



Public Works & Transportation Committee

Anderson Room, City Hall
6911 No. 3 Road

Wednesday, November 19, 2014
4:00 p.m.

Pg. # ITEM

MINUTES

PWT-4

*Motion to adopt the **minutes** of the meeting of the Public Works & Transportation Committee held on Wednesday, October 22, 2014.*



NEXT COMMITTEE MEETING DATE

Wednesday, December 17, 2014, (tentative date) at 4:00 p.m. in the Anderson Room

PLANNING & DEVELOPMENT DEPARTMENT

1. **APPLICATION TO CONDUCT ANNUAL SANTA CLAUS PARADE WITH REVISED DATE AND ROUTING**
(File Ref. No. 11-7400-01) (REDMS No. 4388840)

PWT-16

See Page PWT-16 for full report

Designated Speaker: Victor Wei

STAFF RECOMMENDATION

That the Rotary Club of Steveston be granted approval to conduct the annual Santa Claus Parade on December 24th of each year using the route shown in Attachment 1 of the staff report titled Application to Conduct Annual Santa Claus Parade with Revised Date and Routing, dated October 17, 2014, from the Director, Transportation.



ENGINEERING AND PUBLIC WORKS DEPARTMENT

2. UPDATE ON 2014/2015 SNOW AND ICE RESPONSE PREPARATIONS

(File Ref. No.) (REDMS No. 4390828)

PWT-19

See Page PWT-19 for full report

Designated Speaker: Ben Dias

STAFF RECOMMENDATION

That the staff report titled Update on 2014/2015 Snow and Ice Response Preparations, dated October 24, 2014, from the Director, Public Works Operations, be received for information.



3. SUSTAINABILITY PROGRESS REPORT

(File Ref. No. 10-6125-07-01) (REDMS No. 4334105)

PWT-26

See Page PWT-26 for full report

Designated Speaker: Brendan McEwen

STAFF RECOMMENDATION

That the staff report titled Sustainability Progress Report, dated October 15, 2014, from the Director, Engineering, be received for information.



Pg. # ITEM

4. **ALEXANDRA DISTRICT ENERGY UTILITY PHASE 3 CAPITAL PROJECT**

(File Ref. No. 10-6600-10-02) (REDMS No. 4402488)

PWT-79

See Page PWT-79 for full report

Designated Speaker: Alen Postolka

STAFF RECOMMENDATION

That \$8.0 million from unspent utility capital projects, previously approved by Council, be utilized to fund design, construction and commissioning expenditures related to the expansion of Alexandra District Energy Utility Phase 3.

5. **MANAGER'S REPORT**

ADJOURNMENT



Public Works & Transportation Committee

Date: Wednesday, October 22, 2014

Place: Anderson Room
Richmond City Hall

Present: Councillor Linda Barnes, Chair
Councillor Chak Au
Councillor Linda McPhail
Councillor Harold Steves
Mayor Malcolm Brodie (entered at 4:01 p.m.)

Absent: Councillor Derek Dang

Call to Order: The Chair called the meeting to order at 4:00 p.m.

MINUTES

It was moved and seconded

That the minutes of the meeting of the Public Works & Transportation Committee held on Wednesday, September 24, 2014, be adopted as circulated.

CARRIED

Mayor Brodie entered the meeting 4:01 p.m.

NEXT COMMITTEE MEETING DATE

Wednesday, November 19, 2014, (tentative date) at 4:00 p.m. in the Anderson Room

The Chair advised that the order of the Agenda would be varied to consider Item No. 3 – Multi-Material BC – Financial Incentive Status Update last.

PLANNING & DEVELOPMENT DEPARTMENT

1. PROPOSED CITY OF RICHMOND-TRANSLINK TRAVELSMART PARTNERSHIP

(File Ref. No. 01-0154-04) (REDMS No. 4307325 v.2)

Donna Chan, Manager, Transportation Planning, introduced Dave Lewin, Senior TravelSmart Specialist, and Adrian Bell, Manager, Customer Programs and Implementation, TransLink.

In reply to a query from the Chair, Mr. Lewin advised that he would be pleased to present on the City of Richmond-TransLink TravelSmart Partnership at the upcoming Council meeting.

Mayor Brodie left the meeting (4:05 p.m.).

In reply to queries from Committee, Ms. Chan advised that for 2015, staff propose to increase the number of cycling education courses by stretching resources so that more schools can benefit from the programs. Also, Ms. Chan advised that staff can report back to Committee on the proposed marketing and public awareness campaign.

