Oriented Development
- Planning Principle 4: Connection with Nature
- Planning Principle 5: Street Connectivity
- Planning Principle 6: Safe and Resilient Community

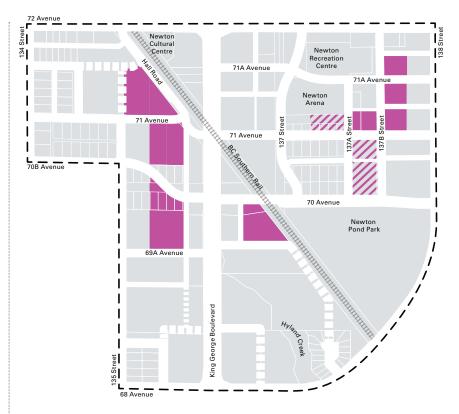
INTENT:

Development within this designation is intended as mid to high rise residential supported by a 2-4 storey podium. Building heights should support a height transition from highest adjacent to the core area designations and lowest adjacent to the low rise designations. The podium should include ground floor residential with front door access to the street.

DEVELOPMENT PARAMETERS:

Building Height:	Minimum 2 storey podium, tower up to 20 storeys*	
Density:	Up to 3.5 FAR*	
Parking:	Underground only	
Design:	Refer to the Urban Design Strategy	

* Additional building height and density may be considered where additional community benefit is provided in accordance with the City's Density Bonus Policy (Policy 0-54). In such cases, development is subject to urban design approval to ensure appropriate interface treatments and consistency with design guidelines.



Hatched properties have the flexibility to redevelop as exclusively civic uses, exclusively residential uses, or a combination of civic and residential uses. Refer to Section 3.5.1.

42 | CITY OF SURREY

3.4.3 Low Rise Residential

Low Rise Residential developments around the plan area will support the vision of the plan by attracting new residents and creating more vibrant and active streets. This designation also provides a transition in building height between the core area and existing lower density neighbourhoods. Development within this designation will meet the intent and principles of the plan, including:

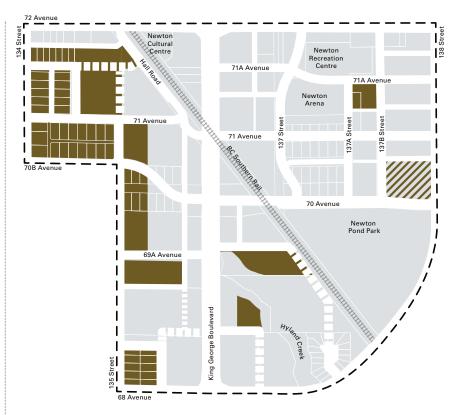
- Planning Principle 1: Support Transit Oriented Development
- Planning Principle 5: Street Connectivity
- Planning Principle 6: Safe and Resilient Community

INTENT:

Development within this designation is intended as low rise residential with ground-oriented townhouse units at the base of buildings and apartments above.

DEVELOPMENT PARAMETERS:

Building Height:	Up to 4 storeys along 134 Street, 70B Avenue, 135 Street, and 68 Avenue. Up to 6 storeys elsewhere.	
Density:	Up to 2.5 FAR	
Parking:	Underground	
Design:	Refer to the Urban Design Strategy	





Hatched properties have the flexibility to redevelop as exclusively civic uses, exclusively residential uses, or a combination of civic and residential uses. Refer to Section 3.5.1.

3.4.5 Townhouse

Townhouses provide an affordable alternative to detached single family housing. Located in the southeast portion of the plan area, this designation provides a transition between higher density and existing single family development. The Townhouse designation is also bounded by a riparian area (Hyland Creek) to the west and the BC Hydro corridor, which serves as a railway, to the east. Development within this designation will meet the intent and principles of the plan, including:

- Planning Principle 4: Connection with Nature
- Planning Principle 5: Street Connectivity
- Planning Principle 6: Safe and Resilient Community

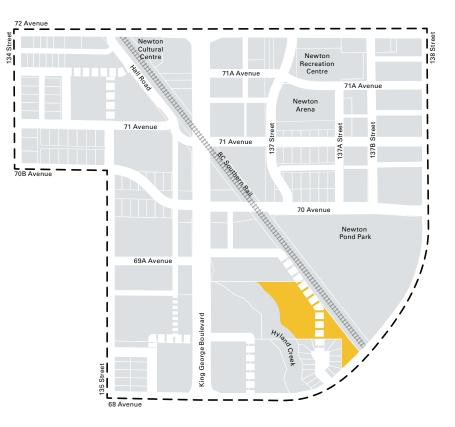
INTENT:

Development within this designation is intended as ground-oriented townhouses, including row townhouses or stacked townhouses.

DEVELOPMENT PARAMETERS:

Building Height:	Up to 15 metres (50 feet)
Density:	Up to 1.0 FAR or 111 units per hectare (45 units per acre)*
Clustering:	Minimum 3 attached units. Maximum 6-unit width per building.
Design:	Refer to Residential Design Guidelines -Townhouse

* Building density may be increased to 1.30 FAR on sites where stacked townhouses are proposed. In such cases, development must meet parking requirements and be subject to urban design approval



3.4.6 Detached Residential

The Detached Residential designation maintains existing neighbourhood character in the southeast corner of the plan area. A Detached Residential dwelling may have a secondary suite, allowing a maximum of two dwelling units per lot. Urban infill will enable the gradual attraction of new residents into the area. Development within this designation will meet the intent and principles of the plan, including:

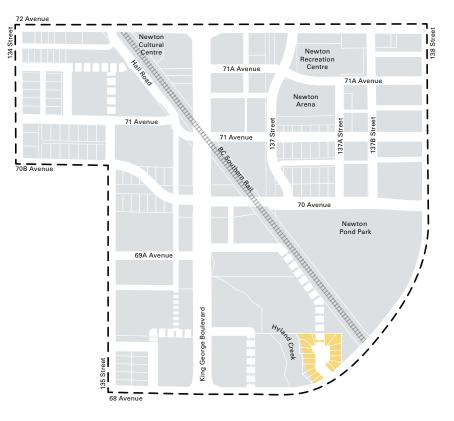
- Planning Principle 4: Connection with Nature
- Planning Principle 5: Street Connectivity
- Planning Principle 6: Safe and Resilient Community

INTENT:

This designation is intended as detached single family homes on urban sized lots. Secondary suites are permitted for a maximum of two dwelling units per lot. Duplex development is also permitted within this designation.

DEVELOPMENT PARAMETERS:

Building Height:	Up to 9 metres (30 feet)	
Density:	Up to 0.6 FAR or up to 14.75 units per hectare (6 units per acre). Up to 18.5 dwelling units per hectare (7.5 units per acre) provided that minimum 15% of the lot area is preserved as open space.	
Parking:	2 minimum or 3 with secondary suite	
Design:	 Units are required to face the street. Renovation or new home materials, detailing and architecture are required to be compatible with neighbouring homes or established character, whichever is more desirable. 	







3.4.7 Residential Design Guidelines

OPEN AND WELCOMING PUBLIC REALM

Clearly acknowledge the public realm through building and site design.

- Maintain clear sightlines between buildings to important neighbourhood sites and features.
- Locate primary building entrances along important thoroughfares.
- Orient most living spaces towards natural amenities and the public realm.
- Increase the connectivity of the site with common walkways to the street.
- Avoid using overt security measures at storefronts, such as bars on windows or bollards; instead, integrate hidden measures into the building.

APPROPRIATE SCALE, FORM AND MASSING

• Express architecture and landscape design with a clear organizing concept.

INTERFACE	# OF STOREYS
Arterial Streets	6 - 8
Collector Streets	4 - 8
Local Streets	3 - 4
Lanes	2 - 6
Plazas	3 - 6

- Create street enclosure with proportional street wall podium heights.
- Avoid projecting floor areas past the floor below.
- Distinguish the tower from the podium base, and if possible, locate it flush with the podium on the street side, while maintaining tower separation to neighbours.
- Locate active living spaces, such as living rooms, dining rooms, and kitchens at the corner of buildings instead of bedrooms or bathrooms.
- Consider architectural detail of the underside of balconies and soffits from views below.
- Contain tower floor plates to 650 m².
- Tower separation: Minimum 50 m face to face and 30 m corner to corner.
- Minimize overlook to residential units.
- Screen parking ramps from views above.
- Use roof tops for roof patios, green roofs, high albedo roofing finishes, energy harvesting arrays, or a combination; avoid contributing to the heat island effect.
- Screen roof top equipment from street view and overlook from above.
- Screen and architecturally integrate wireless communication equipment into the building.
- Residential setbacks are 4.5 m. Setback dimensions and details may be subject to change during review by staff for development applications.

SIGNAGE

- Wayfinding signage should not obstruct the pedestrian experience.
- Limit address and building names to fascia signs; or free-standing signs that are no more than 1.2 m high x 1. 2m wide x 0.6 m deep.

OPTIONAL COMMERCIAL USES

To encourage pedestrian engagement and street-level vibrancy within the Town Centre, streetlevel commercial uses are permitted, where appropriate, within the following residential designations:

- High Rise Residential
- Mid to High Residential
- Low Rise Residential

Any incorporation of commercial uses shall correspond with the Mixed-Use Design Guidelines and must carefully consider appropriate residential interfaces.







3.5 COMMERCIAL

Commercial provides an important role in supporting business growth and fostering new employment. In combination with the mixed-use areas, this designation will enable a wider variety of commercial and retail uses.

Commercial designated areas are in the southern portion of the plan area, along King George Boulevard. The intention of the designation is for applicable areas to continue serving as commercial while also allowing for redevelopment to increase walkability and employment density. Development within this designation will meet the intent of the plan, including:

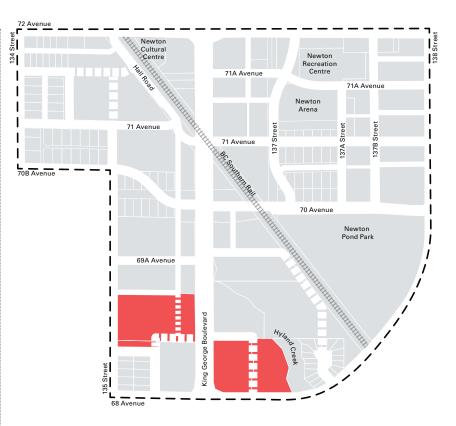
- Planning Principle 5: Street Connectivity
- Planning Principle 6: Safe and Resilient Community

INTENT

Development within this designation is primarily intended as commercial. This may include retail and commercial development that requires a large floor plate and more prominent street presence. For example, general service, large-format commercial, retail, office and financial, in addition to food and beverage establishments.

DEVELOPMENT PARAMETERS:

Maximum Height:	Up to 4 storeys, to a maximum height of 20 meters.
Density:	Up to 1.5 FAR
Parking:	As per applied zoning
Design:	Refer to Commercial Design Guidelines



3.5.1 Commercial Design Guidelines

OPEN AND WELCOMING PUBLIC REALM

- Orient commercial towards the public realm.
- Expose and connect all commercial retail units directly to the street or plaza.
- Locate primary building entrances along important thoroughfares.
- Increase pedestrian permeability through sites and enhance routes along the periphery.
- Avoid using overt security measures at storefronts, such as bars on windows or bollards; instead, integrate hidden measures into the building.

STREET ACTIVATION

- Wrap ground floor retail around building corners along intersecting streets.
- Express ground floor commercial retail unit heights at least 4.5 m floor to floor.
- Include small unit storefronts with flexible space.
- Storefronts should express unit individualization that is distinct from its neighbours.
- Minimize interrupting commercial frontages with residential lobbies.
- Show human scale building proportions.
- Use cladding materials that have a sense of permanence.
- Select and locate building and site lighting to avoid glare, light spill and light pollution.
- Cover walkways and storefronts with weather protection canopies at least 1.8 m deep on arterial, collector streets and plazas; and at least 1.5 m on local streets.
- Incorporate mechanical vents into the building facade when they cannot avoid facing the public realm.
- Incorporate at-grade street planters and ensure generous soil volumes for landscaping.
- Locate parking underground for multiple storey buildings. Locate any above-grade stalls behind buildings, away from streets and open spaces.
- Locate parking access to minimize interruption of the public realm. Use lane access.
- Provide corner feature plazas that are at least 50 m² in area, exclusive of setbacks.
- Commercial setbacks are as follows. Setback dimensions and details may be subject to change during review by staff for development applications.

ROAD	SETBACK	LANDSCAPE	HARDSURFACE
King George Boulevard, Transit Exchange and Green Connector	4.5 m	2 m	2.5 m
72 Avenue	2.5 m	0	2.5 m
138 Street	4 m	2 m	2 m
Collector Street & Local Street	2 m	0	2 m
Festival Street, Pedestrian Street, Green Lane	3 m	0	3 m











APPROPRIATE SCALE, FORM AND MASSING

- Express architecture and landscape design with a clear organizing concept.
- Create street enclosure with proportional street wall podium heights.
- Avoid projecting floor areas past the floor below.
- Screen parking ramps from views above.
- Use roof tops for roof patios, green roofs, high albedo roofing finishes, energy harvesting arrays, or a combination; avoid contributing to the heat island effect.
- Screen roof top equipment from street view and overlook from above.
- Screen and architecturally integrate wireless communication equipment into the building.

SIGNAGE

- Integrate signage into building architecture, so that it is complementary, and does not dominate the building elevation or site.
- Free-standing signs are not supported.
- Wayfinding signage should not obstruct the pedestrian experience.

