

# TRANSIT-ORIENTED DEVELOPMENT CASE STUDY

## COLLINGWOOD VILLAGE, Vancouver, B.C.



**COLLINGWOOD VILLAGE**

*Figure 1—Collingwood Village (all construction now complete)*

Source: Concert Properties

## Project data

<b>Date completed</b>	November 2006
<b>Site area</b>	11.3 hectares (28 acres)
<b>Number, type, size of residential units</b>	2,700 suites (1,917 condominium and 783 rental) within 16 buildings (11 condominium and 5 rental) including four-storey townhouses and mid- and high-rise apartment buildings. Unit sizes range from 34 m <sup>2</sup> (365 sq. ft.) to 123 m <sup>2</sup> (1,323 sq. ft.).
<b>Other land uses on the site</b>	6,500 m <sup>2</sup> (70,000 sq. ft.) of non-residential space including a grocery store, a drug store, a 200-pupil elementary school, a 930 m <sup>2</sup> (10,000 sq. ft.) community centre, a 650 m <sup>2</sup> (7,000 sq. ft.) daycare, small-scale retail and a neighbourhood policing centre.
<b>Gross residential density</b>	239 uph (units per hectare)
<b>Maximum height</b>	The housing is a mix of three building types: up to four-storey townhouses and garden apartments, six-storey apartment buildings, and high-rise towers up to 26 storeys.
<b>Parking</b>	The 11 condominium buildings have a total of 2,173 parking stalls (1.35/unit in phase 1 and 1.04/unit in phase 2). All on-site parking is underground.
<b>Unit selling prices</b>	\$89,000 to \$500,000 (1990 to 2006). The average new selling price was \$339,948 in 2004.
<b>Type of transit</b>	Automated Light Rapid Transit (SkyTrain)
<b>Distance to transit station</b>	25 – 700 m (80 – 2,300 ft.)
<b>Pedestrian connectivity</b>	Very good

## PROJECT SUMMARY

Collingwood Village

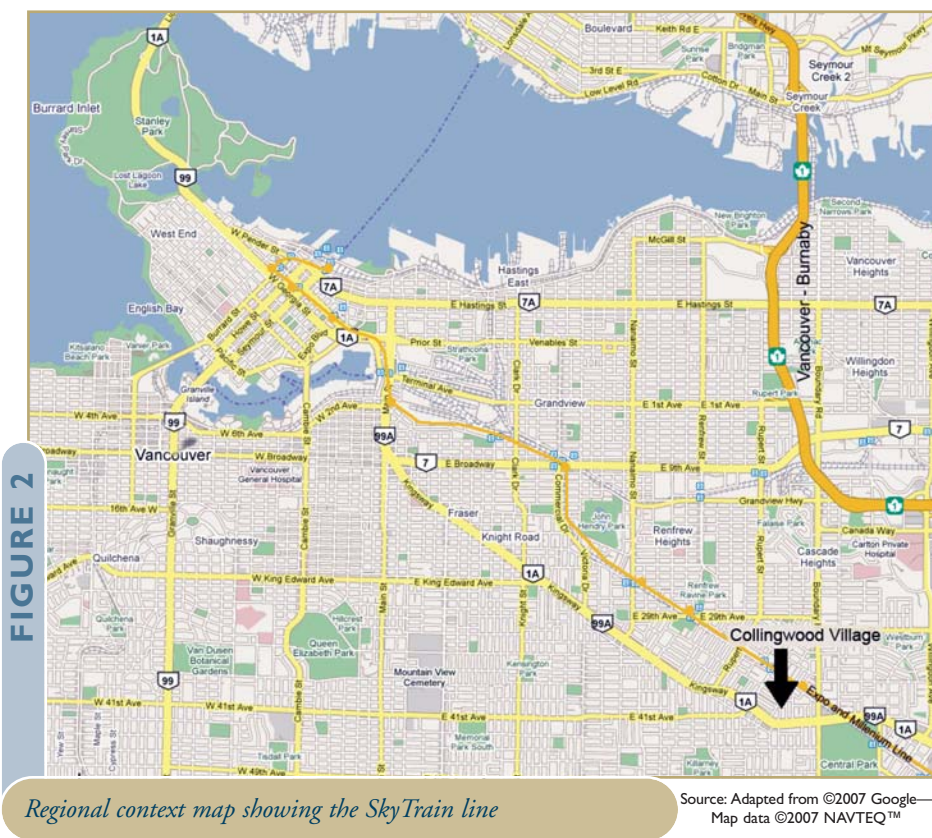
Collingwood Village is a high-density, mixed-use urban village centred around the Joyce–Collingwood SkyTrain Station in Vancouver. The largest master-planned community in British Columbia (2,700 units, 11.3 hectares), it was originally assembled by the Vancouver Land Corporation, and later purchased by Concert Properties. The City and the developer negotiated a number of neighbourhood amenities including a community centre, daycare and community policing station that have made this a truly complete urban village. Collingwood Village was developed within the context of a regional transportation and land use planning system that aims to focus growth around regional centres well served by transit. It is considered a highly successful transit-oriented development (TOD) that combines transit-supportive densities with good connections to the transit station and a mixed-use urban village. According to the survey of residents described later in this case study, 56 per cent use transit as their main means of travel to work.