In reply to comments made by Committee regarding the capacity of the Canada Line, Mr. Lewin advised that, in addition to the promotion of cycling as a viable transportation alternative, other modes of transport, such as carpooling, car sharing, and walking, are also promoted; therefore, these other modes of transport are not anticipated to affect Canada Line ridership. Also, Mr. Bell noted that as part of the TravelSmart program, feedback is provided to TransLink's operational and policy teams with regard to any concerns related to the Canada Line's capacity and cyclists' safety.

It was moved and seconded

- (1) *That the City's proposed partnership with TravelSmart to support and promote the City's goals to increase sustainable transportation choices for the community be endorsed;*
- (2) *That the Chief Administrative Officer and the General Manager, Planning and Development, be authorized to negotiate and execute a Memorandum of Understanding based on the attached draft (Attachment 1 to the staff report titled Proposed City of Richmond-TransLink TravelSmart Partnership dated September 23, 2014) on behalf of the City with TransLink regarding the TravelSmart partnership; and*
- (3) *That a copy of the above staff report be forwarded to the Richmond Council-School Board Liaison Committee for information.*

CARRIED

2.

Public Works & Transportation Committee
Wednesday, October 22, 2014

2. **TRANSLINK 2015 CAPITAL PROGRAM COST-SHARING SUBMISSIONS**

(File Ref. No. 01-0154-04) (REDMS No. 4289061)

It was moved and seconded

(1) That the submission of:

(a) road and bicycle improvement projects for cost-sharing as part of the TransLink 2015 Major Road Network & Bike (MRNB) Upgrade Program; and

(b) transit facility improvements for cost-sharing as part of the TransLink 2015 Transit-Related Road Infrastructure Program;

as described in the staff report titled TransLink 2015 Capital Program Cost-Sharing Submissions dated September 23, 2014 from the Director, Transportation, be endorsed; and

(2) That, should the above submissions be successful and the projects receive Council approval via the annual capital budget process, the Chief Administrative Officer and General Manager, Planning and Development be authorized to execute the funding agreements and the 2015 Capital Plan and the 5-Year Financial Plan (2015-2019) be updated accordingly dependant on the timing of the budget process.

CARRIED

ENGINEERING AND PUBLIC WORKS DEPARTMENT

3. **MULTI-MATERIAL BC – FINANCIAL INCENTIVE STATUS UPDATE**

(File Ref. No. 10-6370-03-01) (REDMS No. 4351873)

Please see Page 11 for action on this matter.

4. **2014 ENHANCED PESTICIDE MANAGEMENT PROGRAM**

(File Ref. No. 10-6125-04-01) (REDMS No. 4366543 v. 5)

In reply to queries from Committee, Lesley Douglas, Manager, Environmental Sustainability, advised that (i) in the absence of provincial legislation, the continuation of the City's Enhanced Pesticide Management Program is valuable, (ii) the Minister of Environment is currently reviewing draft revisions to the *Integrated Pest Management Act*, which do not include a provincial ban on the use of pesticides for cosmetic purposes, (iii) staff received four Pesticide Use Control Bylaw No. 8514 related complaints, whereby no fines were issued, and (iv) staff can liaise with Harvest Power with regard to potential contamination of compost and update Council accordingly.

Mayor Brodie returned to the meeting (4:11 p.m.).

3.

Public Works & Transportation Committee
Wednesday, October 22, 2014

It was moved and seconded

- (1) *That the City's Enhanced Pesticide Management Program, including the Temporary Full-Time Environmental Coordinator, be continued on a temporary basis until December 31, 2015; and*
- (2) *That staff report back with any proposed changes or updates to the Provincial Integrated Pest Management Act.*

CARRIED

5. **MUNICIPAL ACCESS AGREEMENT WITH JET ENGINEERED TELECOMMUNICATION TECHNOLOGIES CORP. (CARRYING ON BUSINESS AS "JETT NETWORKS")**

(File Ref. No. 10-6060-01) (REDMS No. 4366553)

It was moved and seconded

That the Chief Administrative Officer and the General Manager, Engineering & Public Works be authorized to execute, on behalf of the City, a Municipal Access Agreement between the City and JET Engineered Telecommunication Technologies Corp containing the material terms and conditions set out in the staff report titled Municipal Access Agreement with JET Engineered Telecommunication Technologies Corp. (Carrying on Business as "JETT Networks"), dated October 6, 2014, from the Director, Engineering.