3.6 OTHER LAND USE DESIGNATIONS

The other land use designations include:

- Civic
- Institutional
- Parks and Natural Areas
- Plazas







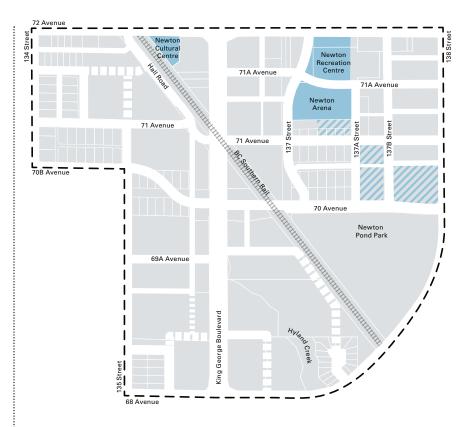
3.6.1 Civic

Civic uses are foundational to the development of complete communities. They form the social, educational, health, recreational, and cultural foundation of the community. The Civic designation allows for the retention and expansion of recreational, cultural, and community uses. Areas designated Civic are located within walking distance to residential development and future rapid transit. Development within this designation will meet the intent and principles of the plan, including:

- Planning Principle 1: Support Transit Oriented Development
- Planning Principle 3: Build Community Heart
- Planning Principle 4: Connection with Nature
- Planning Principle 6: Safe and Resilient Community

INTENT:

Development within this designation is intended for public facilities that support and enrich the social and cultural life of the community. This may include primary uses such as education, recreation, and culture. Secondary and supportive uses are permitted within this designation, including affordable housing in coordination with civic uses.





Hatched properties have the flexibility to redevelop as exclusively civic uses, exclusively residential uses, or a combination of civic and residential uses. Refer to Section 3.2.2 and 3.2.3.

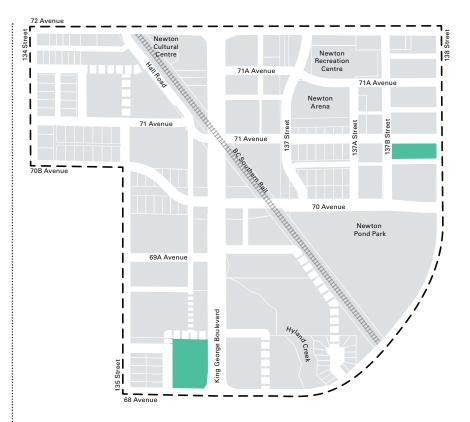
3.6.2 Institutional

The Institutional designation, like the Civic designation, supports the social, health, and educational foundation of the community. The Institutional designation allows for non-profit community supportive health, educational, and community uses. Development within this designation will meet the intent and principles of the plan, including:

- Planning Principle 1: Support Transit Oriented Development
- Planning Principle 3: Build Community Heart
- Planning Principle 4: Connection with Nature
- Planning Principle 6: Safe and Resilient Community

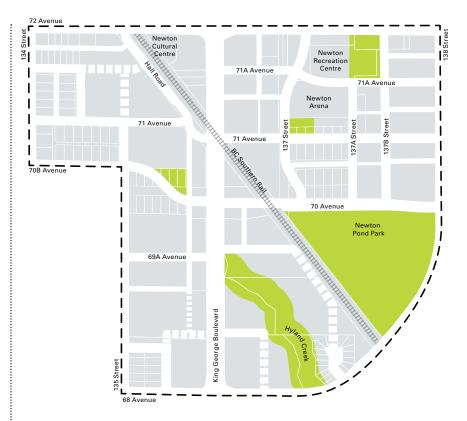
INTENT:

Development within this designation is intended for non-profit public facilities that support the social wellbeing and health of the community. This may include primary uses such as education, affordable and supportive housing, and other community uses.



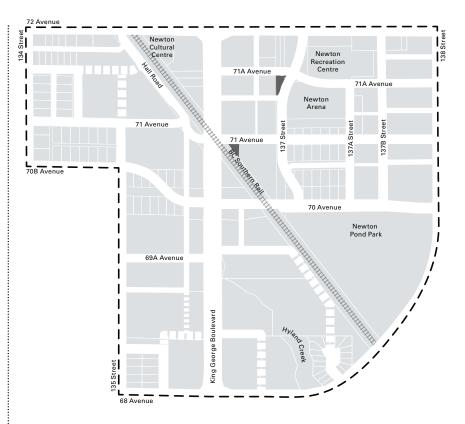
3.6.3 Parks and Natural Areas

The Parks and Natural Areas designation outlines the location of new and existing parkland. This includes neighbourhood and community parks, as well as natural and riparian areas, such as Hyland Creek. Rezoning and subdivision for the purpose of development is not permitted within the Parks and Natural Area Designation. See Section 5 for details on parks and open space.



3.6.4 Plazas

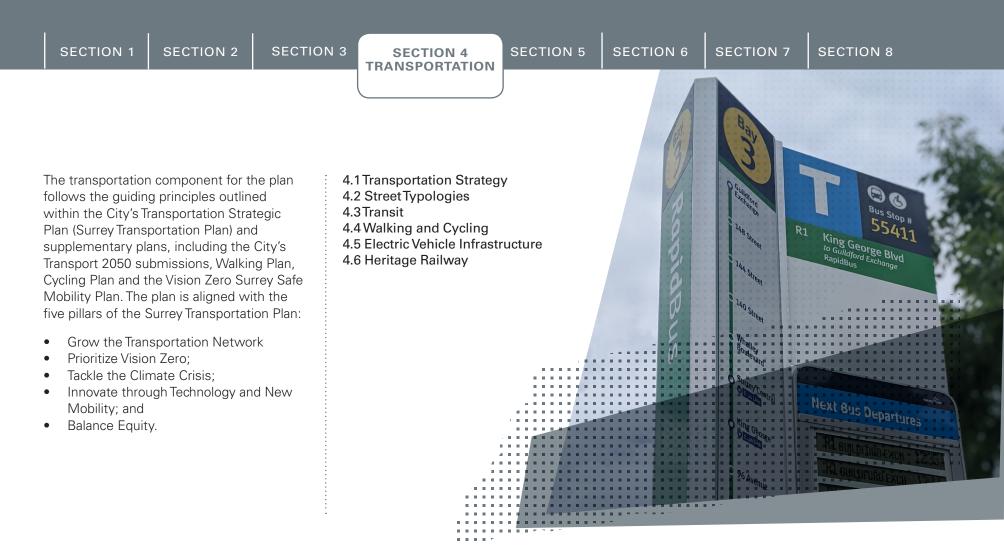
Plazas provide opportunities for additional public open space in higher density areas. They encourage social interaction and reinforce the public realm. Activities supported by plazas, such as socializing, resting, and eating, add to the quality of urban living and create opportunities for positive social and cultural experiences. See Section 5.3 for details on plazas.



"Designated sidewalks and quality curb ramps are essential for seniors, children, persons with disabilities, and parents pushing strollers!!"

Online Survey Response, Newton Town Centre Plan Process, 2018-2019

4 Transportation | **How We Get Around**









4.1 TRANSPORTATION STRATEGY

A high-quality multi-modal transportation network will support the Town Centre's transformation into a vibrant urban centre. The future concentration of people and activities highlights the importance of:

- Creating an efficient transportation system and improving connections to Grow the Transportation Network;
- Using a safe systems approach and applying Complete Streets for *Prioritizing Vision Zero*;
- Encouraging active transportation and reducing car dependency to *Tackle the Climate Crisis*;
- Requiring development to innovate through *Technology and New Mobility*, and,
- Providing transportation solutions for both new and existing residents to *Balance Equity.*

STREET NETWORK

The plan focuses on a street network that is finer grained, interconnected, and provides a continuous street grid. It emphasizes walking, cycling, and transit while providing for efficient vehicle and goods movement.

The street network supports compact urban growth and planned future rapid transit expansion. It will produce a grid of intersections approximately 80 to 100 metres where possible. This will improve connectivity and access, support existing and planned transit service, and create comfortable block spacing that promotes active transportation. With a higher intersection density, the network will also encourage slower vehicle speeds in support of Vision Zero principles to protect all road users.

The block spacing does not limit development viability and is consistent for urban town centres. To reduce any potential impacts of the finer grid on development and ensure equity, the floor area ratio (FAR) is calculated on a gross site area.

The street network includes a hierarchy of arterial, collector, and local roads. Green lanes, pedestrian streets, off-street pathways, parks, and plazas will also provide supplementary connections that support mobility and placemaking. Together, they create a network that meets the transportation demands of anticipated growth.

Key components of the street network currently exist, including all the arterial roads (King George Boulevard, 72 Avenue,68 Avenue and 138 Street). To complete the remainder of the planned network, new collector road connections, local roads, and green lanes will be delivered primarily through development.

Figure 4.1 Transportation Concept



4.2 STREET TYPOLOGIES

4.2.1 Arterial Roads

EXISTING

The plan area is well defined by several existing arterial roads, including King George Boulevard, 72 Avenue, 138 Street, and 68 Avenue. These arterials are the main transportation corridors for moving traffic and goods through the area and across the city. They typically include cycling and pedestrian infrastructure and are key routes for public transit and emergency services.

The arterial road standard in Surrey is a complete streets standard. It is planned for two traffic lanes in each direction, a landscaped median/left turn bay, grass boulevards with trees, sidewalks, cycling facilities, and street lighting within a 30.0m road allowance. Typically, improvements to arterial roads are undertaken as part of City capital works and prioritized through the 10 Year Servicing Plan Program.

The arterials within the plan area have previously been widened as part of prior Capital projects. Improvements were done to previous standards, and for both 138 Street and 72 Avenue cycling infrastructure and wider sidewalks were not provided.

PLANNED

To support growth, prioritize the safety for all road users, and tackle the Climate Crisis, improvements for active transportation are required. The plan identifies the need for wider sidewalks and separated one-way cycle tracks on these arterial roads. This will encourage more active transportation, provide a more comfortable and safer cycling environment, and reduce the reliance on the car.

King George Boulevard

As a former provincial highway, King George Boulevard is one of the main arterial roads in Surrey. It is also part of TransLink's Major Road Network (MRN), and a designated truck route. Prior widening and improvements provide for generally two travel lanes in each direction, a median/left turn lane, bike lanes, and sidewalks. Recent improvements include adding dedicated bus lanes to and/or queue jumps to support transit and safety improvements for all road users. King George Boulevard plays a critical role in connecting South Surrey and Newton with Surrey City Centre. This has made the corridor an ideal candidate for rapid transit. Rapid transit is considered as either 'Exclusive Corridor' where rapid transit is at-grade separated by physical barriers or, 'Separated Corridor' where rapid transit is segregated above or below ground.

To maximize flexibility for either technology option a 40.0m road allowance is proposed. This cross section will include a wide median reserved for rapid transit and wide sidewalks and protected cycling facilities that will promote safe and comfortable active transportation. These components will support ridership for rapid transit and is part of the safe systems approach to Vision Zero for building complete streets.

72 Avenue

As a part of the MRN, 72 Avenue carries regional traffic and is a designated truck route. It is also host to buses routing to the existing transit exchange. While not typical practice, there are also two short sections of paid on-street parking between 137 Street and 138 Street.

With the future rerouting of bus routes to a new 71 Avenue onstreet exchange, and planned active frontage, 72 Avenue has the opportunity to remain a unique arterial road within the plan area. With a 32.0m road allowance, wider sidewalks and separated cycling facilities can be provided while retaining on-street parking. It will be a requirement for development fronting 72 Avenue to provide boulevard improvements to this identified standard.

138 Street / 68 Avenue

Road dedication to the standard 30.0m width will be required for 138 Street/68 Avenue. In order to accommodate improvements to active transportation a unique cross section is required to minimize impacts to existing road infrastructure such as street trees and street lighting.



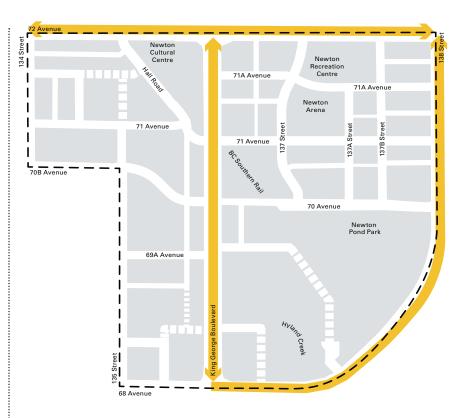


Figure 4A: King George Boulevard - Rapid Transit Cross Section



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Figure 4B: 72 Avenue Proposed Cross Section

Note: Boulevard design may be alternating hard surface with treed planting pockets where commercial fronts on-street parking.

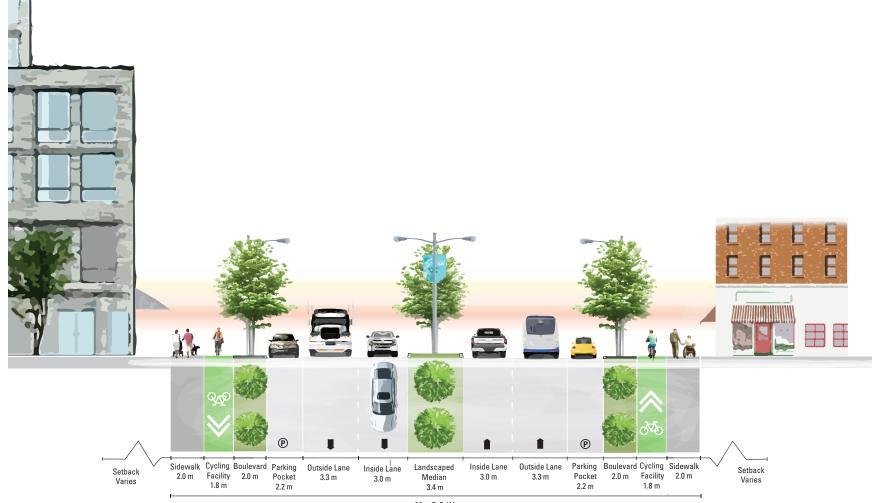


Figure 4C: 138 Street/68 Avenue Proposed Cross Section



64 | CITY OF SURREY

4.2.3 Collector Roads

EXISTING

Collector roads collect and distribute traffic between local and arterial roads. There are several existing collector roads in the plan area, including 134 Street, 70 Avenue, 70B Avenue, 137 Street, and 68 Avenue. These roads are envisioned to be the main neighbourhood corridor connections for walking and cycling.

Similar to arterial roads, collectors are complete streets and are planned to have one travel lane in each direction, left turn lanes at key intersections, boulevards with trees, sidewalks, protected cycling facilities, and street lighting. Outside of left turn lanes on-street parking can be provided on Collectors.