## TRANSIT SYSTEM OVERVIEW AND PROJECT CONTEXT

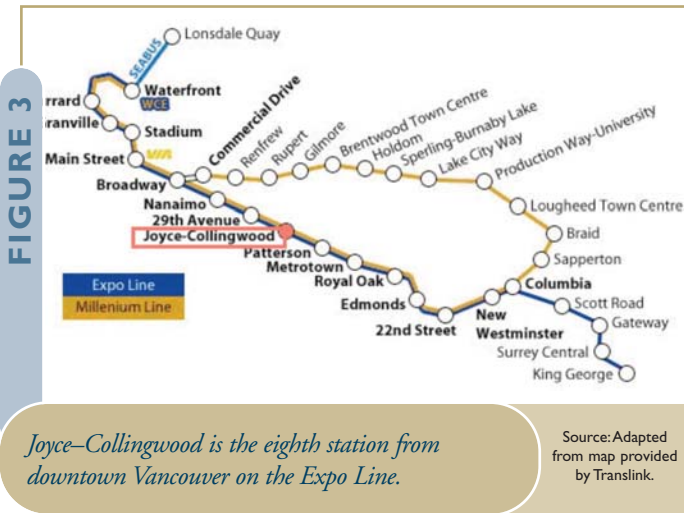
The Joyce–Collingwood SkyTrain Station is the eighth stop on the Expo Line from downtown Vancouver and a major contributor to ridership on the region’s rapid transit system. Developed in 1984 by the Greater Vancouver Transportation Authority (known as TransLink, and since renamed the South Coast British Columbia Transportation Authority) with funding from the provincial government, the Expo Line was the first of Greater Vancouver’s SkyTrain (elevated rail) lines.

A second line (Millennium Line) was completed in 2002, one more is under construction and another is planned. Other components of the regional rapid transit network include the West Coast Express commuter rail system, SeaBus<sup>1</sup> and a growing rapid bus system along the region’s heavily populated major arterials.

Opened in 1986, the Expo line connects downtown Vancouver with regional town centres in Burnaby, New Westminister and Surrey, travelling through well-developed and established areas in between. Collingwood Village has developed as a significant transit node on the corridor.



<sup>1</sup> For a case study featuring a TOD at a SeaBus terminal, refer to “Time, North Vancouver” in CMHC’s Transit-Oriented Development – Case Studies series at <http://www.cmhc.ca/en/inpr/su/sucopl/upload/65508EnW.pdf>



Urban Transportation Showcase Program) is intended to further encourage transit-supportive densities, land uses and urban design around the SkyTrain stations.