CARRIED

6. **CITY CENTRE NORTH DISTRICT ENERGY – REQUEST FOR EXPRESSION OF INTEREST**

(File Ref. No. 10-6600-10-01) (REDMS No. 4364030 v. 6)

It was moved and seconded

That the issuance of a Request for Expressions of Interest by Lulu Island Energy Company for a utility partner to design, build, finance and operate a District Energy Utility (DEU) in the City Centre North area on the basis of the following guiding principles be endorsed:

- (1) *the DEU will provide end users with energy costs that are competitive with conventional energy costs based on the same level of service; and*
- (2) *Council will retain the authority of setting customer rates, fees and charges for DEU Services.*

CARRIED

ENGINEERING AND PUBLIC WORKS & COMMUNITY SERVICES DEPARTMENTS

7. MINORU COMPLEX FLOOR PLAN AND PRELIMINARY FORM/CHARACTER

(File Ref. No. 06-2052-55-01) (REDMS No. 4362822 v. 6)

Jim Young, Senior Manager, Project Development, accompanied by Serena Lusk, Senior Manager, Recreation and Sport Services, provided background information and the following information was highlighted:

- a robust public engagement process was undertaken with regard to the Minoru Complex, including (i) meetings with nine stakeholder groups, (ii) meetings with the Stakeholder and Building/Technical Advisory Committees, (iii) four public consultation events, (iv) online engagement utilizing *Let's Talk Richmond*, and (v) meetings with the City's Construction Manager;
- over 2,000 community members participated in the public engagement process, with 300 surveys submitted to the City; and
- the public engagement process identified three areas that require further examination: (i) the amount of water space and types of water space sufficient to meet the needs of the community now and into the future, (ii) the degree of separation required between the facility lobby and the dedicated older adults' reception desk, and (iii) the most appropriate proportion of universal to gender-specific change rooms.

With the aid of various artist renderings, Darryl Condon, Architect, Hughes Condon Marler Architects (HCMA), provided an overview of the proposed Minoru Complex floor plan and preliminary form and character, and the following information was noted:

- the building's two elevators have been situated in such a manner to support each other in the event one elevator is down;
- Level 2 of the proposed building is comprised mostly of small to large multi-purpose rooms with the older adults fitness area integrated with the other fitness space;
- a total of seven bodies of water are included in the proposed plans; various pool configurations were explored and two six-lane pools were identified as the preferred configuration; and
- connections to the outdoors have been considered and activities that most benefit from adjacent outdoor space have been located appropriately.

Public Works & Transportation Committee

Wednesday, October 22, 2014

In reply to queries from Committee, Mr. Young advised that, if the proposed Minoru Complex floor plan and preliminary form and character were approved by Council, staff would proceed with further public consultation with regard to refining the proposed design and report back to Council with a detailed design.

In response to a query from Committee with regard to the potential to reconfigure the proposed floor plan to accommodate a 50-metre pool, Robert Gonzalez, General Manager, Engineering and Public Works, advised that, if Council so chooses, the proposed floor plan can be reconfigured to include a 50-metre pool. However, Mr. Gonzalez noted that such a change in the scope of the project would result in approximately \$8 to \$10 million in additional costs. Also, he noted that as a 50-meter pool would be suited for competitions, additional parking would be required; in order to facilitate such additional parking, either the proposed footprint of the building would have to be increased, thereby, shifting the building closer to Granville Avenue; furthermore, additional parking would have to be secured elsewhere in the vicinity. Alternatively, he stated that if there is a desire to maintain the proposed footprint of the building, the proposed floor plan could be altered; however, this would impact the size of the older adults' space. Also, Mr. Gonzalez noted that he has not commented on operational and functional impacts to the proposed Minoru Complex should a 50-metre pool be pursued.

In reply to further queries from Committee, Mr. Gonzalez stated the following:

- staff can proceed on the proposed Minoru Complex floor plan and preliminary form and character in any manner that Council directs staff; however, if a modification were to be pursued, it would impact costs and the proposed completion schedule;
- if a modification were to be pursued, and in an effort to maintain the proposed building footprint, some older adults' functions proposed for the ground floor could potentially be relocated to the second floor; alternatively, the proposed footprint of the building could be increased, however, it would shift the building closer to Granville Avenue; and
- additionally, parking would need to be increased in order to facilitate the needs of a 50-metre competition pool.

Ian MacLeod, Chair of the Richmond Aquatic Services Board, spoke in favour of the proposed Minoru Complex floor plan. He cited concern with regard to comments on the potential to reconfigure the building to accommodate a 50-metre pool, stating that such a pool would not serve the needs of the community. Mr. MacLeod stated that a competition pool is available at the Watermania Aquatic Centre (WAC), thus was of the opinion that one is not needed in the city centre. Also, he commented on staff and community efforts with regard to the proposed configuration, and queried why a change in scope would be considered at this point in the process.

Public Works & Transportation Committee

Wednesday, October 22, 2014

Mr. MacLeod spoke of programming options for a 50-metre pool, and noted that it is not preferred due to the use of bulkheads to divide the pool space and the temperature of the pool is not suitable for children and seniors. Also, he commented on the cost of utilities, noting that, following the cost of staff, they are the highest cost to pool operations.