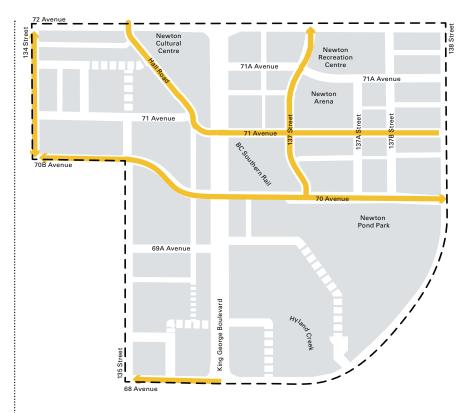
Collector road improvements are typically delivered by development and funded by development to the local road standard, with DCC's funding the "up-sizing" to the Collector road standard.

PLANNED

The plan grows the transportation network by introducing and extending a number of new collectors. This includes the extension of 70 Avenue to King George Boulevard to connect with 70B Avenue. This will ultimately form a continuous collector road through the Plan Area that connects with 68 Avenue. This will provide improved access and circulation for East Newton residents to the plan area as 68 Avenue extends to 152 Street to the east.

The Plan includes the realignment and extensions of 137 Street and 71 Avenue to increase the multi-modal connections as part of a finergrained grid road network that supports the planned higher-density, transit-oriented development. These two collector roads also will form portions of the relocated on-street transit exchange.

The Newton Exchange will be relocated to a new on-street transit exchange with off-street bus layover facility. Both 71 Avenue and portions of 137 Street are planned to have stopping positions for passenger pick up and drop off. A unique 26m road section will be required.



To support the Vision Zero safe systems approach in the plan area and in consideration of it being a Town Centre the Collector Road standard will have enhanced sidewalk and protected cycling infrastructure width of 2.0m.

Figure 4D: Typical Collector Road 24m Cross Section

Note: Boulevard design may be alternating hard surface with treed planting pockets where commercial fronts on-street parking.



66 | CITY OF SURREY



Figure 4E: Transit Exchange Cross Sections for portions of 71 Avenue and 137 Street

Note: Street design of the transit exchange is subject to further engagement and review with TransLink

4.2.4 Local Roads

Local roads increase connectivity and access and are vital to supporting a walkable town centre. Local roads typically provide onstreet parking, have lower design speeds, and ensure the safety of pedestrians and cyclists.

Several new local roads are outlined within the plan, notably 71A Avenue, 137A Street, and 137B Street within the core area. Additional local roads are outlined within the road network map. These new local road connections are critical to the intent and principles of the plan, as they support transit-oriented development, a vibrant urban core, and street connectivity.

Typically, local roads are planned to have one travel lane in each direction, on-street parking where possible, boulevard with trees, sidewalks, and street lighting. In consideration of the plan area being in a Town Centre the Collector Road standard will have enhanced sidewalk and cycling infrastructure width of 2.0m as shown below.

As part of the Vision Zero safe systems approach to road design intersections with local roads will typically have curb extensions (parking pockets). This helps to shorten pedestrian crossing distance at intersections and encourage slower speeds through the intersection, particularly turning movements.

Local road improvements are built and funded by development.

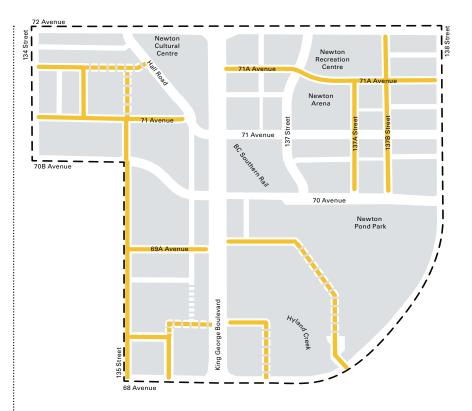
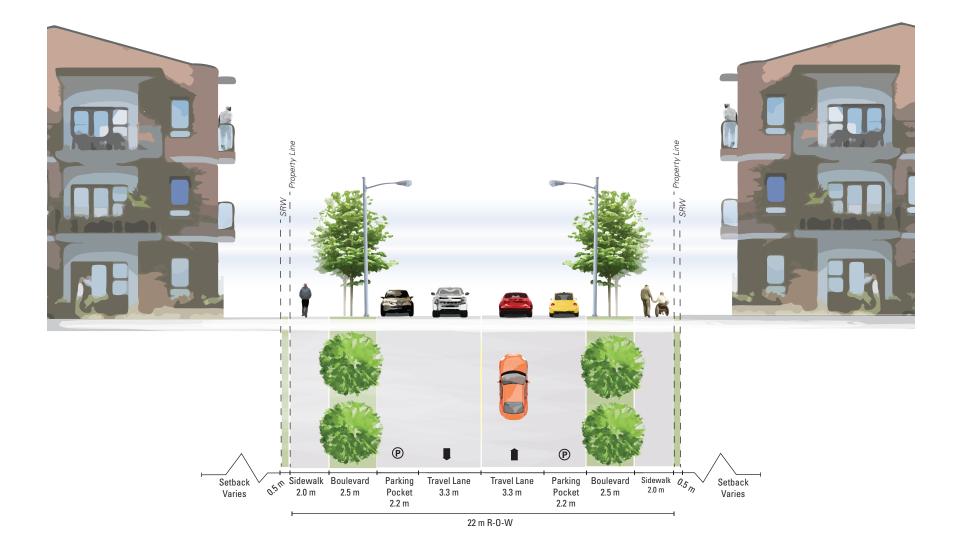


Figure 4F: Typical Local Road 20m Cross Section

Note: Boulevard design may be alternating hard surface with treed planting pockets where commercial fronts on-street parking.

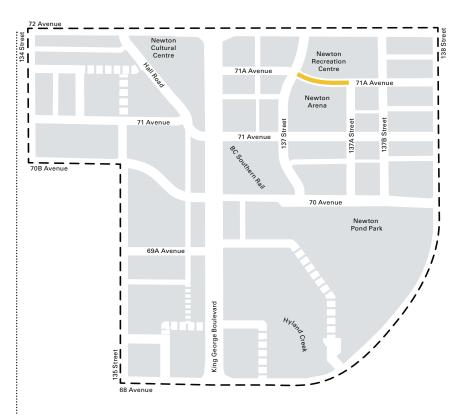


4.2.4.1 FESTIVAL STREET

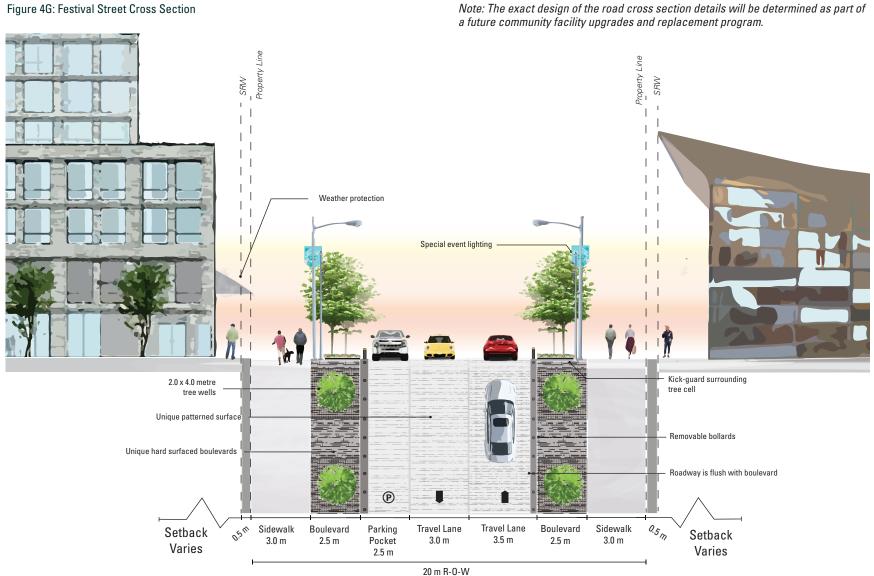
The Festival Street is a unique block of 71A Avenue, between 137 Street and 137A Street. As the road is located between two community facilities, it provides a unique opportunity to be closed to vehicle access for occasional special events such as street festivals, farmers markets, and block parties. When not being used for special events, the road links civic facilities and fosters a community core.

The street design of the festival street is intended to accommodate both special event uses and day-to-day operational needs. To acknowledge the adjacent community uses and accommodate special events the streetscape design will include features that would intuitively create a unique sense of place while reducing driving speeds. These features may include:

- visual markers to designate entrances at 137 Street and 137A Street, and to suggest a change in driver expectation;
- flat or roll over curbs;
- hard surfaced boulevards to accommodate increased pedestrian activity;
- additional street trees and defined landscaping pockets protected by kick-guards at grade;
- specialized pedestrian lighting, with electrical hookups for events;
- bollards and/or level street design; and
- gentle curve to the traffic lanes.



70 I CITY OF SURREY



Note: The exact design of the road cross section details will be determined as part of

4.2.4.2 GREEN CONNECTOR

The Green Connector is a unique section of 137A Street that is intended to enhance the walking experience between the Festival Street, the Grove Park, Newton Civic facilities, and Newton Pond Park. The road will have larger street tree boulevards, wider sidewalks and pedestrian amenities (e.g. benches, planting pockets, public art) and have two travel lanes with on-street parking on one side. Development of the green connector will be delivered over time through new development.

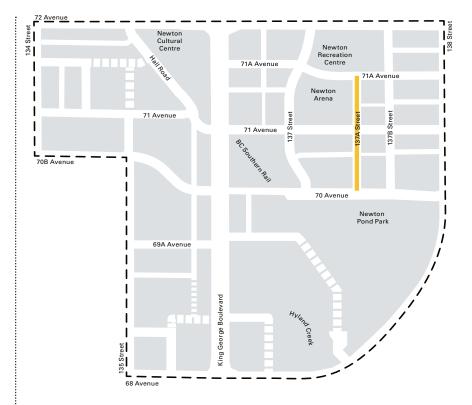


Figure 4H: Green Connector Cross Section

Note: The exact design of the road cross section details will be determined as part of future community facility upgrades and replacement program.



4.2.5 Pedestrian Streets

There are three Pedestrian Streets in the Plan. Two are located between 137A Street and 137B Street at 70A Avenue and 71A Avenue, and the third north of the future transit exchange on 71 Avenue. These pedestrian-only streets feature paved pathways, lighting and boulevards with trees. The Pedestrian Street adjacent to the future transit exchange would likely require hard surfacing to accommodate heavy pedestrian volumes. Unique features may include visual markers to designate entrances and street furniture.

Direct access to ground oriented residential will be encouraged to activate the pedestrian street. Additional pavement width may be required if needed for fire protection.

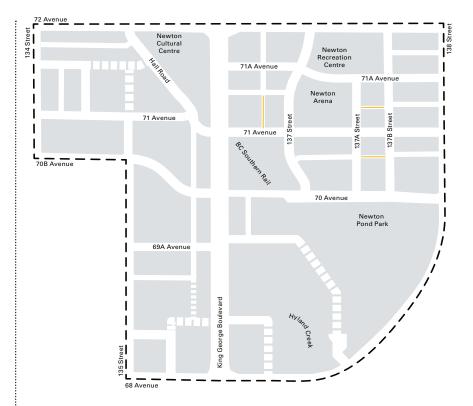


Figure 4I: Pedestrian Street Cross Section

Note: Boulevard design may be alternating hard surface with treed planting pockets adjacent to commercial frontages. The exact design of the road cross section details will be determined as part of future community facility upgrades and replacement program.



4.2.6 Access and Green Lanes

Access management is the application of locating, spacing and designing of the driveways, median openings and road intersections for access to/from roads. The objectives of access management are to:

- Ensure roadway safety for all road users;
- Provide for efficient transportation operations for all modes; and
- Allow for reasonable access to adjacent land-use.

Avoiding direct access to arterial, collector, and local roads for the town centre plan is also consistent with prioritizing Vision Zero and the safe systems approach to road design for all users.

In order to minimize conflicts with vulnerable road users and maintain reasonable vehicle access and loading, Green Lanes are provided throughout the plan area. Their primary role is to provide service and underground parking access and reduce the number of driveways on adjoining streets. Green Lanes are also uniquely designed to have a sidewalk, lighting, and a treed boulevard on one side to improve pedestrian connectivity, create additional greenery, and provide opportunities for stormwater absorption.

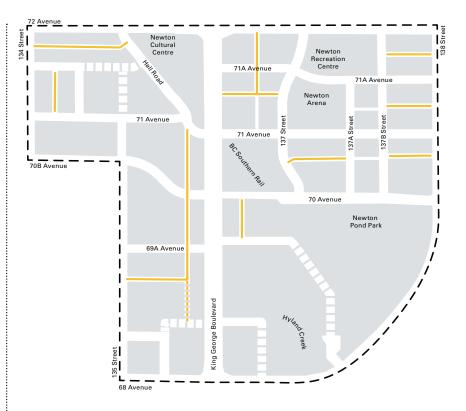


Figure 4J: Green Lane 12m Cross Section

Note: The exact design of the lane cross section details will be determined as part of future community facility upgrades and replacement program.



4.3 TRANSIT

Transit maximizes the mobility and access efficiency of the road network. It allows more goods and people to be moved in the same amount of space while also encouraging walking to complete trips.

Newton Town Centre is a major transit hub that is comprised of an off street bus exchange with network connections around Surrey and plans for future rapid transit. This is critical to the intent and principles of the plan, including support for transit-oriented development and a vibrant core. The plan's land uses and densities are transit-supportive and with the growth will result in increased transit ridership, and justify continued investment in improved transit service levels and rapid transit.

EXISTING TRANSIT SERVICES

A range of transit services connect Newton with City Centre and other parts of the region. These include Frequent Transit Network (FTN) routes, new express services, and local community shuttle circulators.

As of 2020, Newton Town Centre is served by 13 bus routes, including the two highest ridership routes in Surrey: the R1 King George Boulevard RapidBus which connects Newton Town Centre to City Centre and Guildford; and the 319 route which connects Newton Town Centre to Kwantlen Polytechnical University (KPU), Scott Road/120 Street, and Scott Road SkyTrain Station.