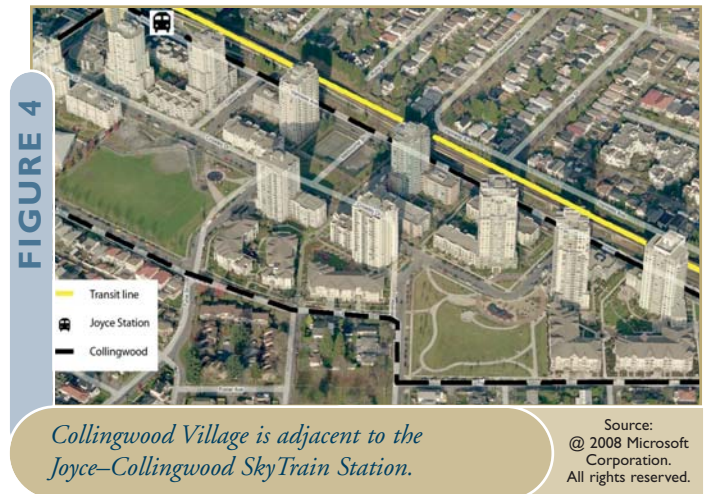
The Expo Line is the backbone of the region’s transit system with extremely successful ridership, so much so that customer surveys show one of the leading areas of dissatisfaction is overcrowding. The line’s 2005 weekday average ridership was estimated at approximately 188,000, up 11 per cent from approximately 169,000 in 2003. Densities around stations vary significantly but sufficient redevelopment has occurred at enough stations along the line, and in enough neighbourhoods close to the line, to make the corridor’s densities transit-supportive.

TransLink’s investments are required by legislation to support the Greater Vancouver Regional District (GVRD) Growth Management Plan (the Livable Region Strategic Plan) which calls for complete, compact communities that maximize transportation choice. This plan designates growth within a “Growth Concentration Area” centred around the metropolitan core. The City of Vancouver, like other municipalities within the region, is required to prepare a Regional Context Statement that describes how its other plans and policies will achieve consistency with the regional plan’s key strategies:

- Protect the green zone.
- Build complete communities.
- Achieve a compact metropolitan region.
- Increase transportation choice.

The area around Joycel-Collingwood Station was previously an industrial and active rail yard area. When these uses eventually declined, not long after the Expo Line was opened, the large area of land was relatively easy to assemble, and for the City to rezone for high-density residential.

It has taken a number of years for zoning and other land use tools to be put into place by the various municipalities that control land use along the line to enable and encourage high-density development around some of the Expo Line stations. In some cases, this has still not occurred or occurred at a minimal level due to established lower-density neighbourhoods that have resisted change. The “Transit Villages” project (part of TransLink’s



The Joycel-Collingwood Station had an average weekday ridership of 10,300 in 2003, which had increased to 10,800 in 2005 (nearly a five-per-cent increase). The Joycel-Collingwood Station is considered to be a highly successful example of transit-supportive densities and development, given the mix of uses, high residential densities, accessible pedestrian network, and reduced residential parking requirements.

### DEVELOPER’S PERSPECTIVE

Replacing light industrial and railway lands, the 2,700-unit Collingwood Village project was developed by Concert Properties over 16 years. The project was born from discussions between the developer and the City that identified surplus industrial lands adjacent to the newly built Joycel SkyTrain Station.

A vision for the project was defined in 1989 to reflect the combined objectives of three entities:

1. Concert's management and shareholders wanted to move beyond the company's initial focus of developing rental properties;
2. The City of Vancouver had identified the area as one where it was appropriate to replace industrial uses; and
3. The GVRD wanted to reduce sprawl by increasing densities, especially around transit stations.

For Concert, Collingwood Village has allowed it to demonstrate how a new rapid transit system can be the impetus for coordinated land use planning within a large-scale development.



FIGURE 5

*A mix of building heights adds visual interest.*

Source: Concert Properties

## Parking and Bicycle Storage

The condominium units contain a total of 2,173 parking spaces. All parking is located underground. All buildings include bicycle parking for a total of 2,408 bicycle spaces located both at and below grade. Commercial and community buildings on the site also provide change rooms and showers in addition to parking.

