

## Kingsway Corridor Charrette

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SFU Surrey Centre  
Room 630, 13450 102 Avenue, Surrey, BC

**thursday 25 may:**

**welcome & plenary session**

8:30 to 10:00 Plenary session all

- Four-day Program and Logistics Fraser Basin Council/Deana
- SxD Overview: Regional Presentation Patrick Condon
- Design Charrette Agenda and Instructions Ray Straatsma
- Review Resources and Materials 1:500/1:2000 Ortho Base Maps, etc.

**working session**

10:00 to 12:30 Full Participant Teams

- CORRIDOR: Kingsway Burnaby
- NODE: 200<sup>th</sup> Street Township of Langley
- EDGE: East Ladner Delta

**lunch**

12:00-1:00

**working session**

1:00 to 5:00 Design Teams only

SFU Surrey Centre  
Room 630, 13450 102 Avenue, Surrey, BC

**friday 26 may:**

**working session**

- 8:30 to 12:00      Full Participant Teams
- CORRIDOR: Kingsway Burnaby
  - NODE: 200<sup>th</sup> Street Township of Langley
  - EDGE: East Ladner Delta

**lunch**

12:00 to 12:30

**mid-course correction**

- 12:30 to 1:00      Welcome & lunch all
- 1:00 to 2:00      Break-out presentations in work rooms
- Draft Sketches taped to wall
  - Brief 15 minute presentation from each team Design Leader and Municipal staff
  - 45 minute “Open House” Discussion of Draft Design results

**working session**

- 2:00 to 5:00      Design Teams only

SFU Surrey Centre  
Room 630, 13450 102 Avenue, Surrey, BC

**monday 29 may:**

**design review update**

8:30 to 9:30

**working session**

9:30 to 12:30      Full Participant Teams

- CORRIDOR: Kingsway Burnaby
- NODE: 200<sup>th</sup> Street Township of Langley
- EDGE: East Ladner Delta

**lunch (with team status reports)**

12:00 to 1:00      Each team will review work complete & to-be-done

**working session**

1:00 to late      Design Teams only



SFU Surrey Centre  
Room 630, 13450 102 Avenue, Surrey, BC

**tuesday 30 may:**

**working session (through lunch)**

- 8:30 to 1:00      Full Participant Teams
- CORRIDOR: Kingsway Burnaby
  - NODE: 200<sup>th</sup> Street Township of Langley
  - EDGE: East Ladner Delta

**working session**

- 1:00 to 2:00      Presentation preparation

**final presentation**

- 2:00 to 4:00      Plenary in SFU Surrey Lecture Theatre
- Draft Sketches taped to wall
  - 20 minute presentations from each team Design Leader and Municipali staff
  - 60 minute “Open House” review of Draft Design results

## section 1: instructions, background & resources

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## instructions

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The role of the design team is **to collectively design a concept plan that incorporates the goals, targets, and other design factors laid out in the Design Brief**. The final result will be a concept plan that achieves the vision identified by stakeholders and input received from experts through the workshop and charrette process. As such, it will represent a conceptual, sustainable vision for the study area that has been designed by the community.

In creating this design, the design team must apply the targets to the identification of constraints and illustration of possible resolutions to the design questions. These targets – developed from the goal and objectives established with input from the municipalities and representative stakeholders – are organized around six Sustainability by Design principles:

- 1 GOOD AND PLENTIFUL jobs CLOSE TO HOME**
- 2 MIXED USE corridors ACCESSIBLE TO ALL**
- 3 FIVE MINUTE walking DISTANCE**
- 4 ACCESS TO natural AREAS AND PARKS**
- 5 LIGHTER, GREENER, CHEAPER, SMARTER infrastructure**
- 6 DIFFERENT housing TYPES**

To facilitate the application of these targets, the design team will initially be divided into three breakout groups responsible for two principles each. The focus of discussion and design for each breakout group are the key design questions, targets, and main outputs relating to their assigned principles. Each breakout group will examine existing conditions and opportunities/constraints, and will develop a series of strategies for achieving the targets within these conditions.

Once established, the breakout group strategies will be applied by the whole design team to the creation of a 1:2000 scale, colour illustrative plan representing the entire study area in 2050. Members from the individual breakout groups will provide the “expertise” on their relevant principles, targets and strategies. In developing the master plan, members from different breakout groups must negotiate with each other to resolve areas of overlap.

A flow of dialogue and information should be maintained between the breakout groups to negotiate areas of overlap between targets, and to draw on the expertise of participants assigned to other groups. Team members are encouraged to initiate dialogue with any other team member wherever appropriate.

And remember...think like it's 2050.

## map of study area

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## background

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In the City of Burnaby, the Kingsway corridor extends from Boundary Road (at the Vancouver border) to 10<sup>th</sup> Avenue (at New Westminster border), a distance of 6.8 kilometres.

Historically, Kingsway was under the jurisdiction of the Provincial Ministry of Transportation who provided prescriptions for road design, but in 1998 the road was turned over to the City. Kingsway is designated as part of TransLink's Major Road Network.

The surrounding road network is based on an arterial model, funneling traffic onto Kingsway, and generally lacks a robust grid to provide alternative routings.

Kingsway is an important route for residents and workers travelling to and from commercial and other services along the corridor, particularly the MetroTown shopping centre area. The corridor also carries commuters and goods between the three cities of Vancouver, Burnaby and New Westminster, although this role has declined in recent decades.

### Study Site and Key Areas

For the purposes of this design charrette, our study site will examine urban design and land use along the 6.8 kilometre length of Kingsway within Burnaby, including 0.5 kilometres on either side of the corridor.

The western segment (5 kilometres) of Kingsway in Burnaby generally has six peak hour travel lanes. The section east of Edmonds narrows to four lanes. The street right of way and road pavement width varies considerably along the corridor. The widest section is at Metrotown (28m), double the width of the narrowest section, located at 10<sup>th</sup> Ave (14m).

The Kingsway corridor is home to two of Burnaby's town centres (Metrotown and Edmonds) and one planned village centre (Royal Oak). In addition, the corridor plays an important transportation link for both residents and workers.

Land uses are expected to evolve over the next 50 years, following the community plans developed for MetroTown, Edmonds, and Royal Oak. Land uses along the Kingsway corridor are primarily commercial retail, with residential and offices located on upper floors. Ground level residential is located in the east of the corridor. A major park (Central Park) is located at the west end.

Over the past decades, the City has been implementing growth management through significant densification within town centre areas. Increased densities along the corridor have increased traffic, although volumes have been off-set by alternative transportation infrastructure through Skytrain and urban trails.

### ***Historic Soundbites<sup>1</sup>***

*Today's Kingsway route was laid out, like much of Greater Vancouver, by Britain Royal Engineers, commanded by Colonel Richard Moody. In 1859, the site for capital city of the colony of British Columbia was cleared, and New Westminster (at first Queensborough).*

*One year later, in 1860 the Royal Engineers constructed the False Creek Trail (now Kingsway), from the new capital, to False Creek.*

*The trail was intended to reach English Bay, but the money ran out.*

*False Creek Trail (Kingsway) followed a very old native trail. For the next several decades, it served as the most direct wagon route between the capital and the Granville (Vancouver) town site.*

*Kingsway was the first major 'road' to be paved in the Vancouver area, in 1913. A 1925 Rand McNally motorist map shows Kingsway as one of the few paved inter-regional roads in the Lower Mainland*

*Kingsway may be the only road in the Lower Mainland to have a complete book of poetry devoted to its, and its environs: **Kingsway**, by Michael Turner (2000). Turner is a prominent young Vancouver writer (Hard Core Logo).*

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<sup>1</sup> The Greater Vancouver Book: An Urban Encyclopedia, Ed. Chuck Davis, Linkman Press, Surrey: 1997; Historical Atlas of Greater Vancouver, Derek Hayes, 2005.

## design table composition

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### **kingsway corridor:**

City of Burnaby: From Boundary Road to 10<sup>th</sup> Avenue.

This case study charrette is examining corridors. Corridors are key areas of mobility, connection, access and community. They have a fundamental role in both the spatial organization and identity of a community, and often of a larger region.

The Kingsway corridor has been identified by the City of Burnaby as a both a major neighbourhood connector, linking two town centres and an emerging collection of neighbourhoods and villages. It anchors and serves multiple small businesses, light industry, civic facilities and a major regional shopping district.

Kingsway is also a major regional transportation route, classed as primary arterial, and designated as part of TransLink's Major Network. Kingsway carries goods and people for three cities of Vancouver, Burnaby and New Westminster, though this role is declining. Up to 70% of the vehicles on Kingsway is estimated to be local traffic within Burnaby.

Design Facilitator: Ron Walkey, UBC School of Architecture  
Process Facilitator: Ray Straatsma, Design Centre for Sustainability at UBC

#### *Housing/Jobs*

##### Breakout Group 1

Kenji Ito	Assistant Director, Current Planning
Ian Wasson	Urban Design Planner
Paul Cipywnyk	Edmonds Town
Ray Allen	Community Safety
Lee-Anne Garnet	GVRD Planning

#### *Corridors/Walkability*

##### Breakout Group 2

Moreno Rossi	TransLink Planning
Stuart Ramsey	Burnaby: Transportation Planner
Peeter Liivamagi	Burnaby: Engineering
Chris Hildred	Community Safety
Darlene Gering	

#### *Infrastructure/Green Spaces*

##### Breakout Group 3

Robyn Wark	Burnaby: Planning
Johannes Schuman	Burnaby: Planning
Joanne Carne	Byrne Creek Watershed
Antonia Beck	Resident/Citizen
Herman Neussler	
Patrick Condon	Design Centre for Sustainability, UBC

#### Resource Persons

Richard Drdul	Transportation Consultant
Sara Fryer	Design Centre for Sustainability, UBC

## **list of resources**

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### In-House Documents

City of Burnaby, *Burnaby Metrotown Summary Statement*

City of Burnaby, *Burnaby Transportation Plan*

City of Burnaby, *Edmonds Town Centre Plan*

City of Burnaby, *Burnaby Official Community Plan*

City of Burnaby, *Royal Oak Community Plan*

Greater Vancouver Regional District, *Livable Region Strategic Plan*

Institute of Transportation Engineers: *Context Sensitive Solutions for Designing Major Urban Thoroughfares in Walkable Communities* (2006)

**section 2: charrette goal, principles & objectives** —————



## charrette goal, principles & objectives

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The Kingsway Corridor charrette is a design exercise that will integrate collaborative planning and best practices into a 50-year design vision for the Kingsway Corridor in Burnaby BC. The following goal and objectives are intended to inform the charrette and the design proposals arising from that process. The Kingsway Corridor **Goal and Objectives** are distilled from local and regional policies. They have been amended and updated, following a collaborative dialogue among municipal, business and citizen representatives sharing their views and responses to the draft document.