FUTURE TRANSIT SERVICES

As part of the current 10-Year Vision for Metro Vancouver Transit and Transportation (Mayor's Council Vision), there are several expanded transit services planned that connect with Newton Town Centre. The R1 King George Boulevard RapidBus is anticipated to be extended to South Surrey and connect with Semiahmoo Town Centre. New RapidBus Service is also planned for 72 Avenue and Scott Road/120 Street to supplement the 319 route, connecting Newton Exchange to KPU and Scott Road SkyTrain Station. Also planned are new transit service connections to South Newton and to Fleetwood, the latter of which may connect to the Surrey Langley SkyTrain Expo Line extension.

RAPID TRANSIT

Rapid Transit has been planned on King George Boulevard since the 1993 when Bus Rapid Transit was included in the Greater Vancouver Regional District (GVRD) Transport 2021 plan. In 2014, the Mayor's Council Vision identified 27km of New Rapid Transit on three corridors for Surrey, King George Boulevard, 104 Avenue, and Fraser Highway.

The recommended principles for Rapid Transit in Surrey include defining rapid transit services as operating in an exclusive right-ofway where Rapid Transit is divided by physical barriers at grade, or separated by vertical separation above or below ground. Currently the technology, timing, and implementation is still to be determined as part of the updated South of Fraser Rapid Transit Strategy.

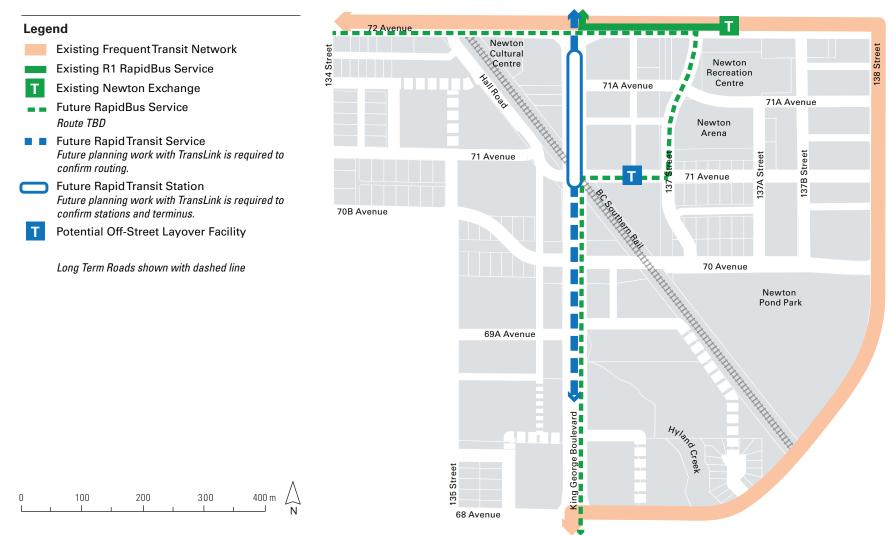
The plan area identifies and protects for Rapid Transit on King George Boulevard. A potential station location is identified south of 72 Avenue, adjacent to the highest planned densities and providing convenient access to the planned relocation of the Newton Transit Exchange. The exact location and format of the station is flexible and will be determined as part of future development of the Rapid Transit project.

TRANSIT EXCHANGE

The City and TransLink identified that the current suburban style transit exchange is not ideally located at 72 Avenue and 137 Street for rapid transit service connections and long term capacity to meet future transit service expansion. A new urban on-street exchange on 71 Avenue east of King George Boulevard and portions of 137 Street was proposed and is accommodated in the plan.

71 Avenue and portions of 137 Street would provide for bus pick-up and drop-off only. A new off-street bus layover facility would be provided to support critical bus operations such as recovery time and driver facilities. Currently the bus layover facility is anticipated to be provided on TransLink lands. The exact location of the layover facility and extent of the transit exchange will be determined as part of a future project.

Figure 4.3 Transit Concept



4.4 WALKING AND CYCLING

EXISTING

Active transportation infrastructure within the Town Centre is currently limited. Much of the existing infrastructure was built to previous standards and several existing local roads do not have sidewalks and as a result this area is also a known hot-sport for pedestrian and cyclist crashes. The limited amount of existing cycling infrastructure does not currently accommodate all ages and abilities.

PLANNED

The Plan grid road network provides for an enhanced and continuous walking and cycling network throughout the NCP. All roads within the plan are planned to be Complete Streets with wider sidewalks on both sides, separation from traffic provided by wide boulevards able to sustain large street trees. Arterial and collector roads will also have one-way protected cycling facilities on both sides of the road. The Complete Street approach will both encourage active transportation trips within the town centre and improve comfort and safety for vulnerable road users which is a key safe systems principle of Vision Zero Surrey.

In addition to the on-street pedestrian and cycling network, the plan includes off-street multi-use pathways and park pathways to further improve connectivity and provided walking and cycling connections throughout the plan area. The walking and cycling network will complement the road network , support safe and comfortable routes within the community, promote active transportation and help to reduce the need for residents to drive to shops, services, and school, and will support access to future transit service in the area.

Key components of the Plan that support increased walking and cycling, and improved safety for pedestrians and cyclists include:

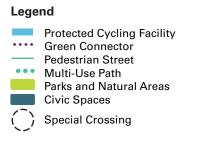
- Smaller block sizes between 80 metres and 100 metres;
- A Complete Streets approach to road design with all roads having sidewalks and prioritizing vulnerable road users;

- A continuous and connected network of protected cycling infrastructure;
- Protected cycling infrastructure including protected cycling intersections that improves comfort and safety for all ages and abilities;
- Green lanes with sidewalks to create more walking connections.
- Pedestrian-only connections through development sites;
- Multi-use pathways and/or protected cycling facilities that provide comfortable connections for multi-modal trips through parks and green spaces for all ages and abilities;
- High-quality interfaces with development that include wider sidewalks, enhanced street furniture and lighting, street trees, and boulevard landscaping;
- A central Green Connector with a specialized crossing and access into Newton Pond Park, and
- Accessible design features.

New infrastructure will be delivered through both development and City capital projects and reflect the road cross sections outlined in this plan.

Additional detail is provided in the Plan's Implementation section and Design Guidelines. These improvements will provide the framework for transforming the Town Centre into a place where active transportation is the natural first choice for short trips.

Figure 4.4 Walking and Cycling Concept



100

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200

Long Term Roads shown with dashed line

400 m

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300



4.5 PARKING

As the Town Centre evolves, there will be a change in travel demand. Transit service will become more attractive and efficient, more people will live and work in the area, demand for green space and landscaping will increase, and competition for curb space between various uses will increase. With new development and additional commercial and retail spaces, parking demand will increasingly become a challenge.

The City's parking management strategies are envisioned to be complementary to transit, cycling, ride-hailing (such as Uber and Lyft), taxis, and car share services (such as Modo and Evo). They will work to achieve transportation, urban design, affordability, and environmental objectives including choice and equity of access.

ON-STREET PARKING

Public streets are assets and as Newton Town Centre develops, road space for on-street parking will need to be allocated carefully. The following actions serve as the building blocks to efficiently maximize the management and use of on-street parking in Newton Town Centre:

- Examine price parking and introduce and adjust rates as needed to maintain optimal utilization.
- Ensure a mix and variety of on-street supply to support short stay, loading, and peak and off-peak uses.
- Regulate on-street parking spaces to favor higher priority uses and encourage turnover.
- Explore opportunities to support dedicated on-street car share parking.

TRANSIT PARKING

As a transit hub with future rapid transit station there will also be demands for short term pick up and drop off spaces near the station. This would be for both ride hail services and taxis as well as private vehicle "Kiss N Ride" use. With the proposed rapid transit station on King George Boulevard and 71 Avenue and 137 Street functioning as the on-street transit exchange there is limited opportunities for dedicated curb space for pick up and drop off without compromising transit and traffic operations. As a result, 71A Avenue and portions of 71 Avenue east of 137 Street are the ideal roads to support this important road use. It is recognized that both roads are roads to be provided with redevelopment and should rapid transit and/or the transit exchange proceed prior to the roads, alternative land temporary locations for pick up and drop off will be required.

As this is a Town Centre and ultimately rapid transit is envisioned to extend beyond the plan area, no dedicated Park N Ride facilities are planned. On-street parking withing walking distance of the station is anticipated to be time managed to promote short stay / high turnover parking and not function as alternative Park N Ride areas.

OFF-STREET PARKING

The nature of off-street parking will change as land values increase and development puts more emphasis on the efficient use of land. This will reduce the amount of surface vehicle parking and increase the amount of underground vehicle parking. Additionally, increases in person-size vehicles, such as bikes, electric assist bikes, and scooters will increase the need to allocate storage for these vehicles. The following actions serve as the building blocks for off-street parking management in Newton Town Centre:

Parking Requirements and Regulations

- Explore opportunities to right-size off-street vehicle parking requirements, in particular with supportive land uses and near transit stops. This will need to be balanced with mitigation measures such as cash-in-lieu, the provision of transportation alternatives, and increase in multi-modal parking provision.
- Underground all off-street parking within multifamily and higher density development.
- Allow shared use of public parking in partnership with private uses.

- Design surface lots and garage entrances to minimize their urban design impact.
- Develop sustainable design guidelines for parking facilities including surface lots.

Parking Supply

- Monitor downward trend in private vehicle demand and supply to anticipate changes to parking supply requirements.
- Encourage major employers to develop "travel plans" that promote the use of non-vehicle transportation options and reduce the need for off-street parking.
- Increase the provision of secure off-street cycling parking supply.

Car Share/Ride Share

- Encourage provision of priority parking for designated carpools, car sharing, and potentially autonomous vehicles.
- Provide free or reduced cost access to on-street and off-street car share parking.
- Explore opportunities to support the expansion of car share operations in Newton Town Centre.
- Explore opportunities for development led provision of car sharing spaces.



Right - Raised On-Street Parking with Decorative Pavers

4.6 TRAFFIC CONTROL & VISION ZERO SURREY

SIGNALS

Consistent with typical practice, traffic signals are planned at all arterial-arterial and arterial-collector intersections. Typically, traffic signals are installed on an engineering warrant basis which includes a criteria of traffic volumes, pedestrian demand, and safety assessments. Proactive planning for traffic signals will occur where road classifications warrant a higher order of intersection control, safe access and circulation will be promoted, and provide crossing opportunities for vulnerable road users will be provided.

A number of traffic signals already exist in the plan area. Additional, traffic signals are anticipated or planned in response to growth in the town centre. This is a function of the tighter grid road network, higher traffic volumes and the increased active transportation demand to cross busier roads. While this will decrease the signal spacing on roads such as 72 Avenue and King George Boulevard this is typical spacing for signalized intersections in a town centre. The City's Traffic Management Centre (TMC) and use of Intelligent Transportation Systems will ensure safe and efficient operations on the corridor to maintain the highest people movement capacity along the arterial roads.

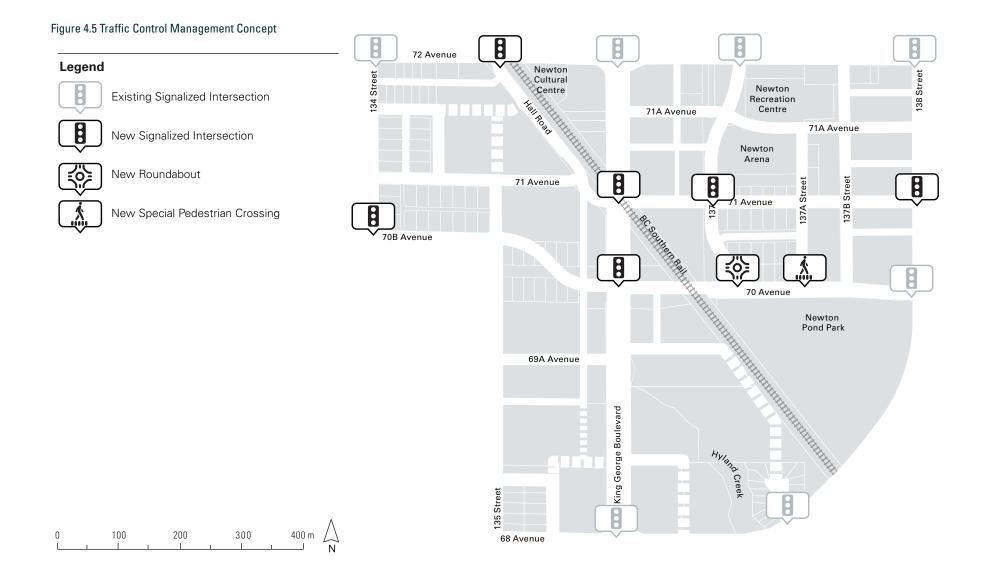
ROUNDABOUTS

A single lane roundabouts is planned at the intersection of 137 Street and 70 Avenue. This is consistent with the practice to have roundabouts at collector to collector road intersections. Roundabouts are effective at reducing the number of and severity of potential collision points at intersections as well as being generally more efficient. The roundabout is anticipated to be installed when the required land is secured through adjacent development.

VISION ZERO SURREY

Vision Zero Surrey is a data driven and collaborative approach to road safety that aims to have zero people killed and seriously injured on roads by valuing human life above all else in the transportation network. To create better streets for everyone, a Safe Systems Approach is used for road design that includes applying best practices in speed management, prioritizing safety improvements at intersections - where most crashes occur -, and focusing efforts on protecting vulnerable road users such as pedestrians, cyclists and motorcyclists. Based on safety analysis and site characteristics, some of the engineering measures that are implemented and that would be anticipated in the Plan Area include:

- Fully protected left turn only phases;
- Fully protected left turn only phases;
- Cycle tracks and protected cycling intersections;
- Leading pedestrian intervals (LPI) where pedestrians walk before traffic gets a green light;
- Removal of or redesigned right turn channelization lanes;
- Curb extensions at local road intersections;
- Speed humps, raised crosswalks and other speed management devices;
- Improved street lighting; and
- Enhanced crosswalks.