Rosemary Nickerson, Vice-Chair of the Richmond Aquatic Services Board, stated that the proposed aquatic facility is to replace the existing Minoru Aquatic Centre (MAC), which has long served the community for recreational purposes. She stated that the WAC meets the community's need for a competitive pool. Also, Ms. Nickerson spoke of the proposed Minoru Complex floor plan, noting that two 25-metre pools facilitate a range of programs that could not be accommodated in a 50-metre pool. She concluded her comments by speaking in favour of the proposed Minoru Complex floor plan, noting that it meets the needs of today's community and that of the future's.

Kathleen Holmes, President of the Minoru Seniors Society, expressed concern with regard to the discussion on the potential for a 50-metre pool. She stated that many seniors have mobility challenges and therefore, relocating older adults' programs to the second level of the proposed building in order to accommodate a 50-metre pool would potentially negatively impact users. Also, she cited concern with regard to the proposed elevator. Also, Ms. Holmes spoke on the number of parking passes recently issued for the Seniors' Centre, noting that driving is a key component of independence for many older adults. She spoke in favour of the proposed two 25-metre pools as these pools are typically warmer and provide a soothing element to older adults, many of whom suffer from arthritis.

In reply to queries from Committee, Mr. Gonzalez and Ms. Lusk provided the following additional information:

- the shallow end of the 50-metre pool at the Hillcrest Aquatic Centre in Vancouver has been utilized for seniors programs, with bulkheads being used to divide the space;
- if staff is directed to examine the potential to accommodate a 50-metre pool, various options would be examined, including but not limited to (i) maintaining the proposed footprint by relocating older adults' programs to the second floor, (ii) increasing the proposed footprint by shifting the building towards Granville Avenue to keep older adults' programs on the ground floor, and (iii) seeking additional space to meet parking needs;
- throughout the public consultation process, several water space configurations were illustrated; six comments specific to a 50-metre pool were received, with the majority of the comments focussed on lap swimming space;

Public Works & Transportation Committee

Wednesday, October 22, 2014

- if a 50-metre pool were pursued, additional parking would be required in order to meet the demands of a competitive pool;
- additional parking would not be required on a daily basis, however the need would arise in the event of competitions; and
- parking arrangements could potentially be made for meet competition parking needs.

Alexa Loo, Richmond resident, inquired about the process that was followed to reach the proposed floor plan configuration and spoke of the potential for the proposed Minoru Complex to create a legacy for the City. She commented on the potential to utilize new technology, such as electronic bulkheads to divide the water space or a pool that can accommodate multiple temperatures simultaneously, to suit the needs of all users.

Mr. Gonzalez spoke of the City's planning process thus far with regard to the proposed Minoru Complex, and stated that, in order to accommodate a 50-metre pool, ancillary spaces of water currently proposed would have to be removed.

In reply to queries from Committee, Mr. Young advised that a parkade structure would cost approximately \$10 million.

In response to a further query from Committee, Cathryn Volkering Carlile, General Manager, Community Services, advised that staff have been planning for the replacement of the Seniors' Centre and the MAC since 2007. Also, Ms. Carlile stated that if a 50-metre pool were to be considered within the proposed footprint, additional deck space would be required for assembly use if the facility is to meeting FINA, the International Swimming Federation, standards for national and international competitions.

Discussion ensued regarding the WAC expected life cycle, and Mr. Gonzalez stated that the City's lease is anticipated to expire in 12 years. Also, Mr. Gonzalez advised that operational costs for a 50-metre pool would be higher than that of what is proposed as there would be additional utility costs, and mechanical costs associated for proper air handling.

It was moved and seconded

That the Minoru Complex floor plan and preliminary form/character design as outlined in the staff report Minoru Complex Floor Plan and Preliminary Form/Character, dated October 10, 2014 from the Senior Manager, Project Development and Senior Manager, Recreation and Sports Services, be endorsed.

The question on the motion was not called as discussion ensued the following Committee comments were noted:

- the notion of a 50-metre pool has been heard repeatedly with little community support;

Public Works & Transportation Committee

Wednesday, October 22, 2014

- the WAC can meet the need for a 50-metre pool for another 12 years;
- the City of Surrey and the University of British Columbia are each constructing aquatic facilities that meet the needs of competitions;
- the planning process, including extensive community feedback and the expertise of the Stakeholder and Building/Technical Advisory Committees should be respected;
- utilizing green space to increase parking to accommodate the needs of a 50-metre pool is not favourable;
- the potential to re-configure the proposed Minoru Complex to include a 50-metre pool should remain available; and
- the notion of a 50-metre pool would have significant impact to the proposed budget and would require additional land.