During the rezoning process, the parking ratio was negotiated between the developer and the City engineering department to be lowered to 1.35 spaces per unit, compared to 1.75, which is the standard for this type of residential development. Concert thought the standard should be lower still to reflect the proximity to transit. Following the build-out of phase 1, they successfully negotiated a further reduction in parking standards to 1.04 spaces per unit based on the actual usage.

## Transit-Oriented Design Considerations

Mere steps<sup>2</sup> to the Joyce–Collingwood SkyTrain Station, the proximity and good pedestrian connections to the transit station were very important considerations for the developer. Collingwood Village has a number of design features that make walking both pleasant and convenient:

- The blocks are small with mid-block connections and pathways between buildings.
- The central street that was created during project development, Crowley Drive, serves as the major pedestrian route. Most of the major buildings as well as the parks front onto this street, making it an interesting and pleasant place to walk or cycle.
- The streets have street trees and include pedestrian bulges at the intersections to reduce crosswalk distances.
- Perhaps what makes Collingwood Village most pleasant for walking is the fact that it is a busy place, that is, there are lots of people around. Even on a rainy Vancouver day, the streets are busy with commuters, shoppers and residents. This contributes greatly to the feeling of safety in the area.

<sup>2</sup> The northern corner of the project is located only steps from the Joyce–Collingwood SkyTrain Station, with the southern corner nearly 700 m (2,300 ft.) away. A distance of 400 m (1,300 ft.) is generally considered a comfortable five-minute walk for the average person.

FIGURE 6



View of Collingwood Village showing the central pedestrian street (at left) and variety of building forms.

Source: Concert Properties

For the most part, the area feels safe at most times of the day. However, the SkyTrain station itself is a utilitarian design in need of a facelift, and a far cry from the sleek designs of the newer Millennium Line stations. The area under the guide rail is dark, often littered with garbage and consequently a little foreboding. Local residents have attempted to brighten this area up with murals and the installation of community gardens but, on a dull day or at night, the area immediately surrounding the station still suffers from the sense of danger that plagues many of the Expo Line stations.

New housing is buffered from the elevated SkyTrain line that runs along the northern edge of the site with landscape setbacks and acoustic treatment of building facades on north-facing sites.

### Project Success and Costs

Built in two phases, the project has unit sizes ranging from very small apartments, less than 34 m<sup>2</sup> (365 sq. ft.) to townhouses of more than 120 m<sup>2</sup> (1,300 sq. ft.). The residents are a combination of first-time buyers and renters with household size varying from one to four persons. Initially, the buyers were low- to middle-income households but, in recent years, more investors have purchased properties. The project has been 16 years in the making, so prices have changed considerably in keeping with the Vancouver market. Initially, suites sold for \$89,000 and, in the later years, prices have topped \$500,000

for the largest suites. The average new selling price was \$339,948 in 2004. This compares to the average new high-rise condominium selling price in Vancouver of \$326,285 in 2004.<sup>3</sup>

The project is considered very successful by the developer. Concert Properties take pride in the fact that the project not only met profit expectations with unit sales and prices following market trends in Vancouver but also generated a true community and promoted the regional goal of increasing density and reducing urban sprawl.

*“Building vibrant communities where neighbours can greet each other is a Concert hallmark. Concert believes the right location can make a difference in the residents’ sense of community and choose locations for its developments with shopping, dining, recreation, and transportation nearby.”* (Lizette Parsons-Bell, Director, Corporation and Community Relations)

The availability of transit allowed the developer to sell the units for a slight premium, and the proximity to transit was used extensively in marketing materials for the project. There were no unusual financial or liability issues although the site was a brownfield. The total project cost was \$402 million. Most of the amenities were paid for by the developer, but the City committed approximately \$5 million to top up the cost of amenities such as a community policing centre and a community centre.