### Charrette Goal

***Design a vibrant Kingsway corridor) to:***

- ***Accommodate 50,000 to 60,000 new residents in 20,000 to 25,000 housing units;***
- ***Support and accommodate 16,000 to 22,000 jobs;***
- ***Facilitate the complete, resilient and sustainable development of Burnaby's urban communities by 2050.***

### Charrette Principles & Objectives

## 1 GOOD AND PLENTIFUL jobs CLOSE TO HOME

**Principle:** Sustainable communities foster local economic opportunities and growth. Residents can find employment close to home. Government policies and local infrastructure support local businesses and individual enterprise.

**Key Objective:** *Provide office, light industrial, business, and retail development that meets ongoing market needs; contributes to Burnaby's employment and tax base; achieves a more complete community, including supportive social and recreational services; and meets a balance between levels of employment in Burnaby and its resident labour force (OCP 5.2)*

**Objectives:**

1. Focus the highest density office and commercial development within Town Centres (*Metrotown, Edmonds*); and direct the most intense office and commercial development within Metrotown, retaining its role as the City's dominant commercial focus (OCP 5.3; LRSP 8.7; EP 2.1; BM p. 3-5)
2. Locate office, business and retail opportunities along the Kingsway commercial arterial (OCP 5.3; EP 2.1)
3. Provide adequate space for easily accessible commercial, retail and recreational services to meet the needs of the neighbouring communities, focused in the Kingsway Town Centres (*Metrotown, Edmonds*)(OCP 4.2; EP 1.2)
4. Provide adequate space for frequent and convenient transit service to meet the needs of the neighbouring communities, especially at the Kingsway Town Centres (*Metrotown, Edmonds*) (OCP 4.2; EP 1.2)

**In 50 years:** The Kingsway corridor will be fully established as Burnaby's central and attractive employment location, providing jobs for Burnaby residents, building on its extensive retail heritage, thriving and extensive industrial/business areas, and providing new and diverse business, social and recreational services.

## 2 MIXED USE corridors ACCESSIBLE TO ALL

**Principle:** Sustainable communities allow residents to live, work, shop and play in their local areas. Land and public infrastructure are designed for multiple purposes and mixed use. Transportation corridors and commercial arterials provide both commuter mobility and access to multiple services and daily activities. Corridors enable diverse transportation choices, including access and movement for pedestrians, bicycles, transit and automobiles.

**Key Objective:** *The Kingsway Corridor will provide a balance of residential and employment opportunities, move people and goods efficiently, reduce overall need to travel and provide for alternative modes of travel, including pedestrian, bicycle and transit (BTP section 5, EP, 3.0)*

**Objectives:**

5. Pursue and implement regional transportation solutions consistent with the Livable Region Strategic Plan by providing complete communities and alternatives to the car (LRSP 13; OCP 8.3; BTP 5.16)
6. Support redevelopment toward a variety of uses, including medium to high densities, mixed use developments with residential, commercial, social services and amenities on the Kingsway corridor (ROP 4.2, 4.7; OCP 8.3; BTP 5.13; LRSP 11.4, EP 2.1)
7. Support the continued development of Kingsway's Town Centre Areas (*Metrotown, Edmonds*) with transit linkages amongst the Town Centres and to other parts of the region (LRSP 8.4, 8.7; OCP 8.3; BTP 5.14, EP 2.1)
8. Facilitate the efficient movement of people and goods in a cost-effective manner – moving more people with fewer vehicles – through transportation demand measures and public transit, in collaboration with TransLink, that serves Kingsway corridor (LRSP 14, 16.5; OCP, 8.2, 8.3)
9. Facilitate more sustainable transportation options on Kingsway and adjacent local roads by providing priorities, improvements, and programs favouring transit, carpooling, bicycle and pedestrian travel (LRSP 16.4; BTP 5.1, 5.2, 5.18, 5.19, 5.21)

**In 50 years:** The Kingsway Corridor will be a diverse location providing for: local retail, employment and services needs of the neighbouring communities; an efficient transportation corridor, carrying as many people by transit, foot and bicycle and carpool alternatives as by private motor vehicle; and providing goods movement for local commerce and industry.

## 3 FIVE MINUTE walking DISTANCE (WALKABILITY)

**Principle:** Sustainable communities have compact neighbourhoods with an interconnected street network that ensures quick access to commercial and public services and amenities. Streets and arterials are designed for walking, cycling and transit access – not just for cars. Neighbourhoods have sufficient residential densities and mixed uses to provide sustained transit ridership and service.

**Key Objective:** *The Kingsway Corridor will anchor an integrated street and transit network, and provide a well-designed urban environment that attracts pedestrian, commercial and civic activity, and provide frequent transit service. These features will make Kingsway an accessible, short-distance destination for neighbouring communities.*

**Objectives:**

10. Create pedestrian-orientated facilities and environments (e.g. safe crossings and sidewalks, pedestrian signals, transit stops, disabled access) along commercial streets and in Town Centres (BTP 5.23, 5.24, 5.24, 5.25; EP 3.3)
11. Design and locate office and retail space along Kingsway in street front form, or in mixed use Town and Village Centres (OCP 3.2.1, 3.2.4, 5.3; EP 1.2)
12. Ensure commercial frontages along Kingsway, particularly in the Town Centre segments, have build-to-line setbacks, with no parking on 'front yards' (ROP 5.9.5; 5.10.3; 5.11.2; EP 1.2)
13. Foster and create legible visual identity on the Kingsway Corridor with a memorable urban design strategy for building design guidelines and street architecture (ROP 4.3; EP 1.2).
14. Enhance and beautify the street environment by providing ample sidewalks, street furniture, street trees, convenient transit, human scale buildings, and easy to cross intersections (ROP 4.3; EP 1.2, 3.1, 3.3)
15. Optimize access for local neighbourhoods while reducing impacts of through-traffic in Kingsway area through traffic calming and other measures. (OCP 8.3, EP 1.2)
16. Link the Kingsway corridor with interconnected pedestrian and recreational routes, such as greenways and paths. (BTP 5.22, 5.24, )
17. Ensure urban design and the built environment includes safety features such as good street lighting, 'eyes on the street' and safe public spaces.

**In 50 Years:** The Kingsway corridor will be vibrant with pedestrian and commercial activity, with numerous safe and accessible routes to local residential communities and neighbourhoods.

## **4 ACCESS TO natural AREAS AND PARKS**

**Principle:** Sustainable communities respect the natural functions of the landscape, particularly agricultural land, stream systems and aquatic habitats. Well designed communities integrate linked natural systems with human activities, placing high value on community access to natural systems and parks. Sustainable communities maintain and restore ecosystem functions. Effective ecosystem management and restoration can achieve significant energy efficiencies, cost savings, and environmental benefits.

**Key Objective:** Parks and natural areas provide critical conservation and recreational value to the Burnaby community, and also play an important supporting role for the overall planning and development of the city and the Kingsway corridor (OCP 7.2, 7.3; LRSP 4.5)

**Objectives:**

18. Provide and maintain a comprehensive mix of open spaces, green amenities and parks to meet the changing needs of the community along and close to the Kingsway corridor. (OCP 7.2, 7.3; EP 2.3)
19. Provide a range of neighbourhood, district, major parks; and open spaces, trails and urban plazas to meet needs of Kingsway-area residents and employees, and those of the wider Burnaby community (OCP 7.2, 7.3; EP 2.3)
20. Ensure the use of good urban design principles to preserve, enhance and reinforce the unique green amenities and parks along the Kingsway Corridor (OCP 7.2, 7.3; EP 2.3)
21. Ensure new development projects and standards protect receiving streams and waterways (e.g. Still Creek, Byrne Creek, Burnaby Lake, Deer Lake) (OCP 10.3, EP 2.3)

**In 50 years:** The Kingsway corridor will provide a significant role in integrating its resident communities, commercial centres and transportation with an ecological network of parks, greenways and natural systems to create a net positive impact over 50 years.

## 5 LIGHTER, GREENER, CHEAPER, SMARTER infrastructure

**Principle:** Sustainable communities optimize the economic, social and ecological impacts of buildings and infrastructure. Innovative development standards and practices will reduce community and environmental impacts as well as private, public, and taxpayer costs of development and infrastructure. Low impact solutions such as green infrastructure and natural drainage systems will save money over the longer-term, ensuring the sustainability of economic growth.

**Key Objective:** *Reduce ecological impacts and public and private sector costs through innovation and efficiency in water, waste, building and transportation infrastructure and operations (OCP 10.3)*

**Objectives:**

22. Introduce new commercial and residential developments along Kingsway that incorporate green infrastructure and energy efficient building materials (e.g. green roofs, fly ash concrete) (OCP 10.3)
23. Provide low-impact drainage and stormwater systems along Kingsway and adjacent areas through the development of green streets and infiltration systems (OCP 10.3)
24. Pursue opportunities to achieve energy efficiency in Kingsway's transportation, building, parks, and ecological infrastructure.
25. Wherever possible, utilize or restore natural systems to collect and infiltrate stormwater (OCP 10.3; EP 2.3)

**In 50 Years:** The Kingsway corridor will demonstrate, through infrastructure, buildings and transport, how energy efficiency, ecological integration and technical innovation can contribute to urban sustainability, climate change targets and operational savings for governments and taxpayers over the next 50 years

## 6 DIFFERENT housing TYPES

- Principle:** Sustainable communities include a variety of housing in the same neighbourhood, and very often on the same street. A mix of housing types, both owned and rented, allows residents to live affordably in the same community throughout their lives. Good neighbourhood design fully recognizes current and future demographic trends, especially aging populations, empty nesters, single-parent families and smaller, non-traditional households. A mix of housing types also helps accommodate lower income residents (including students and fixed-income seniors), allowing access to local jobs, amenities and medical services.
- Key Objective:** *The Kingsway Corridor will provide a varied range of housing options and living arrangements to meet the needs of diverse income, age and family groups (OCP 4.2)*
- Objectives:**
26. Provide a choice of residential housing types, tenures, environment and location suitable for a mix of ages, income groups, family types, and stages of life (LRSP 8.2, OCP 4.2, EP 1.2, 2.2)
  27. Ensure special and affordable housing needs and requirements are met, particularly those suited to an aging population. (OCP 4.2)
  28. Increase development of medium- to high-density ground-oriented and multiple unit housing forms (including townhouses, residential infill and secondary suites) (OCP 4.2, EP 2.2, BTP 5.13)
  29. Provide more multi-family residential development on the Kingsway corridor, including its Town Centres (*Metrotown, Edmonds*) and Urban Villages (*Royal Oak VC*) (OCP 4.3, EP 1.2, 2.2, BM)
  30. Provide new housing development above ground-floor commercial units and buildings fronting on Kingsway (OCP 4.3, EP 2.2)
  31. Ensure new and diverse housing types are located within and adjacent to mixed use areas, with retail, social and recreational services within walking distance.
- In 50 Years:** The Kingsway corridor will be home for a vast diversity of residents, of all ages, incomes, occupations and ethnic heritage, living in affordable, mixed use and compact community rich in services, civic spaces and commercial activity.