The question on the motion was then called and it was **CARRIED**.

Mayor Brodie left the meeting (5:25 p.m.) and did not return.

ENGINEERING AND PUBLIC WORKS & LAW AND COMMUNITY SAFETY DEPARTMENTS

8. BRIGHOUSE FIRE HALL NO. 1 – FLOOR PLAN AND PRELIMINARY FORM/CHARACTER

(File Ref. No. 06-2052-25-FHG11) (REDMS No. 4371528 v. 5)

With the aid of various artist renderings, Mr. Condon, Architect, HCMA, provided an overview of the proposed Brighthouse Fire Hall No. 1 floor plan and preliminary form and character.

In reply to queries from Committee, Mr. Condon advised that Richmond Fire-Rescue (RFR) staff provided input with regard to the proposed design; also, feedback from community members was sought as part of the public consultation process.

In reply to a query from the Chair, Deputy Fire Chief Kim Howell, RFR, advised that administrative functions such suppression, administration, community education, and fire prevention will remain at Fire Hall No. 1; however, training and emergency vehicle technical functions will be relocated to Fire Hall No. 3.

With regard to the proposed form and character of Fire Hall No. 1, Mr. Condon advised that it can be modified to meet Council's vision. He commented on synergies with the adjacent Minoru Complex, noting that additional design development will aim to reflect the needs of both facilities.

9.

Public Works & Transportation Committee
Wednesday, October 22, 2014

Also, Mr. Condon stated the proposed design of Fire Hall No. 1 is targeting LEED Gold standards, and potentially, Net Zero standards, and that the proposed new fire hall will meet the City's needs for the foreseeable future.

It was moved and seconded

That the Brighthouse Fire Hall No. 1 floor plan and preliminary form/character as outlined in the staff report titled Brighthouse Fire Hall No. 1 Floor Plan and Preliminary Form/Character, dated October 3, 2014 from the Director, Engineering and Fire Chief, Richmond Fire-Rescue, be endorsed.

CARRIED

9. **CAMBIE FIRE HALL NO. 3 - FLOOR PLAN AND PRELIMINARY FORM/CHARACTER**

(File Ref. No. 06-2052-55-01) (REDMS No. 4367223 v. 6)

With the aid of various artist renderings, Robert Lange, Architect, DGBK, provided an overview of the proposed Cambie Fire Hall No. 3 floor plan and preliminary form and character.

Mr. Lange highlighted that the proposed facility will combine RFR and BC Ambulance Service (BCAS) under one roof. He stated that the integrated facility will house two fire apparatus bays, two ambulance bays, and two mechanical bays for emergency vehicle technicians. Also, Mr. Lange spoke of administrative space, located in the mezzanine, adjacent to the emergency vehicle technicians' area

In reply to queries from Committee, Deputy Fire Chief Howell commented on noise mitigation efforts such as landscaping, noting that certain activities have been strategically located furthest away from adjacent residential properties. Also, she spoke on BCAC dispatch protocols, noting that ambulances are dispatched over the telephone.

It was moved and seconded

That the Cambie Fire Hall No. 3 floor plan and preliminary form/character design as outlined in the staff report titled Cambie Fire Hall No. 3 Floor Plan and Preliminary Form/Character, dated October 6, 2014 from the Director, Engineering and Fire Chief, Richmond Fire-Rescue, be endorsed.

CARRIED

Discussion ensued regarding the City's extensive efforts with regard to the replacement or refurbishment of emergency services' buildings, including fire halls and the community safety building. As a result of the discussion, the following **referral** was introduced:

Public Works & Transportation Committee
Wednesday, October 22, 2014

It was moved and seconded

That staff bring forward a report to the Community Safety Committee that details the City's efforts in ensuring that the City is safe with the reconstruction of fire halls and the community safety building.

CARRIED

3. **MULTI-MATERIAL BC – FINANCIAL INCENTIVE STATUS UPDATE**

(File Ref. No. 10-6370-03-01) (REDMS No. 4351873)

In reply to queries from Committee, Suzanne Bycraft, Manager, Fleet and Environmental Programs, provided background information, noting that the future of Metro Vancouver's Waste-to-Energy Facility is unknown due to the provincial government's rejection of Bylaw No. 280. She noted that, with waste being transported outside the region, the waste stream cannot be monitored, thus fines cannot be levied for non-compliance.

In response to a query from the Chair, Ms. Bycraft advised that staff can report back to Council with a look at how this will affect the region as a whole and specifically how it will affect the City.

It was moved and seconded

That the staff report titled Multi-Material BC – Financial Incentive Status Update, dated September 15, 2014 from the Director, Public Works Operations, be received for information.