NEWTON TOWN CENTRE PLAN | 85



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4.7 ELECTRIC VEHICLE INFRASTRUCTURE

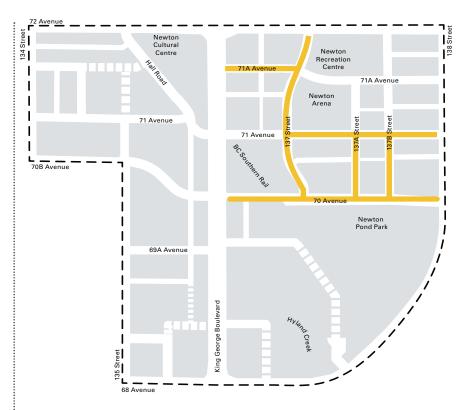
Electric Vehicles are an important part of Tackling the Climate Crisis and reducing Green House Gas emissions. To encourage the use of electric vehicles within the core of the plan area, the City will require that electric vehicle (EV) charging infrastructure be provided onstreet, adjacent to mixed-use developments. Two (2) Level 2 (240 V) EV charging stations will be provided on each block of the following streets (i.e. one on each side) where on-street parking is provided:

- 71A Avenue between King George Boulevard and 137 Street;
- 71 Avenue between 137 Street and 138 Street;
- 70 Avenue between 137 Street and 138 Street;
- 137 Street between 72 Avenue and 70 Avenue (outside of the transit exchange).
- 137A Street between 70 Avenue and 71 Avenue (the Green Connector)
- 137B Street between 70 Avenue and 71 Avenue

The City will designate these spaces as "EV only" and install Level 2 (240V) charging stations. The City will develop an Electric Vehicle Curbside Charging Station Design Standard that will be incorporated into the City's Supplementary Master Municipal Construction Documents (MMCD). It is anticipated that the Design Standard will include:

- Charging station location criteria;
- Concrete base for attaching the charging station;
- Conduit and wiring to a suitable power source; and
- Protective bollards to prevent damage to the charging station.

The City also requires new development to install EV charging infrastructure. Refer to Section 8.1 for additional details.

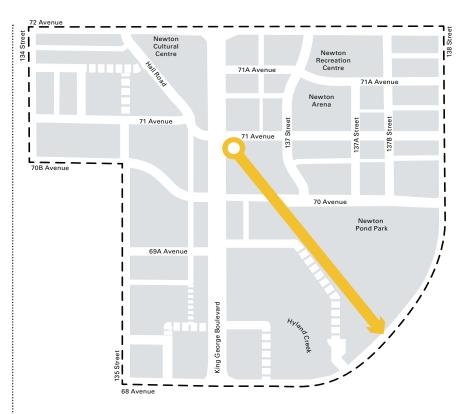


4.8 HERITAGE RAILWAY

Newton Town Centre includes a section of the BC Hydro railway corridor which runs diagonally through the Plan Area. This corridor was historically the BC Electric Railway ("BCER") which provided interurban service between Vancouver and Chilliwack. Today, the corridor is used for weekday freight transport by the Southern Railway of British Columbia Limited ("SRY").

In 2001, the Fraser Valley Heritage Rail Society (FVHRS) was formed to evaluate the feasibility of operating former interurban cars on the railway corridor. Heritage rail service began operations in 2012 between a new Cloverdale Car Barn and Sullivan Station (152 Street and 64 Avenue). The service has been successful and continues to present future opportunity for expanded recreational and tourist rail service, as a weekend or seasonal heritage railway.

A potential extension of the Heritage Railway service to the Plan Area would require a new station. To enable this future service extension, a future heritage rail station and spur line would be required in the BC Hydro railway right-of-way south of 71 Avenue. As the heritage rail station would be very close in proximity to a future rapid transit station, it would also provide a regional connection (on weekends) and expand tourist opportunities for the City.





"More green space please! And preserve what we have!"

Online Survey Response, Newton Town Centre Plan Process, 2018-2019

5 Parks and Open Space | Keeping it Green

Parks in Surrey are planned and designed through the lens of various plans, strategies, and policies. These include the Parks, Recreation and Culture Strategic Plan; the Biodiversity Conservation Strategy (BCS); and the Parks Design Guidelines, along with various subplans and strategies including dog off-leash areas, playgrounds, natural areas, and greenways. 5.1 Parks and Open Space Concept 5.2 Parks

SECTION 5 PARKS AND OPEN SPACE **SECTION 6**

- 5.2 Parks
- 5.3 Plazas
- 5.4 Riparian Areas
- 5.5 Neighbourhood Enhancement

SECTION 8



5.1 PARKS AND OPEN SPACE CONCEPT

One of the goals of the City's Parks, Recreation and Culture Strategic Plan is to provide neighbourhood parks within 500 metres or a 10-minute walk of all residents. Having access to greenspaces provides significant benefits for mental health and well-being, encourages social connections and physical activity. The plan delivers on this principle through new and enlarged parks in the area.

The plan includes enhancing the existing Newton Pond Park, expanding "The Grove" into a larger park, and adding two new mini neighbourhood parks. The plan also includes small public plazas to support retail and recreational uses and promote active and vibrant streetscapes. Together, these active park sites total approximately 6.7 hectares (16.5 acres).

The plan takes into consideration the City's Streamside Protection Bylaw, which protects riparian areas around the headwaters of Hyland Creek, as well as any other streams (including ditches and ponds), which are important to fish habitat and provide ecosystem services such as stormwater management, flood control, and drainage considerations.

Left - The Grove iNewton

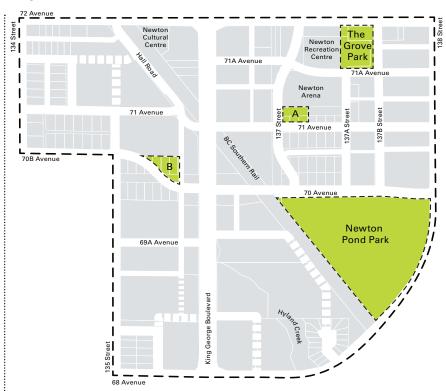
Figure 5.1 Parks and Open Space Concept



5.2 PARKS

Once parkland is acquired, the City works with the community to design new parks. Typical neighbourhood park amenities include playgrounds, pathways, natural areas, seating areas and landscaping. While each park will be subject to its own detailed design and public engagement process, a general overview of the park network follows.

Figure 5.2 Parks



94 | CITY OF SURREY

5.2.1 Park Sites

NEWTON POND PARK

This large community park is partially completed, featuring trails and habitat areas surrounding a network of ponds that help manage stormwater and aid in flood protection. In the future, the northeast section of Newton Pond Park will be redesigned with community input. The redesign will create a public space complementary to the pond while providing amenities appropriate for the town centre context.

THE GROVE PARK

Located adjacent to the Newton Recreation Centre, this area currently consists of a grove of trees with pathways that connect to the bus loop. With the future relocation of the bus loop and changes in adjacent land uses, "The Grove" will be expanded northward into an urban neighbourhood park. The park will be expanded to provide more outdoor community space and to support community engagement and activities.

NEW PARK A

Located on the northeast corner of 71 Avenue and 137 Street, this mini-park will provide a centrally located open space. Surrounded by high rise mixed-uses and community uses, the park will provide easily accessible gathering and social spaces for neighbouring residents, shoppers, and recreation centre users.

NEW PARK B

Located along the northern side of 70B Avenue/70 Avenue, this mini-park will provide park space for residents on the west side of King George Boulevard. Triangular in shape, this park will serve as a small public park for rest and gathering.

In addition to these parks, residents within the plan area are served by nearby parks and outdoor recreation amenities including Unwin Park and Hazelnut Meadows Community Park. Combined, these parks provide a variety of outdoor active and athletic amenities as well as natural areas, playgrounds, and community spaces.





Right Top - Park Plants Right Bottom - The Grove, Newton





5.2.2 Park Design Guidelines

Development adjacent to parkland should positively contribute to park design and function by complying with the following guidelines:

- Multi-family development adjacent to parks should front units onto parkland and will
 provide a sidewalk within the private property onto which all ground-oriented units will
 front. Any fencing to delineate private property will be a maximum of 1.2 metres tall,
 visually permeable and located on the private property side of the frontage sidewalk.
- Design development to meet the existing natural grade of a park or plaza wherever possible. If retaining walls are required adjacent to a park or plaza, they must be entirely on private property, including any underpinning, and with all necessary setbacks required for maintenance of private property.
- If rights-of-way for servicing or any other access (temporary or permanent) is required through existing or future parkland, compensation for the access and a cash-in-lieu payment for the restoration re-planting are required to Parks standard.
- Any development adjacent to an existing or future park must submit an arborist report including the first 15 metres of land within the park and report on all trees 8 cm DBH (diameter at breast height) or greater. Removal of any tree on parkland requires advanced written approval from the Parks, Recreation and Culture (PRC) Department.



Top - Newton Pond Middle - Hyland Creek Bottom - Newton Pond



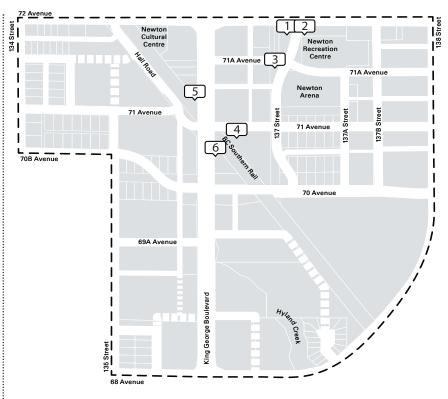


5.3 PLAZAS

Plazas encourage social interaction and activity and reinforce the public realm. They provide a second tier of public open space in higher density areas. Activities supported by public plazas, such as socializing, resting, and eating, add to the quality of city living and provide positive social and cultural opportunities.

Like parks, plazas require a strong program of use and design. Careful thought should be given to a plaza's principal function and its relationship with adjacent buildings and uses. Individual plazas function best as part of a hierarchy of open spaces, serving immediate local needs. All plazas will be secured through adjacent development and enhanced/enlarged with increased setbacks and/or road dedications. A general overview of identified plaza locations follows.

Figure 5.3 Plazas



5.3.1 Plaza Sites

PLAZA 1

Located on the southwest corner of 72 Avenue and 137 Street, this plaza signifies the entrance to the realigned 137 Street and the core area of the Town Centre. The plaza will be secured through development as publicly accessible open space, with enhanced 5 metre by 5 metre corner setbacks to allow for seating, public art, and urban landscaping. Design will be coordinated with Plaza 2.

PLAZA 2

Located on the southeast corner of 72 Avenue and 137 Street, this plaza is paired with Plaza 1 to signify the entrance to the realigned 137 Street and the core area of the Town Centre. The plaza will be secured through development as publicly accessible open space, with enhanced 5 metre by 5 metre corner setbacks to allow for seating and urban landscape. Design will be coordinated with Plaza 1.

PLAZA 3

Located on the southwest corner of 71A Avenue and 137 Street, across from the Newton Recreation Centre and Festival Street, this central plaza supports pedestrian movement and retail within close proximity to future rapid transit and High Rise Mixed-Use development. The plaza will be secured through development as dedicated road right-of-way to create a central landmark plaza and allow for seating and urban landscape. Minimum size should be equivalent to a 6m by 6m corner cut.

PLAZA 4

Located on the southeast corner of 71 Avenue and the BC Hydro railway right-of-way corridor, this central plaza abuts the potential location of a future heritage railway station. It provides space for pedestrian queuing from the nearby future rapid transit station on King George Boulevard. The plaza will also serve residents and retail uses from the surrounding high density mixed-use development. The plaza will be secured as a City-owned parcel or with enhanced setbacks as publicly accessible open space through development. Plaza design should use contemporary forms to reference the historical character of the Newton Heritage Rail.

PLAZA 5

Located on the northwest corner of the BC Hydro railway right-ofway and King George Boulevard, this plaza will utilize challenging site geometries to create a landmark public space. The plaza will be secured as a City-owned parcel or with enhanced setbacks as publicly accessible open space through development. Ultimately, the area is intended to be approximately 650 sq. m (6997 sq. ft) of public outdoor space for social activities.

PLAZA 6

Located on the southeast corner of the BC Hydro railway right-of-way and King George Boulevard, this plaza will also utilize challenging site geometry to create a functional outdoor public space. The plaza will be secured as a City-owned parcel or with enhanced setbacks as publicly accessible open space through development.

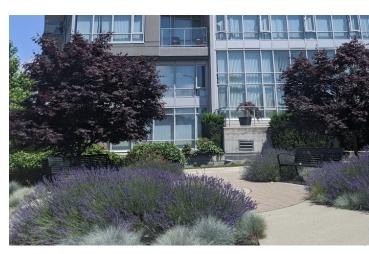
5.3.2 Plaza Design Guidelines

Most plazas will be delivered as publicly accessible open space on private property, paid for and delivered through development. Plaza design should be coordinated through urban design review of adjacent development and is subject to review and endorsement by City Architect. Development adjacent to a designated plaza should positively contribute to plaza design and function by complying with the following guidelines:

- Provide clear street visibility by providing at least two edges with street frontage to indicate the space is public and to encourage street activity and public safety.
- Retail or unit frontage is required where development is adjacent to a plaza. Avoid parking lot interfaces and maximize activity by orienting lobbies and entrances onto plaza spaces.
- Grade plazas to meet sidewalk grades and avoid retaining walls, stairs, and ramps to provide universal accessibility and clear site lines.
- Maximize accessible and comfortable seating opportunities, and consider opportunities for weather and sun protection. Orient seating towards the street, near building entrances, and next to amenities.
- Consider weather protection for open spaces, particularly where commercial uses line the edges. Such protection should be provided at waiting points and along major pedestrian routes.
- Use subtle, pedestrian lighting in character with the overall design, while also providing nighttime generalized lighting to enhance safety and nighttime use.
- Furnish with a variety of amenities to encourage public usage and to create a sense of liveliness and excitement. Key amenities can include bike racks, drinking fountains, tables and chairs, and games and public art.
- Integrate landscaping with shade trees and durable planting. Specify plants for the level of maintenance planned at the site, including robust and drought tolerant species wherever possible.
- Flush in-ground planters should be used instead of raised planters.
- Provide natural elements which reflect seasonal change, such as deciduous trees, as well as shrubs, ground covers, and flowers in a variety of colours and textures.
- Incorporate irrigation and adequate drainage to assure plant survival over time. Integrate stormwater management into landscaping features wherever possible.