### Municipal Support

The developer and the City worked closely together to realize this ambitious project. The City identified the land as surplus and worked with Concert to develop a vision for the area. As with most major developments in Vancouver, an amenity package was required and was negotiated between Concert and the City. This included the building of the Collingwood Neighbourhood House and the community policing centre. The City also offered flexibility in the parking standards, reducing the requirement from 1.75 stalls per unit to 1.35 and eventually, in later phases, to 1.04 stalls per unit. In 1993, after three years of intensive work with the City and community, finding support for the zoning changes proposed by the developer was relatively straightforward.

<sup>3</sup> CMHC, B.C. Market Analysis Centre, Vancouver

## Barriers and Obstacles

Although the project was large and complex, there were no major barriers. Extensive communication with the neighbourhood groups throughout the process resulted in strong neighbourhood support. A well-conceived phasing plan helped to ease the transition from light-industrial to residential use over the master-planned community's 16-year development period.

## Key Success Factors and Lessons Learned

The developer attributes the success of the project to the innovative mix of housing types, a well-conceived phasing plan, the long-term commitment of the developer and the provision of extensive community amenities. In addition, a smart master plan that uses landscaping and building orientation to buffer residents from the SkyTrain system combined with a network of pedestrian-scaled, landscaped connections to that system was also important in ensuring the success of the project.



FIGURE 7

Landscaped pedestrian connections on the site

Source: Concert Properties

The developer advises that “*Extensive community consultation is key. Listen to the community, work with them to address their concerns and find creative ways to incorporate their long-term objectives. Maintain an open and honest dialogue with them and deliver on your promises.*” Furthermore, the developer advises that the first priority should be to develop a human-scaled, very comfortable, pedestrian-oriented residential environment with easy and safe connection to transit.

## MUNICIPAL PLANNER’S PERSPECTIVE

### Planning Objectives

When the Expo Line station planning was underway, the City of Vancouver at that time had little interest in seeing the Joyce–Collingwood Station area change from industrial uses. It was only after the opening of the line that the industry and rail uses in that area declined, and the opportunity for a new residential community arose.

The quality of the development exceeded the station area plan objectives that were formulated in 1987 in conjunction with the community. Higher densities were negotiated between the developer and the community in exchange for significant community amenities. The City was also part of the formula, as it was a partner with the developer to produce rental housing.

Although the project has a much higher density than the surrounding neighbourhood, it has achieved a high level of compatibility with its surroundings through appropriate scale transitions and urban design initiatives such as mid-rise podiums wrapping high-rise towers that are stepped back from the street. Overall, in spite of the high density, the project feels humanly scaled.

### Municipal Process and Support for Project

Planning for the area was undertaken between 1981 and 1989 with a station area plan that defined objectives for the new neighbourhood. This plan set the tone for subsequent discussions leading to a rezoning and eventually development permit approvals. Rezoning occurred through comprehensive development (CD-1) rezonings in the early 1990s. Amendments to these zones occurred later as needed.

The station area planning process involved extensive community input over eight years. The negotiations for added density similarly involved the community. In the end, this was a win-win situation for the community (which secured good urban design and community amenities), the developer (who achieved a successful project), and the City in that rental housing was built. Nobody seems to mind the higher densities.

The City was required to commit approximately \$5 million to top up the cost of amenities. However, this project was accomplished prior to introduction of city-wide Development Cost Levies that are now used to secure funding for infrastructure and amenities in new developments.

### Public Consultation Process

There was an extensive public consultation process and the developer was very co-operative in sharing information openly with the public. Public input was gathered through a variety of mechanisms including open houses and surveys. The majority of local residents were supportive of the project because of the commitments made by the developer. The community support created support at a Council level, and within the bureaucracy. Public concerns centred around traffic impacts on the existing neighbourhood. Concert promised to conduct a traffic impact analysis prior to completing the final phase of the project and undertook a number of traffic management initiatives as a result.