## breakout group 1 design brief pull-out

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### sustainability by design principles:

#### 1 GOOD AND PLENTIFUL jobs CLOSE TO HOME 6 DIFFERENT housing TYPES

This case study charrette is examining corridors. Corridors are key areas of mobility, connection, access and community. They have a fundamental role in both the spatial organization and identity of a community, and often of a larger region. The Kingsway corridor has been identified by the City of Burnaby as both a major neighbourhood connector, linking two town centres and an emerging collection of neighbourhoods and villages. It anchors and serves multiple small businesses, light industry, civic facilities and a major regional shopping district.

Kingsway is also a major regional transportation route, classed as primary arterial, and designated as part of TransLink's Major Network. Kingsway carries goods and people for three cities of Vancouver, Burnaby and New Westminster, though this role is declining. Up to 70% of the vehicles on Kingsway is estimated to be local traffic within Burnaby.

The focus of discussion and design for this breakout group are the key design questions, main outputs, and targets relating to **jobs and housing types**.

#### Key Design Questions

1. What mix of commercial, social, recreational and other services are required along Kingsway to meet the needs of adjacent and emerging neighbourhoods?
2. What types of development along the Kingsway corridor will assist the city of Burnaby attract and capitalize on future job growth and opportunities?
3. What planning policies and design strategies will help achieve a strong cohesive built environment along the full Kingsway corridor?
4. How can the Metrotown and Edmonds Town Centres be designed and built as pedestrian-friendly urban areas, with an attractive sense of place for local residents and visitors?
5. What design elements are needed to establish a strong village character, a diversity of uses and a strong community focus in the Royal Oak neighbourhood?
6. What is the role of industrial sites and lands along a mixed-use Kingsway corridor? Is there a need and intent to protect industrial uses on the corridor?
7. What are the strengths of the portions of Kingsway outside of primary town centres or designated development nodes? How can these strengths be capitalized on to make a more sustainable, pedestrian friendly, and economically vibrant street?
8. How can we provide for more family-oriented, multiple unit residential development?

#### Main Outputs\*

##### **must complete:**

1. Develop a series of diagrams examining current conditions and future opportunities

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\* Note: all outputs to be illustrated with drawings in metric scale, with additional supporting text as necessary.

regarding the allocation of land uses with the Kingsway corridor study area.

2. Create an illustrative plan for a key Kingsway corridor segments, showing all new, retrofitted buildings indicating land use, and natural areas and parks.
3. Create a diagram of green infrastructure (streams and watersheds) of this Kingsway corridor area.
4. Develop a street identity for Kingsway that both expresses the continuity of the corridor and the unique qualities of the neighbourhoods it passes through, with special attention to landscape and urban design strategies for place-specific portions of this corridor.
5. Document, in text and drawings, the achievement of targets (outlined in following pages).

**time permitting:**

6. Develop a land use table giving breakdown of land uses by hectare, acre and percentage of study area for 2050 (and 2020 and 2035, time permitting).
7. Develop an implementation strategy – supported with sketches and diagrams – that identifies opportunities, constraints and potential phasing..

Targets

**1 GOOD AND PLENTIFUL jobs CLOSE TO HOME**

1. Accommodate and locate between 16,000 and 22,000 new jobs (including supporting services) in high-density office, commercial and retail nodes at Town Centres (Metrotown, Edmonds) and nearby Skytrain stations, as well along the linear Kingsway corridor.
2. Design buildable space for 16,000 and 22,000 new jobs in the Kingsway corridor: between 1,280,000 and 1,760,000 square feet of office and industrial space; and between 2,160,000 and 2,700,000 square feet of commercial and retail space.
3. Foster unique urban forms and niche identities for specific job/service sectors at key locations along the Kingsway corridor.
4. Establish a relationship between employment centres, services and residences in order to reduce trip length and reduce VKT by 20% to 40%.
5. Strengthen and extend mixed-use neighborhood commercial centres within a quarter-mile radius of 90% of all residences.

**6 DIFFERENT housing TYPES**

16. Locate 20,000 - 25,000 housing units, buildable on 20,000,000 to 25,000,000 Million square feet, within the Kingsway corridor study area by 2050, in a variety of residential housing types, tenures, environment and location suitable for a mix of ages, income groups, family types, and stages of life.
17. At least 75% of residential development in the Kingsway study area will be multi-family units, especially medium- to high-density apartments, and multiple unit ground-oriented housing forms (including townhouses, residential infill and secondary suites)
18. Increase average density to 150-200 persons per hectare or 80 to 110 dwelling units per hectare along the Kingsway corridor study area.



## breakout group **2** design brief pull-out

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### sustainability by design principles:

#### **2 MIXED USE** corridors **ACCESSIBLE TO ALL** **3 FIVE MINUTE** walking **DISTANCE**

This case study charrette is examining corridors. Corridors are key areas of mobility, connection, access and community. They have a fundamental role in both the spatial organization and identity of a community, and often of a larger region. The Kingsway corridor has been identified by the City of Burnaby as a both a major neighbourhood connector, linking two town centres and an emerging collection of neighbourhoods and villages. It anchors and serves multiple small businesses, light industry, civic facilities and a major regional shopping district.

Kingsway is also a major regional transportation route, classed as primary arterial, and designated as part of TransLink's Major Network. Kingsway carries goods and people for three cities of Vancouver, Burnaby and New Westminster, though this role is declining. Up to 70% of the vehicles on Kingsway is estimated to be local traffic within Burnaby.

The focus of discussion and design for this breakout group are the key design questions, main outputs, and targets relating to **transportation and walkability function of Kingsway corridor, and access to and from its adjacent neighbourhoods.**

#### Key Design Questions

1. What design strategies can be employed to maintain Kingsway's role as an important transportation corridor (highly functional traffic flows and economic activity), while ensuring increased access and use of sustainable modes of travel (transit, bike and walk)?
2. What design strategies can be introduced to manage traffic volumes along the Kingsway corridor, and mitigate impacts on local neighbourhoods?
3. What planning policies and design strategies will help achieve a strong cohesive built environment along the full Kingsway corridor?
4. What mix of commercial, social, recreational and other services are required along Kingsway to meet the needs of adjacent and emerging neighbourhoods?
5. How can the Metrotown and Edmonds Town Centres be designed and built as pedestrian-friendly urban areas, with an attractive sense of place for local residents and visitors?
6. What design elements are needed to establish a strong village character, a diversity of uses and a strong community focus in the Royal Oak neighbourhood?

#### Main Outputs\*

##### **must complete:**

1. Develop a movement system and integrated street network diagram illustrating the relation of Kingsway to the surrounding grid pattern, parallel streets, key intersections, bike routes and other key pedestrian routes.

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\* Note: all outputs to be illustrated with drawings in metric scale, with additional supporting text as necessary.

2. Develop a street typology illustrating in images, sketches, sections and plan the proposed design for at least three primary street type segments along Kingsway corridor. (*Four key segments: Metrotown Town Centre; City Centre (Edmonds); Royal Oak Village; and Mid Zone area at Gilley.*)
3. Create a strategy for mitigating traffic dispersal impacts, illustrated with diagrams, drawings and supporting text.
4. Develop a street identity for Kingsway that both expresses the continuity of the corridor and the unique qualities of the neighbourhood it passes through, with special attention to landscape and urban design strategies for place specific portions of this corridor.
5. Document, in text and drawings, the achievement of targets (outlined in following pages).

**time permitting:**

6. Develop an implementation strategy for above outputs – supported with sketches and diagrams – that identifies opportunities and constraints and potential phasing.

Targets

**2 MIXED USE corridors ACCESSIBLE TO ALL**

6. Reduce the VKT (vehicle kilometers traveled) of Kingsway area residents by 20% to 40% per capita through the provision of more frequent and convenient transit service, better pedestrian and bicycle connections, increases in density and an appropriate mix of land uses (residential and commercial).
7. By 2050, 45%-50% of trips by residents and employees in the Kingsway Corridor area will travel by sustainable travel modes (public transit, walking, and cycling).
8. By 2050, ensure no net increase over 2005 levels of vehicle traffic, by maintaining overall vehicle capacity through transportation demand measures, good public transit, and efficient, cost-effective movement of people and goods on the Kingsway corridor.

**3 FIVE MINUTE walking DISTANCE**

9. Create a memorable and evocative urban design strategy for building design guidelines and street architecture that responds to local climate and conditions, and that establishes a strong, cohesive visual identity on the Kingsway.
10. Employ urban design strategies and traffic calming to ensure pedestrian safety and prioritize walking, cycling and public transit over automobile travel.
11. Create urban design opportunities to enhance the streetscape with trees, street furniture and quality transit facilities.

## breakout group **3** design brief pull-out

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### sustainability by design principles:

#### 4 ACCESS TO natural AREAS AND PARKS

#### 5 LIGHTER, GREENER, CHEAPER, SMARTER infrastructure

This case study charrette is examining corridors. Corridors are key areas of mobility, connection, access and community. They have a fundamental role in both the spatial organization and identity of a community, and often of a larger region. The Kingsway corridor has been identified by the City of Burnaby as a both a major neighbourhood connector, linking two town centres and an emerging collection of neighbourhoods and villages. It anchors and serves multiple small businesses, light industry, civic facilities and a major regional shopping district.

Kingsway is also a major regional transportation route, classed as primary arterial, and designated as part of TransLink's Major Network. Kingsway carries goods and people for three cities of Vancouver, Burnaby and New Westminster, though this role is declining. Up to 70% of the vehicles on Kingsway is estimated to be local traffic within Burnaby.

The focus of discussion and design for this breakout group are the key design questions, main outputs, and targets relating to **natural areas and parks, and green infrastructure**.

#### Key Design Questions

1. How can the Kingsway corridor be developed in ways that sensitively integrate the corridor into surrounding land uses, natural areas, green systems and parks?
2. How can the design of public spaces within the network of existing or future parks, open space and green systems contribute to the overall identity and function of the Kingsway corridor area?
3. How can the design of green infrastructure and low-impact development practices contribute to the health, maintenance and function of the Kingsway corridor study area?

#### Main Outputs\*

##### **must complete:**

1. Develop a series of diagrams examining current conditions, and opportunities/constraints regarding the location and design of parks and open space network within the Kingsway corridor study area, with connections to surrounding community.
2. Design proposed parks and open space network diagram(s) including preserved vegetation and trees, canopy cover, stream corridors, school and park sites, trails and greenways, etc.
3. Create a typology of greenways, including riparian/stream corridors, recreational trails, bicycle routes, including plan, sections and sketches for each type.
4. Create an illustrative plan for key Kingsway corridor segments, *with emphasis on natural areas and parks*, and opportunities for green infrastructure and buildings

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\* Note: all outputs to be illustrated with drawings in metric scale, with additional supporting text as necessary.

5. Develop a street identity for Kingsway that both expresses the continuity of the corridor and the unique qualities of the neighbourhood it passes through, with special attention to landscape, green and open space networks for place specific portions of this corridor.
6. Document, in text and drawings, the achievement of targets (outlined in following pages).

**time permitting:**

7. Develop an implementation strategy – supported with sketches and diagrams – that identifies opportunities and constraints and potential solutions.