Top - Commercial Corner Plaza Middle - Residential Corner Plaza Bottom - Landmark Plaza









5.4 RIPARIAN AREAS

Watercourses (including wetlands, ditches, channelized streams, and natural streams) may be regulated by Provincial and Federal statutes and protected under the City's Streamside Protection Zoning Bylaw (Part 7A of the Zoning Bylaw 12000). The aim of the Bylaw is to adhere to Provincial and Federal regulations through land development. The Bylaw protects fisheries and biodiversity values and protects the public interest by managing flood hazards, as well as protecting agricultural land use, particularly as climate change progresses and adds uncertainty to existing flood and drought conditions. As a result of the Bylaw, these riparian areas will require a prescribed buffer between the watercourse and proposed development. This buffer is to be protected and naturalized with native vegetation species, which will aid in bank stabilization to reduce erosion and flood potential and provide habitat for fisheries values. Full compliance with the Bylaw will more effectively maintain biodiversity and encourage native pollinators and wildlife to occupy riparian spaces.

There are several riparian areas in Newton Town Centre. Hyland Creek, a "Class A" watercourse, runs through the southern portion of the plan area and is inhabited or potentially inhabited by fish including salmonids year-round. A pond system which may also be fish-bearing runs along the BC Hydro railway corridor and into Newton Pond Park. Other riparian areas including ditches may provide food and nutrients to downstream fish habitat ("Class B" or yellow-coded streams).

All of these watercourses are critically important for fish species throughout their life cycle. Watercourses may be mapped on the City of Surrey's Online Mapping System (COSMOS); however, confirmation of classifications and extents of watercourses will need to be completed by a qualified Environmental Professional (QEP). Through the land development process, the Streamside Protection Zoning Bylaw is triggered and it is anticipated that riparian areas will be protected by either securing protective registered instruments including Right-of-Ways or Restricted Covenants or conveyed and protected as parkland.

Left - Newton Pond

5.5 NEIGHBOURHOOD ENHANCEMENT

Community identity and sense of place will contribute to quality of life and sense of belonging and connection in the Newton Town Centre. Strategies to enhance neighbourhood development and activity include:

COMMUNITY SPACE STEWARDSHIP

When people come together to enhance their neighbourhood, it contributes significantly to the health and quality of life in a community. The Newton Town Centre area is home to a mix of community groups contributing to neighbourhood and public life, providing stewardship over and animation of public spaces. Retaining and creating new opportunities for community members to shape and steward community spaces in Newton Town Centre will help connect the old with the new, and contribute to the development of unique local character.

RETROFITTING AND ENHANCEMENT OF PUBLIC SPACE

As development occurs and shapes the community, there will be a need to improve existing public spaces in the plan area and on the periphery to create a cohesive urban experience for residents and visitors to the area. Development occurs at an uneven pace, interventions may be needed to bridge gaps in the urban environment. The connection to the existing commercial corridor of 137 Street is one connection that should be considered.

PLACEMAKING

Permanent and temporary placemaking features can be incorporated strategically into the urban environment to support vibrant street level activity and animation. Key areas that will benefit from enhanced public realm features and placemaking interventions can be identified. Static features, such as wayfinding signage, street furniture, plazas, public art, and temporary parklets, can be employed as needed as the public realm needs of the neighbourhood develop and change. Flexible approaches to urbanism can support the needs of present and future land uses. Where possible, community led initiatives to animate, program, and improve public spaces can be planned and supported.

Top - Newton Parkit Middle - The PLOT Community Sharing Garden, Newton Bottom -The Grove Lit Up at Night, Newton





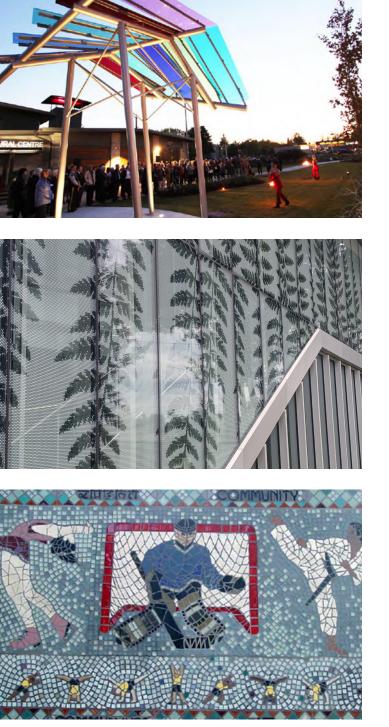


"Seniors... need a place that is like a second home where they can meet and interact with their friends and take part in activities suitable for their age group."

Online Survey Response, Newton Town Centre Plan Process, 2018-2019

6 Community Amenities | **Building Community**

SECTION 5 SECTION 1 **SECTION 2 SECTION 3 SECTION 4 SECTION 7 SECTION 8 SECTION 6** COMMUNITY **AMENITIES** Town Centre areas create a critical mass 6.1 Overview 6.2 Civic Facilities and Services of activity which facilitate cultural, social, educational, and economic exchange. 6.3 Schools Community facilities, services, and events 6.4 Public Art are the foundation to that exchange. They provide amenities and programming that encourage active lifestyles, learning, opportunities for cultural and social interaction, and services to promote health and well-being.



6.1 OVERVIEW

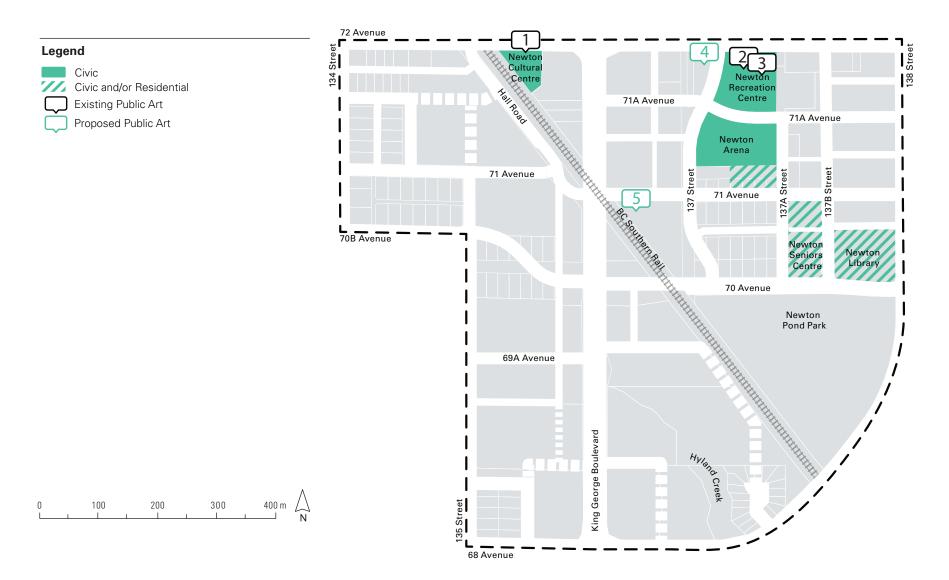
Newton Town Centre is unique in that approximately one-fifth of the plan area is City owned property. This supports a variety of existing community, recreational, and cultural assets, and provides opportunity for more. Existing facilities include a recreation centre, wave pool, ice arena, seniors centre, library, and cultural centre. Various community events and activities also take place in and around these community spaces, such as community festivals and community gardens. In addition to creating a sense of place, these facilities are vital to realizing the plan's objectives to attract new residents, enhance character, and support local business.

Top - Dancing Tower, 2010, Claudia Cuesta and Bill Baker Location: Newton Cultural Centre (13530 72 Avenue)

Middle - Fern Façade, 2017, Sean Alward Location: Newton Recreation Centre (13730 72 Avenue)

Bottom - Valeri Sokolovski, Connie Glover and Vallalee Hoffman, 2006 Location: Newton Wave Pool, Arena, Community Centre, & Seniors' Centre (137 Street & 82 Avenue)

Figure 6.1: Community Amenities



6.2 CIVIC FACILITIES AND SERVICES

Civic facilities and services are essential components of the overall health and wellness of all residents. They provide year-round amenities and programming that encourage active lifestyles, learning, opportunities for social interaction, and the capacity to provide dynamic programming that supports all ages and abilities. Civic facilities and services welcome the entire community, and strive to serve vulnerable individuals, families, and children through fostering a sense of belonging and connection.

Figure 6.2: Civic Facilities



6.2.1 Facilities

COMMUNITY AND RECREATION FACILITIES

Community and recreation facilities and services act as community hubs that bring people together, supporting community capacity, volunteerism, and a sense of place. They will be transformational health and social service centres that, in collaboration with community partners, will make a positive impact on real social issues facing the community. Within the Town Centre, several facilities serve current and future recreation and social needs of residents, including:

- Newton Recreation Centre
- Newton Wave Pool
- Newton Ice Arena
- Newton Seniors Centre

In the long term, the Newton Ice Arena will be replaced and relocated outside of the Plan Area to create space for a new community centre. The existing Wave Pool will also be expanded to include additional aquatic and community amenities. These two facilities will be centred on a new "Festival Street," which will encourage events and activities and reinforce the civic heart of the community. Through these longterm changes, the Newton Seniors Centre will be incorporated with opportunities for expanded programs and services and the potential inclusion of seniors-oriented housing.

CULTURAL FACILITIES

As the area transitions into a more urban landscape, cultural facilities and assets will play an essential role in contributing to a more distinct and thriving town centre. They will support this vision by providing opportunity for social, educational, and economic exchange and by celebrating the historical and cultural heritage of Surrey.

Within the plan area, the Newton Cultural Centre serves current and future residents as the headquarters for the Arts Council of Surrey. This former firehall now holds a theatre, exhibition gallery, and meeting

rooms. It is anticipated that the future community centre will include dedicated cultural space for a variety of programs and services.

LIBRARY FACILITIES

Newton's first library opened in the 1960s. It was replaced by the current 14,700 square feet library in 1992, which in 2019 remained largely unchanged. The Newton library is a community library, which provides a collection based on the area's demographics and expressed interests. It includes some specialized collections and services, computer workstations, children's areas, and study and reading space. It also offers meetings rooms for library events and community use. The library reflects the communities around it and hosts special events and programs.

The 2014 Surrey Libraries Facilities Master Plan identified the Newton library as insufficient to meet the needs of the current population. In 2019, Newton had the least amount of library space per capita in Surrey. The Surrey Libraries Facilities Master Plan suggests that continued growth in the broader Newton area requires 20,000 square feet to 25,000 square feet of library space. The Plan includes the consideration of expanding the existing location from 14,700 square feet to minimum 25,000 square feet.

Expansion to the existing building is challenging and the City owns limited suitable land within the broader Newton community. The preferred solutions involve the library relocating within a nearby mixed-use development or through integration within the future community centre in the civic core. Co-location may reduce construction costs and offer opportunity to serve the growing community with a larger and central location. The Surrey Libraries Facilities Master Plan will be updated in 2020 to develop the feasibility of preferred solutions.

6.3 SCHOOLS

The plan anticipates new growth and development taking place gradually over several decades. This is expected to slowly increase student numbers and school enrollment in the Town Centre. The plan area is centrally located in various school catchments at both the elementary and secondary levels. The School District has confirmed that the area currently has an adequate number of schools to meet projected demand in school population.

ELEMENTARY

The plan area is served by Georges Vanier, W.E. Kinvig, Henry Bose, and Hyland elementary schools. All these schools have capacity for additional students.

SECONDARY

The plan area is served by Frank Hurt, Princess Margaret, Panorama Ridge, and Sullivan Heights secondary schools. These schools have a mix of capacity levels, with additional space in Princess Margaret and limited capacity in the other schools. The School District is planning for an addition to Frank Hurt Secondary, as well as a new secondary school within the Newton Community. Combined, these capital projects will address the long-term growth of secondary school students within the area.

Figure 6.3A Elementary School Catchments Serving Newton Plan

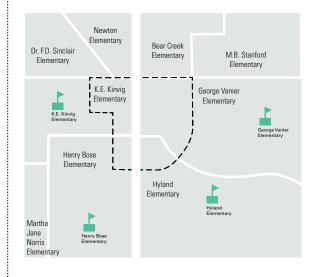
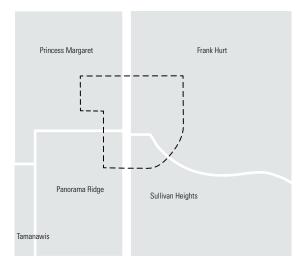


Figure 6.3B Secondary School Catchments Serving Newton Plan



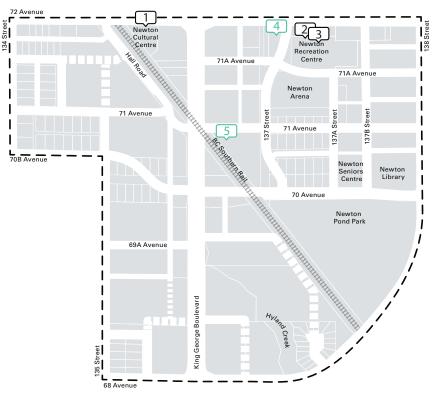
6.4 PUBLIC ART

Public art installations animate the public realm and contribute to creating a memorable and unique landscape. They also engage residents in the interpretation and expression of what is important and significant to the community.

Public art features are envisioned to enhance the walkability and unique character of Newton Town Centre. Sites for future artworks are identified within the Surrey Public Art Master Plan.

New development is expected to contribute to public art through the City's Private Development Public Art Policy. See Section 8.2 Community Amenity Contributions for more details.

Figure 6.4: Public Art



"This is important and much needed but I must stress the importance of King George Blvd as being the important route that needs attention, especially for fast transit."