### Success Factors

The urban design factors that are considered successful include the location of commercial uses close to the transit station, with community services slightly further away, and high-density residential uses throughout the project. This supports transit ridership and neighbourhood vitality. The scale is compatible with the surrounding area, despite the high density, because of design features like stepping back taller buildings and placing lower structures closer to the streets adjacent to the existing neighbourhood. The developer responded to community input with design solutions that resulted in neighbourhood support.

Parking standards have been adjusted over time. They are reduced when there is evidence that people have reduced their reliance on automobiles and therefore don't need parking spaces.

## RESIDENTS' PERSPECTIVES

Thirty-one residents from the project were interviewed during the summer of 2006 to learn about their motivations for choosing a home within Collingwood Village, their level of satisfaction and their transportation choices.

### Reason for Choosing this Location

Proximity to transit and work figured high on the list of respondents' main reasons for purchasing in this location with 32 per cent of residents surveyed choosing it because of proximity to transit and 22 per cent because of proximity to work.

Reason for choosing Collingwood Village	Main reason (%)	Some influence (%)*
Proximity to transit	32	61
Proximity to work	22	32
Proximity to school	0	6
Proximity to daycare	0	0
Proximity to amenities (for example, shopping, parks, trails)	6	52
Price of unit	12	39
Size of unit	3	3
Architectural features (for example, layout, look of building)	6	16
Other/don't know	16	45

\* More than one response was allowed, so the total may not equal 100 per cent.

As a separate question, respondents were asked to what extent the building's location near transit influenced their decision to live in this development. Overall 87 per cent said that the building's location near transit had a strong or some influence on their purchase decision.

Most respondents were very satisfied with the quality of the project, including 90 per cent reporting being satisfied with the amount of parking provided for their personal use. Somewhat fewer (64 per cent) were satisfied with parking provided for visitors; 93 per cent reported being very satisfied or somewhat satisfied with the character of the neighbourhood, including the style and type of housing, landscaping, and shops, that contribute to the atmosphere of the area. Further, 100 per cent were either very satisfied (55 per cent) or somewhat satisfied (45 per cent) with the amenities in the neighbourhood, such as shopping, services, schools, and recreation.

Ninety per cent of respondents said they were very or somewhat satisfied with the overall cost of living in this location even though, for 65 per cent, the purchase price was higher than that of their previous dwelling. Forty per cent said that they accepted this higher cost primarily because of the location near transit, 25 per cent because of design features and 25 per cent because of neighbourhood amenities. The design and appearance of the buildings were very popular with respondents, most of whom (90 per cent) said they were very or somewhat satisfied with this aspect of the project. Eighty-four per cent said they were satisfied or somewhat satisfied with the size of their units, even though the project has some very small units (less than 37 m<sup>2</sup> / 400 sq. ft.).

### Travel to Work, Shopping and School

The proximity and good connectivity to transit and amenities along with smaller unit sizes seem to have resulted in fewer households with cars. Only 77 per cent of households surveyed owned a car, compared to 84 per cent of households in the Vancouver census metropolitan area (CMA) and only 13 per cent owned two or more cars compared to 37 per cent in the CMA. In addition, 51 per cent said they used transit daily and 71 per cent used transit at least once a week. In Greater Vancouver, the overall modal share for transit is 10.8 per cent<sup>4</sup>. Among the Collingwood Village respondents, 56 per cent traveled to work mainly by public transit<sup>5</sup> compared to 11.5 per cent for the Vancouver CMA.<sup>6</sup>



FIGURE 8

*Part of the success of Collingwood Village as a transit village is due to the high quality public realm.*

Source: Concert Properties

<sup>4</sup> TransLink, 2004 Greater Vancouver Trip Diary Survey

<sup>5</sup> A survey of 4,000 households near the SkyTrain in the east side of Vancouver and west side of Burnaby was conducted in 1996. It compared SkyTrain use among two groups: those within 300 m of a station and those over 1 km from the nearest station. It found that 47 per cent of the group nearest a station took more than 10 trips per month, compared to 18 per cent in the latter group. Among respondents in the first group, 24 per cent took less than two trips per month, while 60 per cent did so in the group further from a station. This finding is similar to the one shown in table 3, indicating significantly higher transit use among respondents of Collingwood Village, compared to the Vancouver CMA average.