CARRIED

10. **MANAGER'S REPORT**

(i) River Road Realignment

Victor Wei, Director, Transportation, referenced a memorandum dated October 14, 2014 regarding the realignment of River Road between Hollybridge Way and Gilbert Road (copy on file, City Clerk's Office), and spoke to immediate and short term improvements to ameliorate traffic delays at the new River Road / Gilbert Road intersection. Also, Mr. Wei stated that staff will continue to place a high priority on monitoring the area's traffic conditions and to expedite the implementation of any other necessary traffic control enhancements to further minimize any delays or confusion of motorist.

In reply to queries from Committee, Mr. Wei advised that Transportation staff are working with Parks staff to develop a communication strategy with regard to the waterfront park, and noted that the development of the park is driven by the adjacent development. Also, he commented on the design of the temporary reconfiguration, noting that, although it is awkward, it is functional and safe.

11.

Public Works & Transportation Committee
Wednesday, October 22, 2014

(ii) Sustainability

Discussion took place regarding the possibility of banning certain plastic items from the City. Also, Committee queried about the As a result of the discussion, the following **referral** was introduced:

It was moved and seconded

- (1) That the City of Richmond examine banning plastic cups, plastics plates, plastic utensils, and plastic bags in all City parks, community centres, City facilities, at public events held on land owned by the City, and from City-licensed food carts and report back; and*
- (2) That staff provide an update on the City's Environmental Purchasing Guide.*

CARRIED

ADJOURNMENT

It was moved and seconded

That the meeting adjourn (6:02 p.m.).

CARRIED

Certified a true and correct copy of the Minutes of the meeting of the Public Works & Transportation Committee of the Council of the City of Richmond held on Wednesday, October 22, 2014.

Councillor Linda Barnes
Chair

Hanieh Berg
Committee Clerk

Staff Report

Origin

The Richmond Events Approval Coordination Team (REACT) has received an application from the Rotary Club of Steveston to conduct its annual Santa Claus parade on a different day and using a different route than that currently approved by Richmond City Council. Per Section 7.2 of Traffic Bylaw No. 5870, any changes to the criteria of an approved annual parade must be approved by Council. This report presents the revised criteria and recommends that the parade be granted approval.

Analysis

Proposed Changes to Parade Criteria

Currently, the annual Santa Claus parade is approved to be held on December 23rd each year starting at 6:00 p.m. along the route in the Steveston area shown in solid red in Attachment 1 (i.e., beginning on Hunt Street and ending on Moncton Street).

As of the upcoming event in 2014, the Rotary Club of Steveston is requesting approval to conduct the parade on December 24th each year starting at 5:00 p.m. along the revised route in the Steveston area shown in dashed purple in Attachment 1 (i.e., beginning on Regent Street and ending in Garry Point Park). The revised and shorter routing keeps the parade within the residential areas and avoids any potential traffic impacts to Steveston Highway, 7th Avenue and No. 1 Road-Moncton Street intersection (all of which are bus routes). While the proposed revised routing would travel on some roadway sections that it did not in 2013, those same sections were used as part of the parade route prior to 2011 and residents on these roadway sections have expressed interest in having the parade return to their areas.

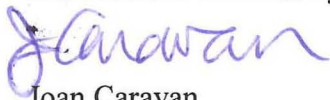
The estimated duration of the parade is 45 minutes and any disruption to traffic along the affected streets is expected to be minimal. Richmond RCMP will be participating in the parade and providing traffic control. No amendments to Traffic Bylaw 5870 are required.

Financial Impact

None.

Conclusion

Staff recommend support of the request of the Rotary Club of Steveston as the annual Santa Claus parade has proven successful over the years and continues to be supported by the residents and business community in Steveston.