Online Survey Response, Newton Town Centre Plan Process, 2018-2019

7 Utilities and Servicing **The Nuts and Bolts**

SECTION 2 SECTION 1 SECTION 3 SECTION 4 SECTION 5 SECTION 6 SECTION 8 SECTION 7 UTILITIES AND SERVICING 7.1 Drainage An efficient and reliable infrastructure 7.2 Sanitary network is critical for a liveable and thriving neighbourhood. Future land uses and 7.3 Water expected growth in the plan area will require infrastructure expansion and servicing upgrades. This section outlines the utility servicing strategies that will support the plan area.





7.1 DRAINAGE

Newton Town Centre is in the Hyland Creek watershed. Stormwater is conveyed by an existing system of storm sewers and open ditches, eventually discharging into the confluence of Hyland Creek near 68 Avenue and 138 Street.

The existing storm sewers within the Plan Area were mostly installed in the 1970s and 1980s. This was a period when stormwater management focused on conveying rainwater off-site as quickly as possible, as opposed to current practice which emphasizes retaining rainwater onsite. On-site retention better maintains the natural pre-development flow and quality of water in the receiving watercourse.

To mitigate drainage impacts from existing development, the Newton Town Centre Detention Pond was constructed in 2016. Located in Newton Pond Park south of 70 Avenue, the detention pond controls peak flows prior to discharge to Hyland Creek and improves water quality conditions.

A resilient drainage system contributes to the ability of the community to weather the increased frequency and severity of storms now and into the future due to the impacts of climate change.



Top - Newton Pond Middle - Hyland Creek Bottom - Newton Pond

7.1.1 Watercourse Classification

The City classifies watercourses as follows:

- Class A (Red) Inhabited by salmon and trout all year, or potentially inhabited all year.
- Class A(O) (Red dash) Inhabited by salmon and trout primarily during the over-wintering period, or potentially inhabited during the over-wintering period with access enhancement.
- Class B (Yellow) Food or nutrient value. No fish potential present at any time of the year.

Hyland Creek (and its tributary) is a "Class A" watercourse. There are several potential "Class B" watercourses within the plan area: one along existing 136B Street (south of 71 Avenue) leading to the BC Hydro corridor, two along the BC Hydro corridor (between 138 Street and 72 Avenue), and one within the Newton Pond Park.

If a feature does not carry a natural source of water and does not meet the definition of a 'stream' as per the Provincial Water Sustainability Act (WSA) or Riparian Areas Protection Regulation (RAPR), then no Municipal setbacks will apply to the feature. These features are defined as such:

 Class C (Green) – Not considered a stream under any definition. No fish potential present at any time of the year.

Class A, A(O), and B watercourses require assessment by a qualified environmental professional (QEP) in order to complete environmental permits and Sensitive Ecosystem Development Permit approvals, and must meet the applicable Zoning By-law setback requirements. As the City's online mapping system (COSMOS) does not represent confirmed information in all locations, Class C features must also be confirmed in the field by a QEP.

Ŀ, Cultura Newton 88 Centre Recreation Centre 71A Avenu 71A Avenu Newton Arena 71 Avenue 71 Avenue 70B AV 70 Avenue Newton Pond Park 69A Avenue 68 Avenue Legend Watercourse A-Class Watercourse B-Class Waterbody

Figure 7.1A: Existing Watercourse Classifications

34

7.1.2 Stormwater Upgrades

With the higher densities proposed, the Newton Town Centre Plan will increase the total surface imperviousness above existing conditions. To mitigate associated impacts and address the anticipated increase in the frequency and intensity of storms due to climate change, the proposed stormwater servicing strategy for the plan includes the following three key components:

- Relocation and abandonment of existing storm sewers, and construction of new storm sewers;
- Implementation of low impact development (LID) / stormwater best management practices (BMPs) throughout the neighbourhood; and
- Optimize the use of the Newton Town Centre Detention Pond.

The plan proposes to extend 137 Street south of 72 Avenue to 70 Avenue, and abandon 136B Street. Existing stormwater infrastructure located along 136B Street will be abandoned and new infrastructure will be constructed, through new development, along 137 Street. Additionally, to optimize the use of the detention pond and to mitigate impacts to Hyland Creek, a diversion sewer is required on 70 Avenue between King George Boulevard and 136B Street to divert flows from the northwest corner of the plan area into the detention pond. Additional minor system storm sewer upgrades will also be required.

In addition to sewer upgrades, development provides an opportunity to manage runoff quantity and quality at a site level through implementation of a variety of BMPs. The following on-site BMP strategy is recommended for new, infill, and re-development:

- Include on-site BMPs in site development plans to address runoff volume and flow control;
- Implement on-lot water quality treatment units to remove pollutants from stormwater runoff before discharging into Hyland Creek;
- No further encroachment by development on riparian areas;
- Preserve remaining natural features as much as possible, and

maintain their links with external natural areas; and

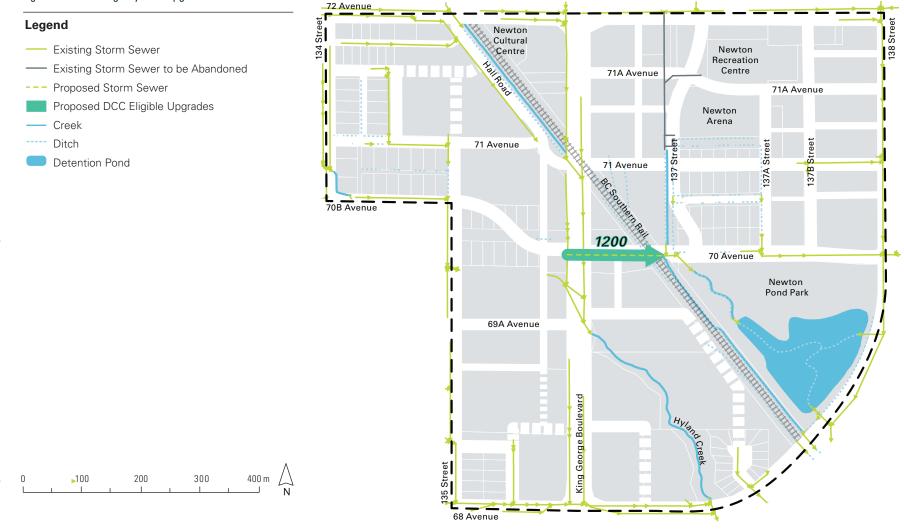
 Preference should be given to permeable pavements and driveway technologies that allow precipitation to infiltrate to the ground. In addition, the footprints of impermeable structures should be minimized to maintain as much natural land cover as possible.

LID measures are a critical part of the overall stormwater management strategy. LID measures will provide servicing and environmental benefits in terms of peak flow control, water quality improvement, and erosion condition improvement in Hyland Creek. In addition, LID features will integrate with and improve overall landscaping in the plan area.

The LID performance target for the neighbourhood is to prohibit runoff from rain events up to the 6-month recurrence, 24-hour rain event, defined as 47 mm in 24 hours. Developers will be required to select and incorporate LID measures into site plans and buildings to satisfy the performance targets.

All designs shall be in accordance with the City's Design Criteria Manual and the Hyland Creek Integrated Stormwater Management Plan (ISMP).

Figure 7.1B: Drainage System Upgrades



7.2 SANITARY

Newton Town Centre is currently serviced by an extensive sanitary sewer network that supports existing development. The Plan Area is divided into two sanitary catchments based on local topography: East Catchment and West Catchment. Wastewater generated by the East Catchment is conveyed southeast along the BC Hydro Railway corridor to 68 Avenue and is ultimately discharged to Metro Vancouver's Central Valley Trunk sewer at 66A Avenue and 152 Street. Wastewater generated by the West Catchment is conveyed south along King George Boulevard to 64 Avenue; flows then travel east and are also ultimately discharged into the Central Valley Trunk sewer. Both catchments receive additional wastewater flows from external areas.

Existing sanitary sewers within Newton Town Centre range in size from 150 mm to 450 mm diameter and most of them were installed in the 1960s and 1970s. Most of these sewers are comprised of asbestos cement (AC) or vitrified clay (VC). These are non-standard materials that are no longer permitted for new installations per the City's Design Criteria.

A sanitary sewer analysis was undertaken to determine wastewater flows resulting from the full build-out of the plan area. The analysis determined that the projected growth in the plan area will exceed the capacity of some of the existing sanitary sewers.

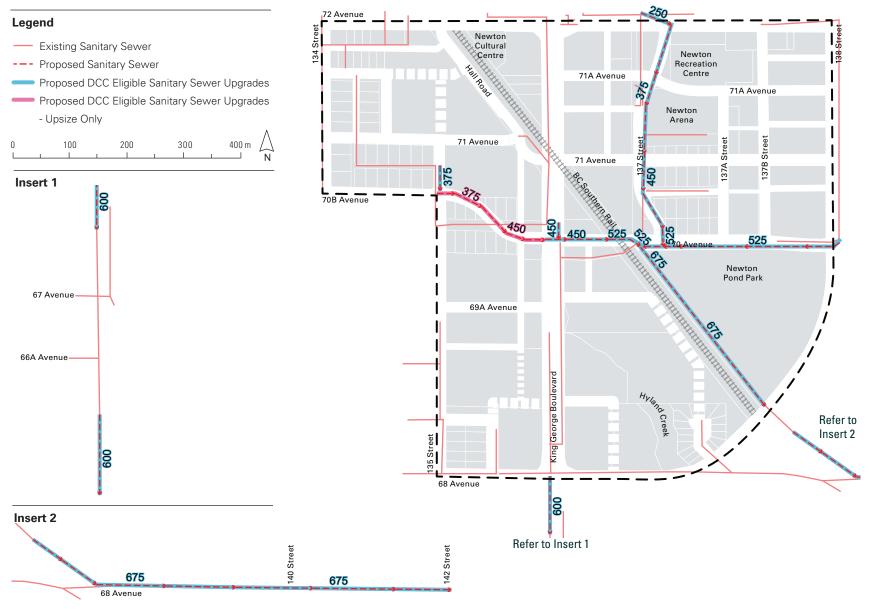
7.2.1 Sanitary Upgrades

The proposed sanitary infrastructure is designed to optimize the function and use of the existing sanitary sewer system while supporting future growth. A phased sanitary infrastructure upgrade and replacement strategy is recommended based on the anticipated development timeline and projected population growth. Upgrades will ultimately be driven by the pace of development in the plan area.

Sanitary sewer upgrades will be required on King George Boulevard, 68 Avenue, 70 Avenue, 72 Avenue, and 137 Street to support the densities proposed in the plan area. Portions of existing sanitary infrastructure along 136B Street and 70A Avenue will be abandoned due to the realignment of roads. Remaining service connections will be extended from 136B Street to the new sewers on 137 Street. Additional sewer upgrades are also required downstream of the plan area.

Sanitary infrastructure upgrades required to support future development are shown in the Sanitary System Upgrades figure. The upgrades shown are Development Cost Charge (DCC) eligible. Fronting development upgrades are not included in the figure. All designs shall be in accordance with the City's Design Criteria Manual.

Figure 7.2: Sanitary System Upgrades



7.3 WATER

Newton Town Centre is located entirely within the Newton-Kennedy pressure zone (135 m). Water to the plan area is supplied from the Newton Pump Station through feeder mains, ranging in diameter from 450 mm to 750 mm.

Existing water mains within Newton Town Centre were installed between the 1960s and 1980s and are comprised of older material such as asbestos cement (AC), with some newer material such as polyvinyl chloride (PVC) and ductile iron (DI). An analysis was undertaken, which determined that the existing water mains have adequate capacity to supply current water demand based on current land uses, but up-sizing of these mains may be required to support anticipated growth.

The City recently completed a feeder main installation on 138 Street between 68 Avenue and 72 Avenue, which improves the water supply to the plan area.

7.3.1 Water Upgrades

The future water infrastructure servicing Newton Town Centre is designed to optimize the use of existing water mains while supporting future growth. A phased water infrastructure upgrade and replacement strategy is recommended based on the timeline of anticipated development and population growth. Upgrades will ultimately be driven by the pace of development in the plan area.

Per the City's Design Criteria Manual, water mains within Newton Town Centre shall be upgraded by developers to be at least 250 mm, as part of their fronting development upgrade requirements. The City's latest water model was used to confirm that these fronting development upgrades will be adequate to service the plan area in the future and no additional up-sizing or new feeder mains are required. All designs shall be in accordance with the City's Design Criteria Manual.

Portions of existing mains along 136B Street and 70A Avenue will be abandoned due to the realignment of roads. New local water mains, delivered by the development community as part of their fronting development upgrade requirements, will be along new road alignments.

Figure 7.3: Water System

Existing Water Mains >= 450mm

Existing Water Mains < 450mm

Existing Water Mains to be Abandoned

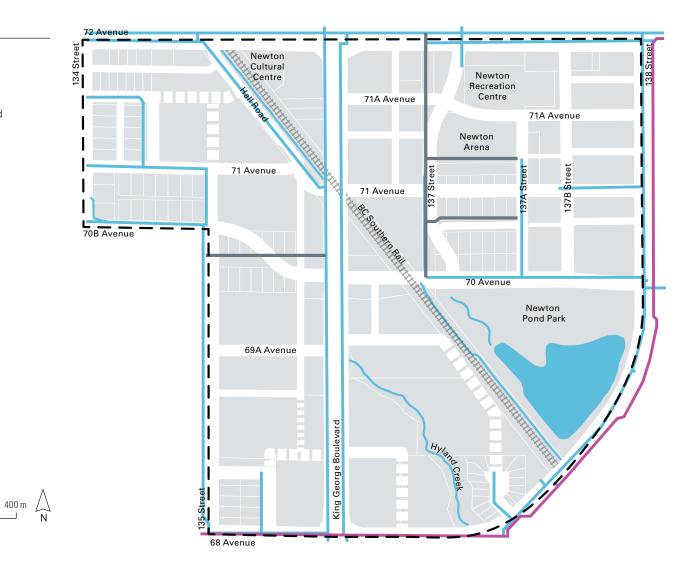
300

Legend

0

100

200



"I think it is a good plan. I hope it gets realized."