Targets

**4 ACCESS TO natural AREAS AND PARKS**

12. Design all streets, public parks, schoolyards, public spaces and greenways as part of an integrated and connected open space network.
13. Ensure at least 90% of Kingsway corridor residents live within 500m of a park.

**5 LIGHTER, GREENER, CHEAPER, SMARTER infrastructure**

13. Reduce impacts to streams (e.g. Still Creek, Byrne Creek) through the use of low impact storm water management and related infrastructure in new or rebuilt areas and buildings.
14. Reduce energy requirements of new and existing buildings (relative to 2005 code-compliant buildings) and transportation (fewer car trips, more bike, walk, transit trips) by 50% or more.



**target**

Accommodate and locate between 16,000 and 22,000 new jobs (including supporting services) in high-density office, commercial and retail nodes at Town Centres (Metrotown, Edmonds) and nearby Skytrain stations, as well along the linear Kingsway corridor.

**support**

*Using demographic data from Urban Futures, the City of Burnaby will see 65% growth in employment between 2005 and 2050. Burnaby will need to accommodate over 123,000 new jobs by 2050.*

*With its strong transport links, central location and concentration of social and business services, the Kingsway corridor will attract a significant majority of Burnaby's growing employment sectors.*

*We assume the Kingsway corridor will capture 13% to 18% of new Burnaby employment growth. Therefore, redevelopment and growth along the Kingsway corridor should accommodate between 16,000 and 22,000 new jobs between 2005 and 2050.*

"Commercial development is to be strengthened and revitalized by creating a Town Centre core, a Station Core and a Secondary Core. These core areas are to be pedestrian oriented and linked to surrounding residential area."

*Edmonds Town Centre Plan 2.1 (p. 4)*

"The existing commercial area surrounding Middlegate Mall will be reinforced through a mix of street front retail stores and high-rise apartments along both sides of Kingsway and Edmonds ...[and] will include a significant anchor store and major food store, as well as street oriented retail shop as part of mixed use developments."

*EP, 2.1 (p. 4)*

"Establish the Edmonds Station area as a second core area for public transit, office, residential and supporting retail."

*EP, 6.0 (p. 12)*

"Focusing the highest density office and other commercial developments within the City's four town Centres, with the most comprehensive within Metrotown, in keeping with its intended role as the dominant commercial focus for the City."

*OCP 5.3*

"The continued use of established commercial arterials for the provision of office and retail opportunities, either in a streetfront form, or within mixed use Village Centres."

*OCP 5.3*

"A greater provision of locally scaled convenience retail outlets in suitable locations close to residential neighbourhoods."

*OCP 5.3*

**target**

Design buildable space for 16,000 and 22,000 new jobs in the Kingsway corridor: between 1,280,000 and 1,760,000 square feet of office and industrial space; and between 2,160,000 and 2,700,000 square feet of commercial and retail space.

**support****Jobs calculation:**

*Using Urban Future data, we assume between 16,000-22,000 new jobs for the study area.*

*We assume that **office and industrial jobs will account for 40% of those jobs**: between 6,400 and 8,800 jobs for that sector. We assume that office and light industrial space will require 200 square feet per job: This gives us a total of **1,280,000 and 1,760,000 square feet of office and industrial space**.*

*We assume that **commercial and retail jobs will account for 45% of those jobs**: between 7,200 and 9,000 jobs for that sector. We assume that commercial and retail space requires 300 square feet per job. This gives us a total of **2,160,000 and 2,700,000 square feet of retail and commercial space**.*

"The GVRD Board will... seek through partnerships on complete communities, a better balance in jobs and labour force location through the region.

*Livable Region Strategic Plan (LRSP), 8.2*

"Provide within a structured framework a range of office and retail opportunities which meets existing and changing needs of the general and business communities ... [and] ... contributes towards the achievement of a more complete community."

*OCP 5.2*

"Provide a mix of housing, a variety of shops and businesses, employment opportunities, schools, recreation facilities and parks to provide for the daily needs of area residents and to fulfill its town centre role."

*Edmonds Town Centre Plan 1.2 (p. 4)*

"The existing commercial area surrounding Middlegate Mall will be reinforced through a mix of street front retail stores and high-rise apartments along both sides of Kingsway and Edmonds ...[and] will include a significant anchor store and major food store, as well as street oriented retail shop as part of mixed use developments."

*EP 1.2 (p. 4)*

**target**

Foster unique urban forms and niche identities for specific job/service sectors at key locations along the Kingsway corridor.

**support**

“The existing commercial area surrounding Middlegate Mall will be reinforced through a mix of street front retail stores and high-rise apartments along both sides of Kingsway and Edmonds ...[and] will include a significant anchor store and major food store, as well as street oriented retail shop as part of mixed use developments.”

*EP, 2.1 (p. 4)*

“Establish the Edmonds Station area as a second core area for public transit, office, residential and supporting retail.”

*EP, 6.0 (p. 12)*

“Urban design guidelines are required to establish a village-like character which will promote both diversity of uses and building forms, yet foster a sense of overall integration and cohesion.”

*Royal Oak Community Plan, 5.8.2 (p. 14)*

“Urban design guidelines for street boulevards and façade treatments within the area are required to encourage the regeneration of the area and the provision of a quality environment.”

*ROCP, 5.11.3 (p 17)*



**target**

Establish a relationship between employment centres, services and residences in order to reduce trip length and reduce VKT by 20% - 40%.

**support**

“The Royal Oak Study Area should provide for a balance of residential and employment opportunities both in terms of redevelopment and the strengthening of identified existing development.”

*Royal Oak Community Plan (ROCP), 4.1 (p. 6)*

“Edmonds Town Centre should ...help meet the growth management objectives of the City by improving road and transit service to meet local needs and to provide better connections to other parts of the City and region.”

*EP 1.2*

“Provide adequate space for frequent and convenient transit service to meet the needs of the neighbouring communities, especially at the Kingsway Town Centres (*Metrotown, Edmonds*).”

*Kingsway Corridor Objective 16*

**target**

Strengthen and extend mixed-use neighborhood commercial centres within a quarter-mile radius of 90% of all residences.

**support**

“Provide a greater provision of locally scaled convenience retail outlets in suitable locations close to residential neighbourhoods.”

*OCP, 5.3*

“Provide a mix of housing, a variety of shops and businesses, employment opportunities, schools, recreation facilities and parks to provide for the daily needs of area residents and to fulfill its town centre role.”

*Edmonds Town Centre Plan, 1.2 (p.4)*

“The GVRD Board will seek... a diversity of housing types, tenures and costs in each part of the region in balance with job distribution.”

*LRSP, 8.2*

**target**

Reduce the VKT (vehicle kilometers traveled) of Kingsway area residents by 20% to 40% per capita, through the provision of more frequent and convenient transit service, better pedestrian and bicycle connections, increases in density and an appropriate mix of land uses (residential and commercial).

**support**

"The City will support the continued development of its Town Centre areas with transit linkages to one another and to Town Centres in other parts of the region."

"The City will work with other agencies to reserve rights of way for public transit, high occupancy travel lanes, cyclists, pedestrian and other transportation facilities."

"The City will encourage appropriate higher density residential and job related development along the existing and proposed rapid transit corridors."

*Official Community Plan 8.3*

"...the development of transportation services and facilities that support local access to centres."

*Livable Region Strategic Plan, 8.7*

"...enhance and/or retrofit local streets and infrastructure to favour transit, bicycle and pedestrian uses."

*LRSP 16.4*

"That the City develop an overall transit concept plan which provides efficient mobility to town centres within Burnaby and to major centres outside the City."

*Burnaby Transportation Plan, 5.14*

**target**

By 2050, 45%-50% of trips by residents and employees in the Kingsway Corridor area will travel by sustainable travel modes (public transit, walking, and cycling).

**support**

45%-50% trips by foot/bike/transit in the Kingsway corridor in 2050 would roughly equal the share currently achieved in highest density areas in the GVRD. In downtown Vancouver, as many people travel by foot, bicycle and public transit as travel by private automobile (i.e. 50/50 mode split). In Metrotown, about 38% of trips are currently by foot, bike or public transit achieves about 38% share in walk/bike/transit trips. The 2050 target for Kingsway Corridor would represent a 7%-12% increase in current (1999) foot, bicycle and transit trips in Metrotown.

Trips by mode by location of **residence or work**, in previous 24 hr-period (1999)

24-hr Trip period (1999) (includes multiple modes)	GVRD	Burnaby & New West	Metrotown City Centre	MCC totals
SOV	45%	50%	38%	
Vehicle / w passenger - Carpool	29%	19%	18%	56%
Transit (Bus)	10%	8%	8%	
Transit (Skytrain)	3%	5%	7%	
Walk	12%	10%	16%	
Bicycle	3%	5%	7%	38%

Comparison of weekday travel mode share in 1999 (**residents only**):

Travel Mode Share 1999	GVRD	Burnaby & New West
SOV	45%	50%
Vehicle w/passenger	29%	26%
Transit	12%	14%
(Skytrain)	6%	11%
Walk	19%	17%
Bicycle	3%	-
Other	2%	1%
No trips taken	6%	6%

Source: 1999 Regional Travel Survey  
Burnaby/New West Sub-Area Travel  
(TransLink/Canadian Facts)

“Demand for transportation will need to be managed in order to reduce travel by single occupant vehicles during peak periods.”

*Official Community Plan 8.3*

“...to plan and implement a transit-oriented and automobile restrained transportation system for the region based on intermediate capacity transit facilities (including light rail transit, Skytrain and high-capacity busways) within identified corridors.”

*LRSP, 16.1*

**target**

By 2050, ensure no net increase over 2005 levels of vehicle traffic, by maintaining overall vehicle capacity through transportation demand measures, good public transit, and efficient, cost-effective movement of people and goods on the Kingsway corridor.

**support**

“...to assign priority for increased roadway capacities first to high-occupancy vehicles, goods movements, inter-regional movements and then single-occupant automobiles.”

*LRSP, 14*

“...to maintain appropriate levels of service for interregional and truck movements through the Lower Mainland by pursuing transportation system management strategies and measure including access restriction and future corridor and right of way protection.”

*LRSP, 16.5*

“Improve the arterial road system to emphasize movement of more people in fewer vehicles during peak periods”

*OCP, 8.3*

**target**

Create a memorable and evocative urban design strategy for building design guidelines and street architecture that responds to local climate and conditions, and that establishes a strong, cohesive visual identity on the Kingsway.

**support**

“Edmonds Town Centre should ...help meet the growth management objectives of the City by ...establishing a distinct identity for the Town Centre.”

*EP, 1.2*

“Urban design guidelines are required to establish a village-like character which will promote both diversity of uses and building forms yet foster a sense of overall integration and cohesion.”

*ROP, 5.8.2*

“An integrated urban design approach needs to be pursued for all sub-areas both to beautify the area, to foster an enhanced visual framework, and to humanize the street environment. This approach will assist in providing a compatible environment accommodating disparate proximate uses...”