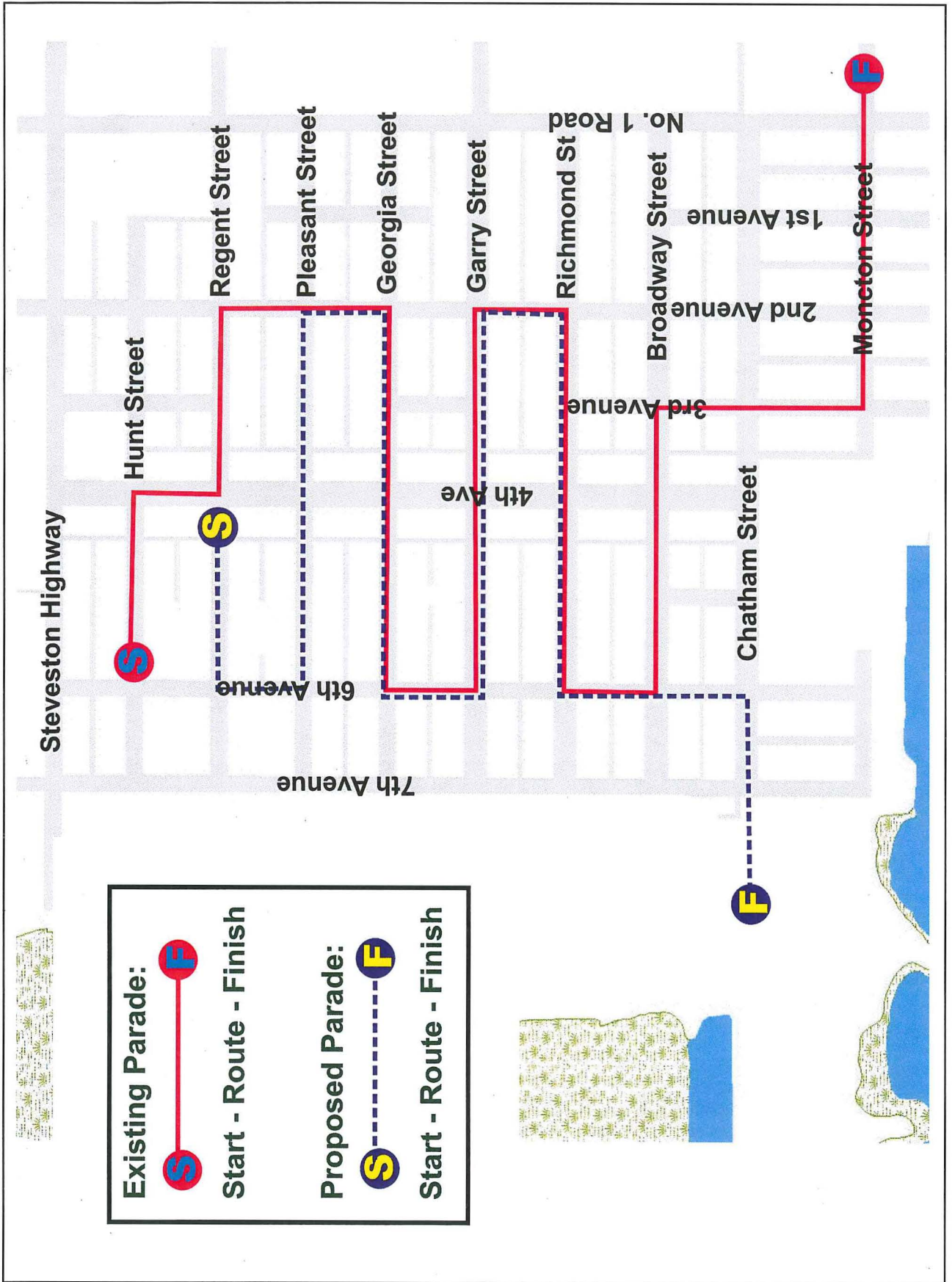


Joan Caravan
Transportation Planner
(604-276-4035)

JC:jc

Att. 1: Existing and Proposed Routes of Annual Santa Claus Parade

Existing and Proposed Routes of Annual Santa Claus Parade



Existing Parade: Start - Route - Finish

Proposed Parade: Start - Route - Finish



City of Richmond

Report to Committee



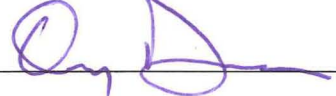
To: Public Works and Transportation Committee **Date:** October 24, 2014
From: Tom Stewart, ASCT. **File:**
Director, Public Works Operations
Re: Update on 2014/2015 Snow and Ice Response Preparations

Staff Recommendation

That the staff report titled "Update on 2014/2015 Snow and Ice Response Preparations", dated October 24, 2014, be received for information.

Tom Stewart
Director, Public Works Operations
(604-233-3301)

Att. 2

REPORT CONCURRENCE		
ROUTED TO: Communications Parks Services	CONCURRENCE <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	CONCURRENCE OF GENERAL MANAGER 
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS: 	APPROVED BY CAO 

Staff Report

Origin

This report provides information about the City's 2014/2015 snow and ice preparations.

Analysis

Public Works has implemented numerous changes over the past several years to enhance the City's readiness and response efforts. These changes include: policy amendments, equipment review, enhancement to public communications/public involvement, record keeping and overall response planning.