Online Survey Response, Newton Town Centre Plan Process, 2018-2019

8 Implementation | Making it Work

SECTION 5 SECTION 6 **SECTION 8** IMPLEMENTATION The plan will increase development intensity 8.1 Development Policies and population. To address the impacts of 8.2 Community Amenity Contributions growth, funding will be required to improve 8.3 Infrastructure Financing local amenities and infrastructure necessary for a high quality of life. A number of area specific considerations, such as flooding and watercourse protection, must also be considered as the area grows.

8.1 DEVELOPMENT POLICIES

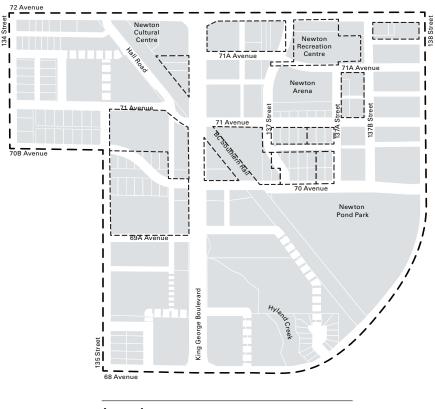
8.1.1 Lot Consolidation Areas

Lot consolidation requirements prevent the creation of land remnants which are undevelopable based on proposed land use designations. They also ensure equitable distribution of road dedication and construction costs across properties, and in some cases ensure development does not adversely impact existing residents. Lot consolidation requirements have been generally identified in Figure 8.1.

If land consolidation is proven to be unfeasible, the developer must:

- Demonstrate that the development potential of the excluded property is not compromised to the satisfaction of the City; and
- Share any required road construction costs amongst properties shown in the land consolidation area.

Figure 8.1 Lot Consolidation Map





124 | CITY OF SURREY

8.1.2 Housing Policies

As a designated Town Centre, Newton plays an important role in achieving the City's housing goals. A diversity of housing forms and tenure types will support a full range of housing needs for the homeless, young families, older adults, low-income groups, and people living with disabilities. The following housing objectives support the City's Affordable Housing Strategy, and ensure that residents of all income groups benefit from development:

- Focus most new development within walking distance of downtown;
- Encourage more housing options, which benefits young families, people with disabilities, and seniors;
- Plan for a rapidly increasing seniors' population with accessibility challenges;
- Prevent the loss of purpose-built rental housing; and,
- Retain the character of existing neighbourhoods at the edge of the plan area.

To support these housing objectives the Plan outlines the following policies that apply to new development within the Plan Area:

HOUSING POLICY 1:

A minimum of 30% of new multi-family housing units should be family oriented 2-bedroom or greater, and at least 10% as 3-bedroom or greater.

HOUSING POLICY 2:

All new residential units within the Town Centre should meet the Adaptable Housing Standards in the BC Building Code.

HOUSING POLICY 3:

Re-development of purpose-built rental housing should conform with the City's Rental Housing Redevelopment Policy (Policy O-61).

HOUSING POLICY 4:

New residential developments that require a rezoning should provide a per unit contribution to the Affordable Housing Reserve Fund. The funds will be used to purchase land for new affordable rental housing projects.



8.1.3 Watercourse Protection

The City of Surrey's Streamside Protection Bylaw requires that a protective buffer be established around any ditch, dyke, watercourse, or wetland that is connected to potential fish habitat. This protects wildlife and aquatic resources and provides essential protection to flood-prone areas by providing water storage and flow away from private land.

The Streamside Protection Bylaw is enacted by a Sensitive Ecosystems Development Permit Area (SEDPA) DP3 process, which requires that any potential development within 50 meters of a stream be assessed by a Qualified Environmental Professional (QEP). The QEP will be required to write an Ecosystem Development Plan (EDP), in which a setback will be assigned (called the Streamside Protection Area, or SPA) to the stream based on Provincial and Municipal regulation, in which no disturbance may occur. Habitat enhancement measures may also be required within the Streamside Protection Area. The SPA will need to be protected by either a Registered Covenant (minimum safeguarding) or by conveying the land to the City of Surrey (maximum safeguarding), to ensure that the SPA is appropriately fenced off and maintained as a natural vegetated buffer in perpetuity. The QEP will need to address Provincial and geotechnical setbacks, as well, as they can be potentially larger than the SPA. The largest of all setbacks will apply for development.

72 Ave Cultura Newton 18 Recreation 71A Avenue Centre 71A Avenu Newton Arena 71 Aveni Newtor 69A Avenu Geo set 68 Avenu Legend Watercourse A-Class Watercourse B-Class Streamside Protection Area Steep Slopes Hazard Lands Area Steep Slops Hazard Lands 10-30m Buffer

Figure 8.1 Environmental Constraints Map

8.1.4 Development Permit Areas

Where developments are located in designated Development Permit Areas (DPA), as identified in the OCP (steep slopes, farm protection, environmentally sensitive areas, etc.), as well as in the case of multiple unit residential or commercial developments, the OCP Design Guidelines will be implemented through the process of reviewing and approving the related Development Permit at the time of development application.

8.1.5 Electric Vehicle Charging Infrastructure

As per the Zoning Bylaw, 100% of residential parking spaces in new residential developments are required to have an electrical outlet capable of supporting Level 2 EV charging (e.g. 220V outlet). All new commercial developments are required to provide a minimum 20% of parking spaces that have an electrical outlet capable of supporting Level 2 EV charging. The Zoning Bylaw requirements provide for EV Energy Management Systems to be implemented, where power can be shared between up to four parking spaces and where the minimum performance standard is achieved.

8.2 COMMUNITY AMENITY CONTRIBUTIONS

In accordance with City policy to address the impacts of growth, all development proposals at the time of rezoning or building permit issuance will be required to make a monetary contribution toward the provision of new community amenities. These include needs identified within the plan area, as well as broader community and citywide amenities.

Plan area specific amenity needs include the development of new parks and open spaces, as well as population related improvements to police protection, fire protection, and library services. Community and citywide needs include new capital projects (cultural and recreational facilities), affordable housing, and public art.

Total estimated costs are divided evenly by the average anticipated number of dwelling units (acreages in the case of non-residential development). This ensures an equitable contribution. It also means that if a development application proposes lower density than anticipated within the plan, the applicant will be expected to "top up" the amenity fees as per the plan designation. This will avoid a shortfall in anticipated funding. Amenity contribution rates will be updated with future iterations of the plan.

To enact the above noted amenity contribution requirements, Schedule G of the Zoning By-law will be amended to add Newton Town Centre to the list of secondary plans where monetary contributions are required.

Figure 8.2 Newton Town Centre CAC Rates Table

Uses:	Police	Fire	Libraries	Parks**	TOTAL
Residential* (\$/dwelling unit)	\$80.52	\$347.89	\$181.17	\$2,012.74	\$2,628.32
Non- Residential (\$/acre)	\$483.12	\$2,087.34	n/a	n/a	\$2,570.46

Explanatory Notes:

* Excludes secondary suites.

** Includes pathways and facilities.

*** See Section C of Schedule G in Zoning Bylaw 12000, Community Amenity Contributions for contributions related to Newton Town Centre density increases.

8.2.1 Plan Area Specific Amenity Contributions

PARKLAND DEVELOPMENT

Monetary contributions toward parkland are based upon the estimated capital costs of all park amenity improvements within the plan area. This also includes parkland adjacent to the plan area that will serve future residents. Park amenity calculations do not include riparian area works required as part of the development process on land conveyed to the City. This includes in-stream works and any other related riparian area costs which are to be accounted for as part of the development process.

The scope of parkland development within the plan includes the development of neighbourhood parks, plazas, and other landscaping on public property. It also includes the restoration and management of key natural areas including riparian areas. The estimated cost of developing park amenities is \$18,960,048.00 which results in a \$2,012.74 (in 2020 dollars) per dwelling unit. This estimate includes the planning, design, administration, and construction of park amenities, including playgrounds, washrooms, sports courts, tree and horticultural plantings, paths and trails, seating areas, and passive open spaces. This also includes natural and riparian area restoration and enhancement within parkland.

LIBRARY MATERIALS

A study of library requirements in Surrey has established that a contribution per dwelling unit is necessary to cover the capital costs for library materials and services. Monetary contributions toward library materials will offset capital costs of providing services to new development and are calculated on a standardized basis citywide. Refer to Schedule G of the Zoning By-law for current rates.

FIRE PROTECTION

A study of fire protection requirements in Surrey has established that a contribution per dwelling unit is necessary to support the capital costs for fire protection and services. Monetary contributions toward fire protection will offset capital costs of providing services to new development and are calculated on a standardized basis citywide. Refer to Schedule G of the Zoning By-law for current rates.

POLICE PROTECTION

A contribution per dwelling unit is necessary to contribute towards the capital costs for police protection and services. Monetary contributions toward police protection will offset capital costs of providing services to new development and are calculated on a standardized basis citywide. Refer to Schedule G of the Zoning By-law for current rates.











8.2.2 Citywide Amenity Contributions

COMMUNITY AMENITY CONTRIBUTION

In November 2019 Council endorsed and introduced a new Community Amenity Contribution (CAC) to support the long-term development of new community capital project. The CAC will support capital projects identified within the City's 5-year Capital Plan, such as community centres, ice rinks, cultural facilities and community or city-wide park development projects. The contribution applies citywide to residential rezoning applications seeking to accommodate higher density. It outlines per dwelling unit contributions for applicable rezoning application. Applicable rezoning within approved secondary plan areas, such as the Newton Town Centre, are provided a discount of 50% to account for area specific amenity contributions. Refer to Schedule G of the Zoning By-law for details.

PUBLIC ART CONTRIBUTION

The City's Private Development Public Art Policy was adopted on March 15, 2011. The Policy applies to rezoning applications seeking to accommodate higher density multiple residential, commercial, or industrial development. In 2018, the public art contribution percentage for eligible private development projects was set at 0.5% of the estimated total project construction cost. Contributions are added to the City's Public Art Reserve to fund new public art citywide.

For eligible development projects where the public art contribution is calculated to be over \$200,000, the applicant will have the option to either provide a contribution to the Public Art Reserve or install public art on or in the vicinity of the project site. Refer to the City's Private Development Public Art Policy for contribution levels and other details.

AFFORDABLE HOUSING CONTRIBUTION

On April 5, 2018, Council adopted the Surrey Affordable Housing Strategy. The Strategy encourages the development of new purpose-built rental housing and increasing the supply of housing affordable for households with low to moderate incomes. Based on Census 2016 data, Newton is an area that needs additional affordable housing. To address this the Plan seeks to protect and increase the supply of rental housing near transit by; requiring any redeveloped rental units be replaced on a one-to-one basis, and at 10% below the average rent in Surrey; and encouraging the development of new rental units in exchange for bonus density.

In addition to this, development of all new non-rental residential units within Surrey are required to provide \$1,000 per unit into an Affordable Housing Fund. This money will then be used for the development of new non-market housing. Contributions are payable upon subdivision for single-family subdivisions or upon issuance of building permits for multiple-family development. Refer to the City's Affordable Housing Strategy for details.

8.3 INFRASTRUCTURE FINANCING

The cost of servicing improvements is calculated based on the anticipated impacts of the location, type, and intensity of planned future development. Servicing costs are recouped through development cost charges (DCCs), which generally reflect developers' proportional share of public infrastructure relative to their projects' estimated servicing needs.

A base DCC rate is applied to all new development in the city. Where a secondary plan shows the base rate is insufficient to cover the planned cost of local servicing, an additional "areaspecific DCC" is applied.

Planned servicing improvements in Newton Town Centre will not require area-specific DCCs. New development will be subject to the citywide DCC rates, which will provide adequate funding to make the necessary infrastructure improvements to support planned future development in the Town Centre. For more information and current DCC rates, refer to the City of Surrey DCC bylaw.

As per current City practice, developers will be required to fund fronting development upgrades with the DCC program responsible for funding any up-sizing required.



ESTIMATED TOTAL INFRASTRUCTURE REVENUES AND COSTS

Growth has always been planned for the Newton area. Using the original land use projections per the OCP, DCC revenues at full buildout would have been in the order of \$169 million (including a 1% Municipal Assist Factor). With the adoption of the Stage 2 Newton TCP, even further growth for the Newton area is projected. This additional growth will result in approximately \$186.3 million in total DCC revenues (or \$17.3 million more than estimated using the original land use projections). Estimated DCC revenues and eligible costs are summarized in the following table.

The DCC revenues are sufficient to address the engineering infrastructure upgrades required to support future development in the Plan Area as well as growth related impacts beyond the Plan Area boundary. For example, Transportation eligible costs also go towards future road widening projects such as 132 Street and 140 Street.

The DCC revenues are based on the 2020 Citywide DCC rates outlined in the Surrey Development Cost Charge Bylaw, 2020, No. 20019. The estimated DCC revenues include a 1% Municipal Assist Factor for all asset types.

The differences between the DCC eligible costs and estimated revenues will be used to help fund various growth projects adjacent to and / or near the Plan Area. Examples include projects in the 2020 10-Year Servicing Plan such as new traffic signals, pedestrian signals, and intersection improvements at various locations near the Plan Area; water main upgrades on 128 Street, 76 Avenue, and 132 Street; storm sewer upgrades on 68 Avenue; and sanitary sewer improvements near 64 Avenue and King George Boulevard.

SERVICE	ESTIMATED DCC REVENUES ¹	DCC ELIGIBLE COSTS ATTRIBUTABLE TO NEWTON TOWN CENTRE
Drainage	\$5,253,000	\$250,000
Sanitary	\$17,413,000	\$5,885,000
Water	\$12,048,000	\$0
Arterial Roads	\$65,575,000	\$40,095,000
Non-Arterial Roads	\$15,270,000	\$14,946,800
Parks	\$70,780,000	Land purchase cost

Figure 8.3 Newton Town Centre Estimated DCC Revenues & Eligible Infrastructure Costs Table

¹DCC revenues include the Municipal Assist Factor (MAF) (1% for utilities and transportation).

NEWTON TOWN CENTRE PLAN | 133