*ROP, 4.3*

“Foster and create legible visual identity on the Kingsway Corridor with a memorable urban design strategy for building design guidelines and street architecture”

*Kingsway Corridor Objective 13*

“Enhance and beautify the street environment by providing ample sidewalks, street furniture, street trees, convenient transit, human- scale buildings, and easy to cross intersections.”

*Kingsway Corridor Objective 14*

**Target**

Employ urban design strategies and traffic calming to ensure pedestrian safety and prioritize walking, cycling and public transit over automobile travel.

**support**

“That safe and comfortable pedestrian facilities be provided on City roads and in street oriented commercial areas; that Town Centre areas be developed as pedestrian-oriented centres.”

*BTP 5.23, 5.24,*

“Pedestrian improvements in the Town Centre and Secondary Core areas include: setbacks for storefronts, overhanging canopies for weather protection, street furniture and benches, street trees, small pocket parks, appropriate lighting, and improved pedestrian crossings.”

*Edmonds Town Centre Plan p. 4, (2.1)*

“The core areas should have a strong pedestrian orientation that would include: improved pedestrian crossings, wider sidewalks, trees, benches, setbacks and canopies.”

*EP p.9, (3.3)*

Create pedestrian-orientated facilities and environments (e.g. safe crossings and sidewalks, pedestrian signals, transit stops, disabled access) along commercial streets and in Town Centres.

*Kingsway Corridor Objective 10*

Ensure commercial site frontages along Kingsway, particularly in the Town Centre segments, have build-to-line setbacks, with no parking on ‘front yards.’

*Kingsway Corridor Objective 12*

**target**

Create urban design opportunities to enhance the streetscape with trees, street furniture and quality transit facilities.

**support**

"Pedestrian improvements in the Town Centre and Secondary Core areas include: setbacks for storefronts, overhanging canopies for weather protection, street furniture and benches, street trees, small pocket parks, appropriate lighting, and improved pedestrian crossings."

*EP p. 4, (2.1)*

"Enhance and beautify the street environment by providing ample sidewalks, street furniture, street trees, convenient transit, human- scale buildings, and easy to cross intersections."

*Kingsway Corridor Objective 14*

"Ensure urban design and the built environment includes safety features such as good street lighting, 'eyes on the street' and safe public spaces."

*Kingsway Corridor Objective 17*



**target**

Design all streets, public parks, schoolyards, public spaces and greenways as part of an integrated and connected open space network.

**support**

“The creation of an integrated greenway system with linking green spaces that can enhance ecological health within the city.”

*Official Community Plan (OCP) 10.3*

“To provide and maintain a comprehensive mix of park and public open space opportunities sufficient to meet the changing needs of the community.”

*OCP 7.2*

“To provide a system of pedestrian/cycle trails and other greenways to connect the major park and open space areas of the City with each other and other strategic components of the City and adjacent municipalities.”

*OCP 7.2*

“There is a need to ensure the use of proper urban design principles to preserve, enhance and reinforce the special natural and developed features of the City.”

*OCP 7.3*

“Existing parks and open spaces in the Edmonds area are to enhanced...A network of pedestrian and cycle routes is to be provided to link areas of the Town Centre.”

*EP 2.3*

“Ensure the use of good urban design principles to preserve, enhance and reinforce the unique green amenities and parks along the Kingsway Corridor.”

*Kingsway Corridor Objective 20*

**target**

Ensure at least 90% of Kingsway corridor residents live within 500m of a park.

**support**

“Provide and maintain a comprehensive mix of park and public open space opportunities sufficient to meet the changing needs of the community.”

*OCP 7.2*

“The creation, preservation and development of parks and open space is a desirable and necessary function of City government for the overall health of individuals and the community as a whole.”

*OCP 7.3*

“Existing parks and open spaces in the Edmonds area are to be enhanced.”

*EP 2.3*

“Protect the existing 58 acre Byrne Creek Ravine Park and add an additional 19 acres of the forested area to the east of the ravine to the Ravine Park.”

*EP 6.0 (p. 12)*

“Provide a range of neighbourhood, district and major parks; and open spaces, trails and urban plazas to the needs of Kingsway area residents and employees, and those of the wider Burnaby community.”

*Kingsway Corridor Objective 19*

**target**

Reduce impacts to streams (e.g. Still Creek, Byrne Creek) through the use of low impact storm water management and related infrastructure in new or rebuilt areas and buildings.

**support**

“...the pursuit of an ecologically sustainable environment, based on a recognition that there are linkages and a balance between the long term health of our natural areas, the economy and community livability.”

*OCP 10.3*

“...the continued recognition that environmental management should be addressed from both a watershed and ecosystem basis.”

*OCP 10.3*

“The City is to develop a drainage/runoff control plan for new and existing developments in the Edmonds Town Centre to reduce potential impacts on Byrne Creek.”

*EP 2.3*

“Provide low-impact drainage and stormwater systems along Kingsway and adjacent areas through the development of green streets and infiltration systems.”

*Kingsway Corridor Objective 23*

“Wherever possible, utilize or restore natural systems to collect and infiltrate stormwater.”

*Kingsway Corridor Objective 25*

**target**

Reduce energy requirements of new and existing buildings (relative to 2005 code-compliant buildings) and transportation (fewer car trips, more bike, walk, transit trips) by 50% or more.

**support**

*Communities can save energy costs and maximize the use of renewable energy by anticipating optimal solar orientation for passive and active systems, and integrating green building/design techniques into a significant proportion of new structures.*

*Lower energy and fuel costs can also be achieved by reducing automobile trips (esp. at peak hour) and facilitating use of transportation alternatives.*

“[Include] ...environmental considerations as an integral part of the assessment of land-use and transportation plans, development proposals and maintenance programs.”

*OCP 10.3*

“Endeavour by the City to use energy wisely and improve the efficiency of our lighting, heating, ventilating systems, electrical equipment and vehicle fleets through energy conservation and the use of appropriate new technologies.”

*OCP 10.3*

“Introduce new commercial and residential developments along Kingsway to incorporate green infrastructure and energy efficient building materials (e.g. green roofs, fly ash concrete).”

*Kingsway Corridor Objective 22*

“Pursue opportunities to achieve energy efficiency in Kingsway’s transportation, building, parks, and ecological infrastructure.”

*Kingsway Corridor Objective 24*

**target**

Locate 20,000 - 25,000 housing units, buildable on 20,000,000 to 25,000,000 Million square feet, within the Kingsway corridor study area by 2050, in a variety of residential housing types, tenures, environment and location suitable for a mix of ages, income groups, family types, and stages of life.

**support**

*Urban Futures/City of Burnaby estimate between 50,000 and 60,000 new persons will live in the Kingsway corridor by 2050. Assuming an average of 2.0 persons per unit, the population growth will generate demand for approximately 25,000 new housing units.*

"The GVRD Board will... seek through partnerships on complete communities, a diversity of housing types, tenures and costs in each part of the region in balance with job distribution."

*LRSP, 8.2*

"To make provision for a variety of predominately urban and suburban neighbourhood types that offer choice of residential environment and location, while recognizing the progressive urbanization of the City."

*OCP 4.2*

"To meet the housing needs of households through the changing lifecycle."

*OCP 4.2*

"Establish the Middlegate Mall area as the primary core for shopping, working, living, socializing and community services."

*Edmonds Town Centre Plan 6.0 (p. 12)*

"Edmonds Town Centre should ...help meet the growth management objectives of the City by providing a mix of housing, schools, recreation facilities and parks to provide for the daily needs of area residents and fulfill its town centre role."

*EP 1.2 (p.1)*

"A range of housing types is designated in the Town Centre to provide a diversity of living opportunities, to support the redevelopment of the Town Centre and Secondary Core area, and to address the overall City needs for housing units."

*EP, 2.2 (p.6)*

**target**

At least 75% of residential development on the Kingsway study area will be multi-family units, especially medium- to high-density apartments, and multiple unit ground-oriented housing forms (including townhouses, residential infill and secondary suites)

**support**

*In 2001, housing structures in Burnaby were 36% single detached dwellings; 26% low-rise apartments; 17% high-rise apartments; 17% duplex or row housing; 5% other. Burnaby thus has a relative high percentage of (60-65%) of multi-family residences. Kingsway corridor already has some of the highest density residential areas in Burnaby. This high proportion of multi-unit housing could grow to 75%-80% of new units in the Kingsway corridor.*

Dwellings by Structure Type, 2001	GVRD	City of Burnaby	% of total dwellings, Burnaby
<b>Total Occupied Private Dwellings</b>	758,715	74,000	--
Single Detached dwelling	327,655	26,550	<b>36%</b>
Semi-detached dwelling	18,920	2,650	<b>4%</b>
Apartment detached duplex	68,790	6,445	<b>9%</b>
Row House	55,470	6,030	<b>8%</b>
Other single detached house	1,210	90	<b>1%</b>
Movable dwelling	5,230	30	<b>0%</b>
Apartment, five or more storeys	89,780	12,705	<b>17%</b>
Apartment, fewer than five storeys	191,670	19,515	<b>26%</b>

Source: GVRD, 2002

"Higher intensity of redevelopment of a medium density character is warranted primarily in light of proximity of Metrotown, the convenience of Skytrain service to the area [and] the strong residential component of the Royal Oak Development Plan."

*Royal Oak Community Plan 4.2 (p. 6.)*

"The Royal Oak Study Area should provide for a balance of residential and employment opportunities both in terms of redevelopment and the strengthening of identified existing development."

*ROCP, 4.1 (p. 6)*

"The City will encourage appropriate higher density residential and job related development along the existing and proposed rapid transit corridors."

*Official Community Plan 8.3*

"The use of the urban medium density townhouse form should also be further encouraged in the City. This could range from individual sites to ones integrated with higher density uses in the Town Centres....Also, wherever possible, high rise residential developments should be designed to contain units with a ground orientation at grade level.

*Official Community Plan 4.2*

**target**

Increase density to 150-200 persons per hectare or 80 to 110 dwelling units per hectare along the Kingsway study area.

**support**

“Higher intensity redevelopment of a medium density character is warranted primarily in light of the proximity of Metrotown, the convenience of Skytrain service to the area, the strong residential component of the Royal Oak Development Plan, and industrially-used area ripe for redevelopment.”