<sup>6</sup> Source: 2001 Census



**TABLE 2**

Comparison of Collingwood Village and Vancouver CMA resident travel patterns

Travel variable	Collingwood Village	Vancouver CMA*
Mode of travel to work	44% motor vehicle as driver 0% car pool 56% public transit 0% walk 0% bike 0% other	72% motor vehicle as driver 7% car pool 11.5% public transit 6.5% walk 2% bike 1% other
% households who own at least one vehicle(s)	77%; 13% two or more cars	84%; 37% two or more cars†
Avg. length of trip to work	29 min. (one way)	67 min. (round trip)‡
* Source: 2001 Census, Statistics Canada † Source: <i>Spending Patterns in Canada, 2001</i> , Statistics Canada ‡ Source: <i>General Social Survey on Time Use: Cycle 19, The Time it Takes to Get to Work and Back</i> , Statistics Canada (by Martin Turcotte), 2005		

Of those respondents using transit, all (100 per cent) walked to the transit station and from the transit station to work. All the transit users interviewed rated the trip from home to the transit station as either very or somewhat pleasant and very convenient. For the majority of transit users, the streets and sidewalks felt safe (87 per cent), there were enough trees and landscaping along the route (94 per cent), there were walking paths that are separate from the street (94 per cent), the buildings along the way were attractive (75 per cent), and there were parks and public amenities along the route (69 per cent). All of the transit users walked to the transit station at both ends of their journey.

Although over half of respondents took public transit to work, only 13 per cent reported taking transit to get to work more often since moving to this location suggesting that Collingwood Village strongly appealed to existing transit users. The majority cited “convenience” as the primary reason for this change, with others citing cost savings and pleasant journey as reasons.

Of those respondents making shopping trips, 19 per cent walked, only 22 per cent took transit and the rest (58 per cent) drove most often. The average (mean) trip length from home to shopping was just over 12 minutes. Ten per cent said they walked more for shopping trips than they did in their previous home location, with one person walking less. Ten per cent used transit for shopping more than before, and none used transit less than before for these trips. Again, convenience was cited as the major reason for the changes. Three of the 31 respondents (10 per cent) used transit more for making regular trips to school or daycare than they did in their previous location.

**TABLE 3**

Change in travel patterns since last home location

Change since last home location	Work trips	Shopping trips	School or day-care
Use transit more than before	13%	10%	10%
Drive less than before	6%	6%	6%
Walk more than before	0%	10%	10%
Drive more than before	3%	0%	6%
Walking less than before	0%	3%	3%
Own one less car	3%		
Previous home was not a high-rise (high-rise is more than five storeys)	65%		

## Demographics

The respondents of Collingwood Village tend to have a smaller household size, be younger and have a higher proportion of middle-income households than the Vancouver CMA. Thirty-five per cent had previously lived in a high-rise building, and 42 per cent had previously lived in a single-detached dwelling.

TABLE 4		Demographic and income data
Demographic variable	Collingwood Village	Vancouver CMA*
People per household	1.9	2.6
Age range†	35% under 35 years 59% 35-65 years 6% over 65 years	20% under 35 years 61% 35-65 years 19% over 65 years
Household income (pre-tax)	36% under \$50,000 56% \$50,000 - \$100,000 7% over \$100,000	50% 34% 16%
Don't know/refused	1%	n/a
* Data source, 2001 Census, Statistics Canada † For Collingwood Village, average age of survey respondents and, for Vancouver CMA, average age of household maintainer(s)		

## SUMMARY AND LESSONS LEARNED

Collingwood Village is a model TOD that has delivered on expectations for the developer, transit authority, municipality and the community. The project has enough density (4,500 people) to help support good levels of ridership on the Expo Line as well as create a vital community that always seems to be alive. This critical mass of residential development supports retail uses, community amenities, schools and a health centre and helps make Collingwood Village a complete, urban community.