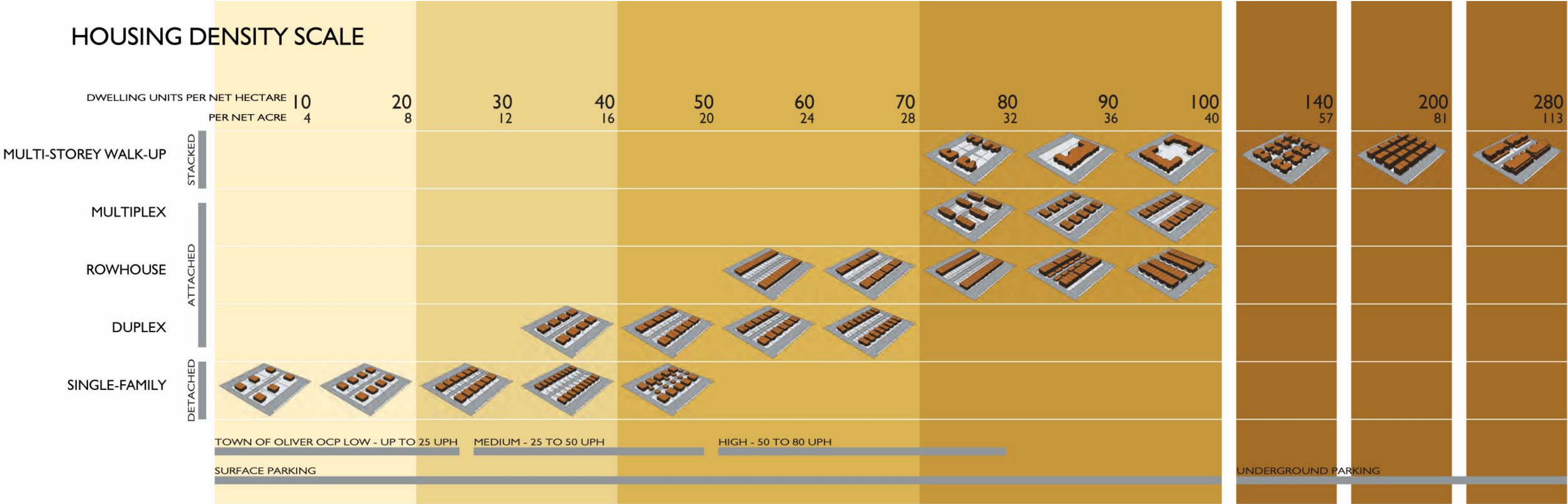
*ROCP 4.2*

“High rise apartment are located in proximity to the Town Centre Core, above commercial developments in this core, and near the Station Core...mixed use high rise apartments areas in the Town Centre core...single and two-family infill/intensification area provide opportunities for additional housing units through smaller lot subdivision, more duplexes or additional suites within dwellings.”

*EP 2.2 (p. 6)*







DWELLING UNITS PER NET HECTARE  
PER NET ACRE

10

20

30

40

50

60

70

80

90

100

140

200

280

4

8

12

16

20

24

28

32

36

40

57

81

113





HOUSING DENSITY SCALE  
IN DWELLING UNITS PER HECTARE

		DETACHED SHARED DRIVEWAY	DETACHED	DETACHED ACCESSORY OVER GARAGE	ATTACHED DUPLEX	ATTACHED ROWHOUSE ACCESSORY OVER GARAGE	ATTACHED ROWHOUSE	ATTACHED ROWHOUSE LIVE / WORK SPACE	STACKED LOWRISE	STACKED LOWRISE
		2 STORY 25 UPH (10 DUA) 2 CAR DETACHED, OFF STREET .24 FAR	3 STORY 31 UPH (13 DUA) 2 CAR DETACHED, OFF ALLEY .84 FAR	2 STORY 39 UPH (16 DUA) 2 CAR DETACHED, OFF ALLEY .78 FAR	2 STORY 59 UPH (24 DUA) 1 CAR DETACHED, OFF ALLEY .79 FAR	3 STORY 62 UPH (25 DUA) 1 CAR DETACHED, OFF ALLEY .93 FAR	2 STORY 73 UPH (29 DUA) 2 CAR DETACHED, OFF ALLEY .95 FAR	3 STORY 84 UPH (34 DUA) 2 CAR ATTACHED, OFF ALLEY 2.27 FAR	3.5 STORY 99 UPH (40 DUA) 1.3 CAR UNDERGROUND 1.32 FAR	2 STORY 103 UPH (41 DUA) 1.1 CAR SURFACE, OFF ALLEY .46 FAR
										
0	10	20	30	40	50	60	70	80	90	100
										
										
		GARRISON WOODS SINGLE FAMILY	CORNELL INFILL HOUSING	MURRAYS CORNER SINGLE FAMILY	2238 COLLINGWOOD	BLINGAROWS	FAIRVIEW ROWHOUSES	ORENCO STATION BROWNSTONES	GARRISON WOODS COURTYARDS	LAUREL GARDENS
DETACHED		NARROW LOT		ATTACHED			STACKED			

ATTACHED ROWHOUSE

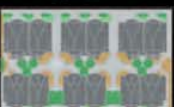


3 STORY  
139 UPH (56 DUA)  
1 CAR UNDERGROUND  
2.28 FAR



KITS MEWS

STACKED TOWNHOUSE

4 STORY  
201 UPH (81 DUA)  
1 CAR UNDERGROUND  
2.43 FAR



HELEN'S COURT

STACKED MIDRISE  
OVER COMMERCIAL

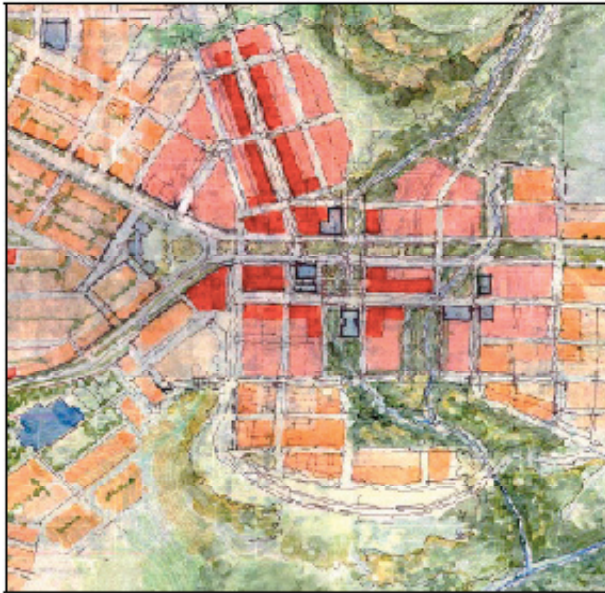
4 STORY  
284 UPH (114 DUA)  
1 CAR UNDERGROUND  
2.84 FAR



TRIBECA



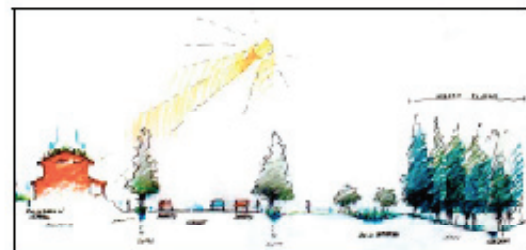
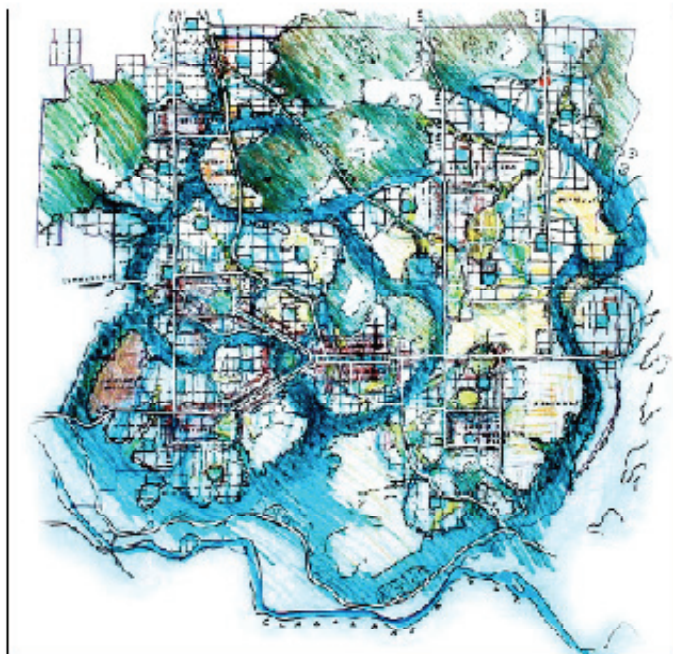
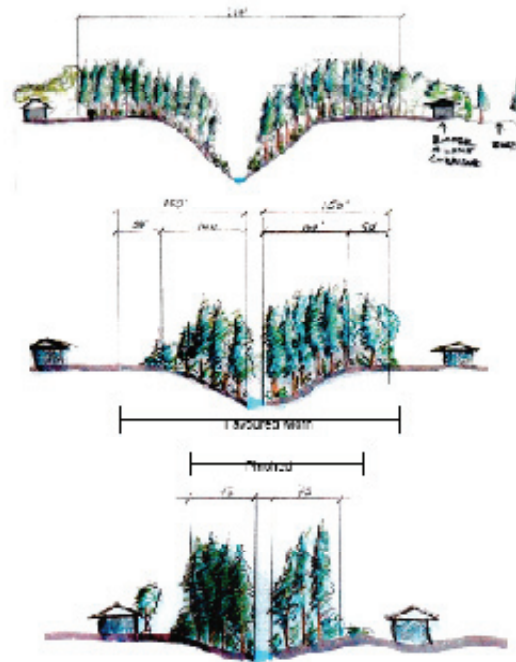
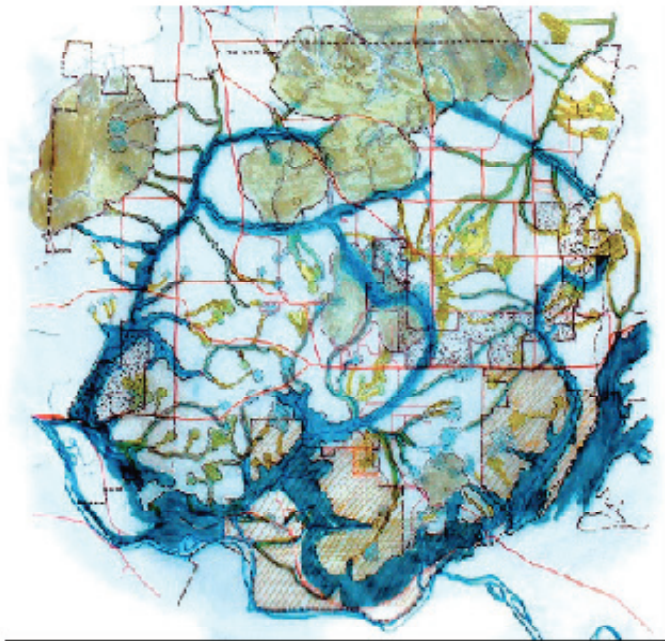
The Home Team



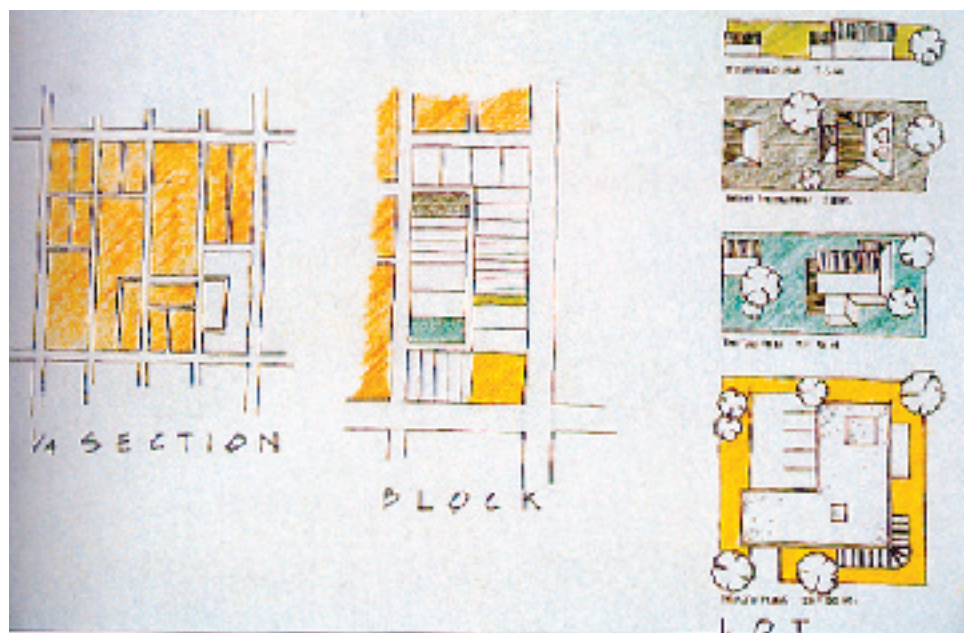
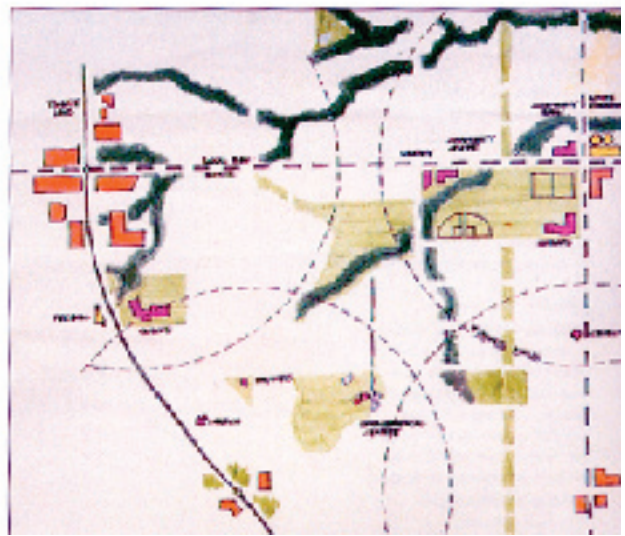
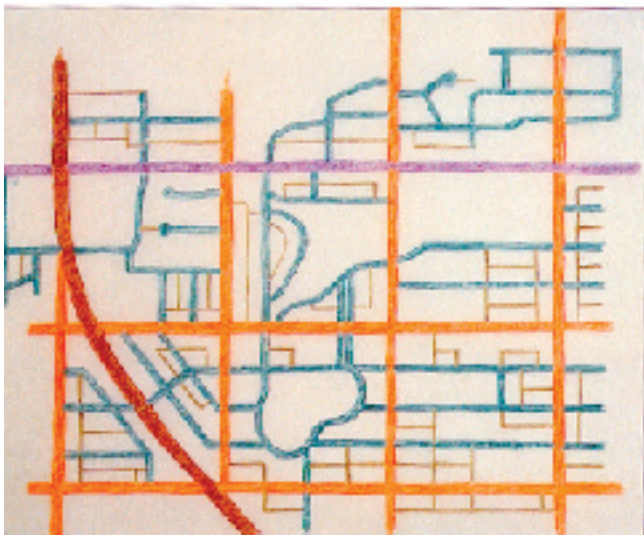
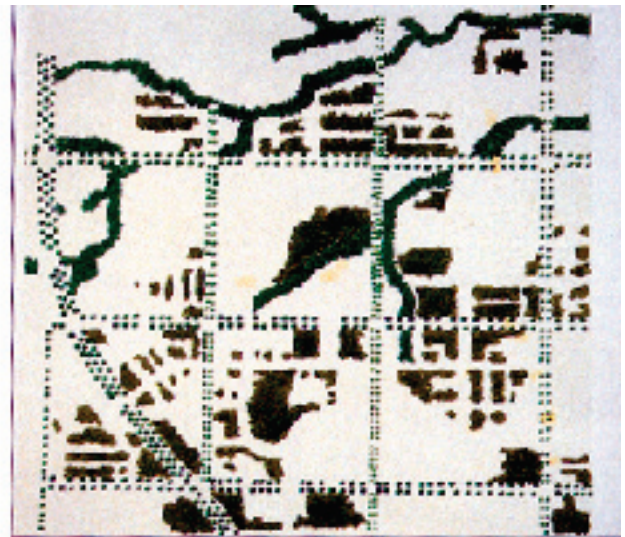
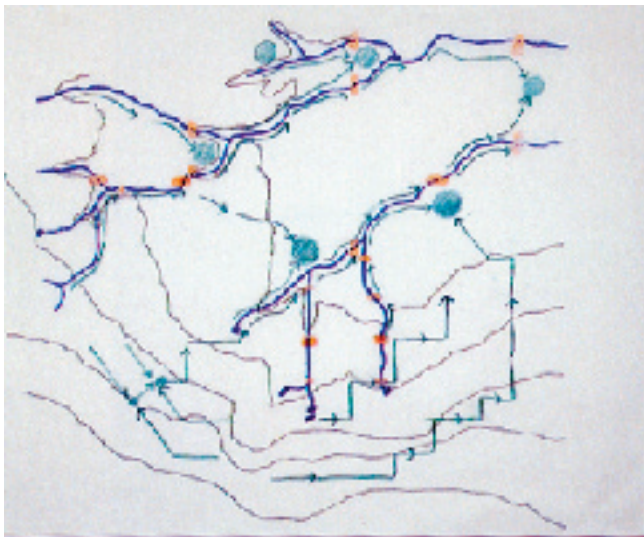
The Go Team















STREET GRID



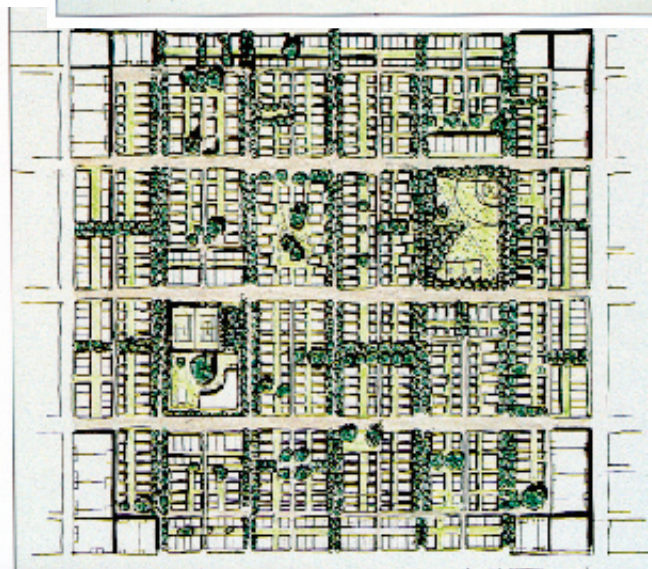
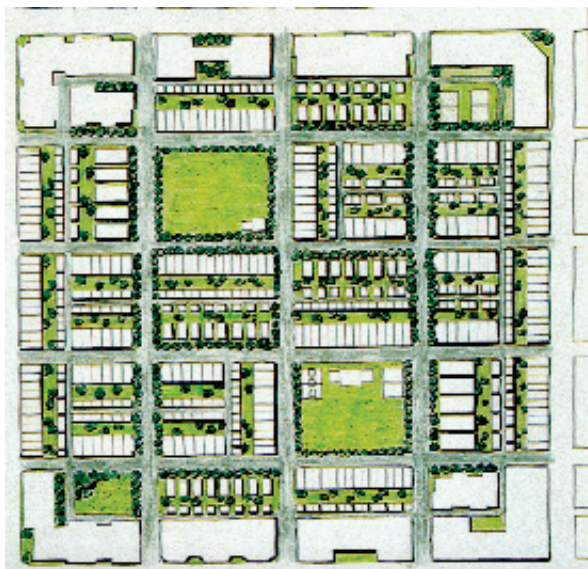
VEGETATION