A major advantage enabling the Collingwood development to be master-planned as a TOD station area was having a single developer and relatively easy land assembly (due to the previous large industrial properties in the area). The close co-operation between the municipality and the developer along with a patient and inclusive public process meant that all parties benefited from, and therefore supported, the project. The high quality of urban design and good connections between the project and the transit station has meant that many people walk to and from the station adding to the “eyes on the street.” Design features make even the high-rise buildings blend well with the much lower density surroundings. Concert responded to neighbourhood input with creative solutions that resulted in widespread support.

Residents surveyed were generally very satisfied with their decision to live in Collingwood Village. Over half used transit to get to their place of work, nearly five times the Vancouver CMA average, and many also used transit and walking for other trips including shopping.

## REFERENCES

Greater Vancouver Regional District, Livable Region Strategic Plan, adopted January 20, 1996.

TransLink, Three-Year Plan and Ten-Year Outlook: Strategic Transportation Plan Amendment, February 2004.

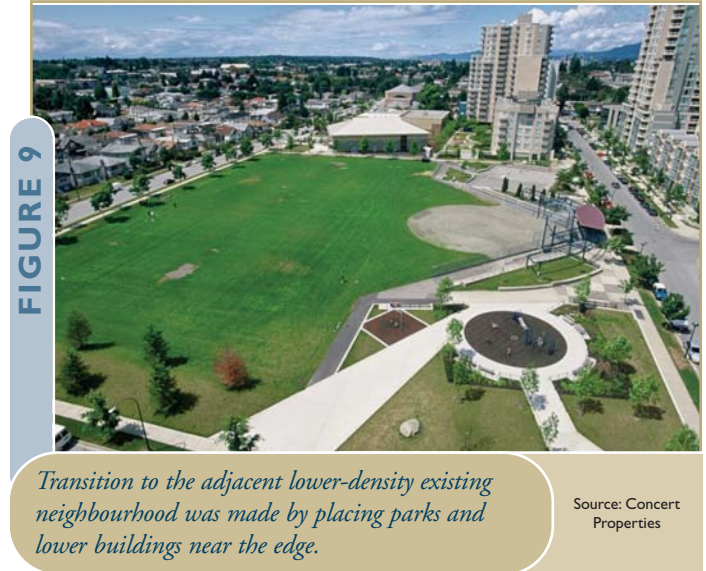
City of Vancouver, Joyce Station Area Plan, approved by City Council on May 20, 1987.

CD-1 By-law No. 7204 and Joyce/Vanness Guidelines for the adjoining Collingwood Village development.

City of Vancouver, Regional Context Statement Official Development Plan, adopted by By-law No. 8060, September 14, 1999.

Concert Properties, Marketing Materials for Collingwood Village (various).

*Bunt & Associates Engineering Ltd.*, Car Ownership Patterns Near Rapid Transit Stations, 1996.



## CONTACT INFORMATION

Developer	Planner	Transit authority
<p>Concert Properties Ltd. Lizette Parsons-Bell Director, Corporate and Community Relations 9<sup>th</sup> Floor – 1190 Hornby St., Vancouver, B.C. V6Z 2K5 Phone: 604-688-9460 E-mail: LParsonsBell@ConcertProperties.com Website: www.ConcertProperties.com</p>	<p>City of Vancouver Rob Whitlock Senior Housing Planner—Projects 435 West 12<sup>th</sup> Avenue Phone: 604-873-7432 Fax: 604-871-6488 E-mail: rob.whitlock@vancouver.ca Website: www.vancouver.ca</p>	<p>Joanna Brownell, Transportation Planner Greater Vancouver Transportation Authority (TransLink) 1600-4720 Kingsway, Burnaby, B.C. V5H 4N2 Phone: 604-453-3066 Fax: 604-453-4697 E-mail: joanna_brownell@translink.bc.ca Website: www.translink.bc.ca</p>

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