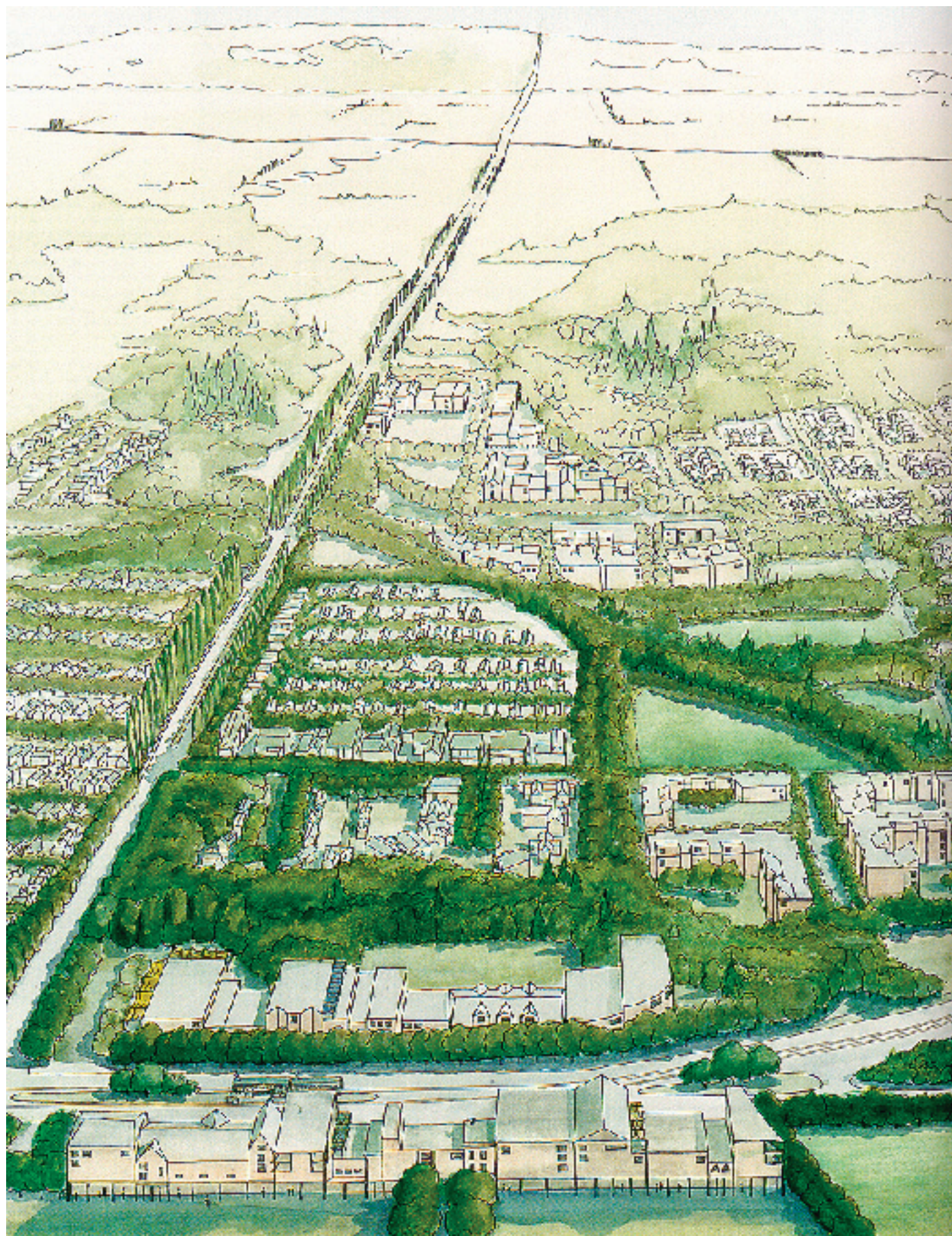
WATER



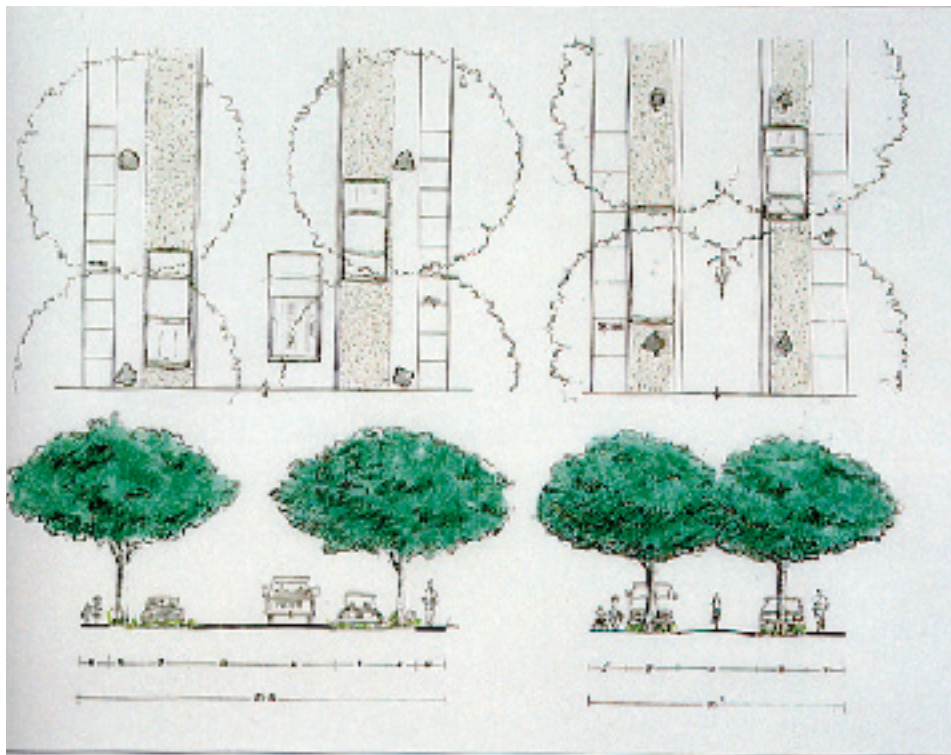
LAND



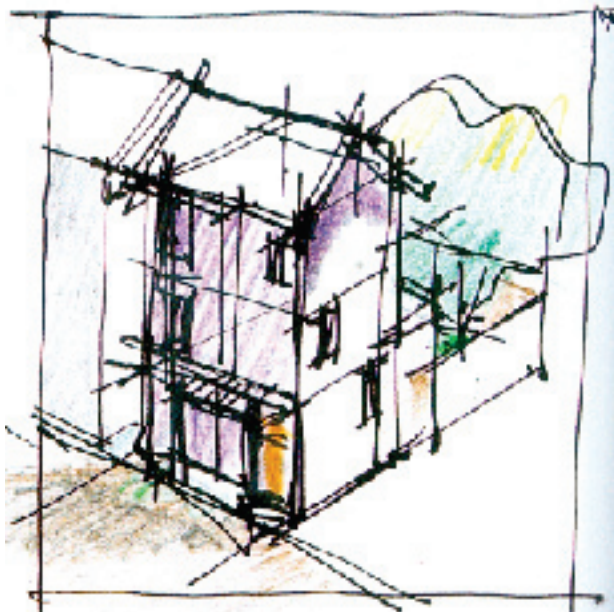






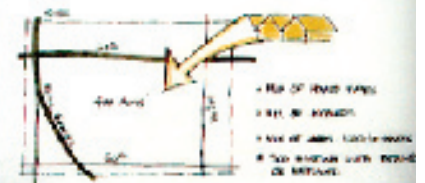




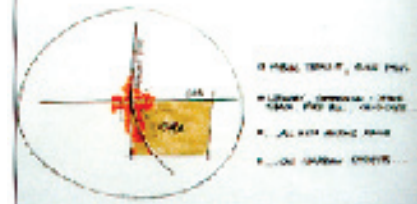


A HOUSE + SMALL LOT  
IS STILL AN OPTION.

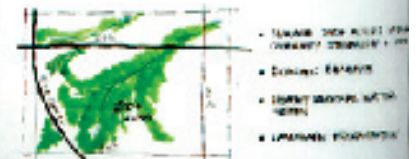
## I. ADD 2200 DWELLING UNITS BY 2045



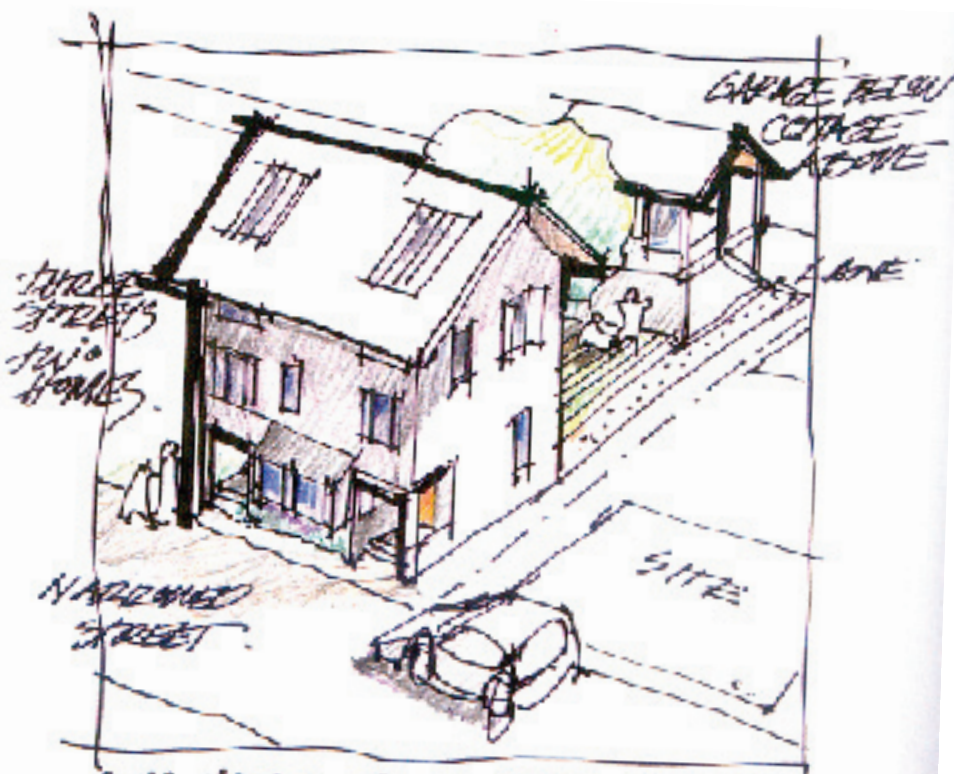
## II. CREATE A LIVELY PEDESTRIAN-SCALE TOWN CENTER AT KING CROSS + GLEBE



## III. NURTURE THE EVOLVING ECOLOGY of the SITE

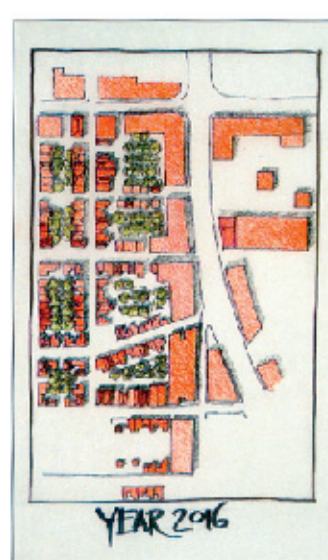
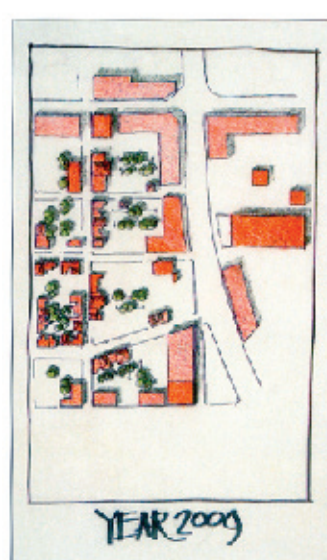
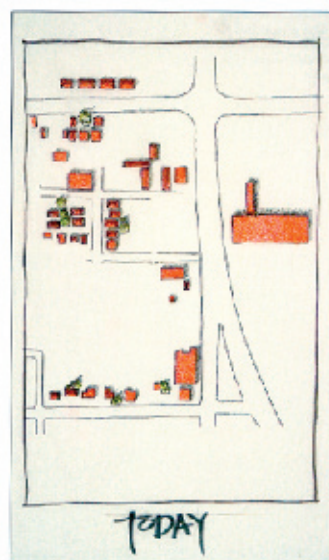
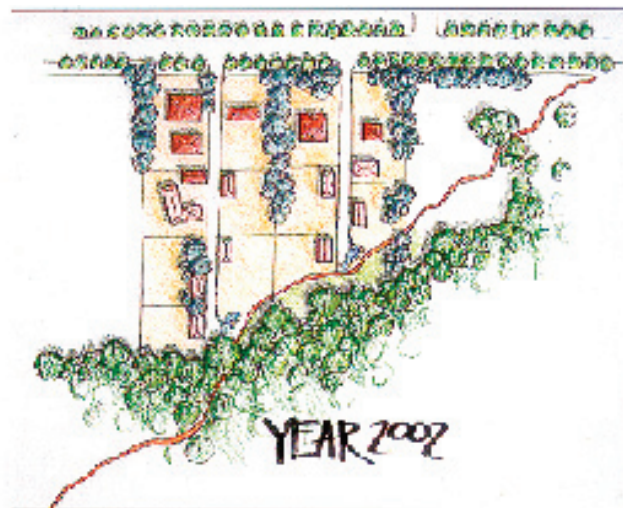


## IV. LOCATE DENSE, MIXED USE BUILDINGS at the EDGE



A HOME FOR TWO FAMILIES + GARAGES







# Photoshop Examples

Before



After





Before



After