Overview of Existing Initiatives

Policy Amendments

Traffic Bylaw 5870 was amended by Council on November 23, 2009, to require commercial, industrial and multi-family property owners or occupiers to clear snow and ice from sidewalks adjacent to their property. City staff will remind the public of Bylaw 5870 through news releases, as well as social media, such as Facebook, YouTube and Twitter. This Bylaw was amended to encourage the use of public transit with improved convenience for pedestrians. Section 6.1 of the Bylaw reads:

“The owner or occupier of any parcel of real property which is developed for, or used in whole or in part for, commercial, industrial or multi-family dwelling use other than a two-family dwelling shall remove all snow and ice from any sidewalk adjacent to such parcel for a distance that coincides with the property line of his real property, not later than 10:00 a.m. of everyday, including Sunday.”

In response to public concerns about the lack of salting and ploughing on residential streets, Council approved an amendment to Bylaw 7013 (Roadways – Ice and Snow Removal) to identify and add third priority routes. These routes include the designated collector roads and roads of local significance in residential subdivisions. This initiative will help improve vehicle access from within subdivisions to the major collector roads. However, it should be noted that third priority routes will only be cleared if first and secondary routes have been fully attended to and resources permit.

Equipment

The City has six road temperature sensors. These sensors are monitored 24 hours a day and provide early indications of potential road frost or freezing conditions. Each sensor is strategically located under roadway asphalt throughout the City to provide real time information concerning road conditions. Sensor locations are illustrated in Attachment 1 and a complete list of equipment dedicated for snow response is provided in Attachment 2.

Public Outreach

Public involvement within the community is vital during the winter season. The City participates in the following programs, working jointly with the public:

- **Snow Angels Program:** This program was introduced in 2010 and connects local volunteer organizations with elderly citizens and residents with mobility/health challenges during a snowfall event. Assistance involves shovelling snow from sidewalks, driveways and/or walkways. A Snow Angels registry is accessible on the City's website and can also be obtained by calling the Community Services Department, Dispatch, City Hall, or any of the Community Centres. The program is activated in the event of a significant snow fall (defined as an accumulation of 5+ centimetres of snow) and is dependent on the severity of the storm and volunteer resources. The City plays a role in coordinating and promoting the Snow Angels program, but the volunteers are recruited, screened and managed by each association participating in the registry.
- **Good Neighbour Program:** This program encourages everyone to clear the walkways around their property and help others who may face challenges. This neighbour-helping-neighbour campaign simply encourages residents to watch for people in their neighbourhood that could use help removing snow from their sidewalks and driveways and offer them a helping hand.

Communications Strategy

A comprehensive communication strategy has proven to be valuable in delivering accurate, timely and relevant information to the public. By using a cross-functional approach, each division's important messages are delivered in a coordinated fashion over a variety of pre-determined mediums in both a proactive, planned manner as well as reactive when extreme weather occurs and circumstances require it. The communications strategy includes, but is not limited to, using the following mediums:

- Social media: The City's Twitter, Facebook, Youtube; retweeting/sharing information from credible sources i.e. weather warnings.
 - Media relations (news releases, media interviews)
 - City's website (dedicated web pages, news pages)
 - Richmond Review City Page
 - City's intranet for employees
- **Social Media:** Social media is incorporated into the overall communication strategy to reach out to the community through Facebook, Twitter and YouTube. Social media provides timely updates during snow and ice events. This includes use of the @RichmondBC Alert Twitter account which is used only to provide emergency-related messages to residents (which include snow or other weather events). These updates include weather forecasts, what preparations are underway for current and upcoming events, current conditions and the status of any road closures due to debris, etc. This 2014/2015 season staff will again incorporate the use of photos and videos through its

social media channels. During the 2013/2014 snow season staff created a number of short videos to visually inform residents of a variety of snow topics (tips on how they can prepare for snow and snow removal preparation done at the Works Yard for any predicted snow events). These videos were shared to the public through the City's Facebook, Twitter and YouTube pages in advance of and during snow and ice events.

- News releases: News releases have been developed to address common extreme weather/snow and ice topics and will be released to the media as events occur. Some examples include: clearing leaves from storm drains, personal winter preparedness, and how the City is preparing for extreme weather events.
- Website: The City's website provides considerable information about snow response including news releases and a list of contractors that residents, Strata Councils, and business owners can call for snow removal services at their own cost. This information can be found at the following location:
<http://www.richmond.ca/services/rdws/weather/cityprepares.htm>.
- Coordinated Response: The City's various divisions have established communications protocols which will reinforce the snow response communications program. Participating departments include Public Works, Parks, Emergency Programs, Corporate Communications and Richmond Fire-Rescue.

2014/2015 Weather Forecast

Richmond's unique geography often results in exclusive weather patterns. Richmond-specific weather information and long range forecasts are received daily. According to Northwest Weathernet the 2014/2015 winter forecast is as follows:

Expect a normal to warm/dry winter this year with one arctic outbreak possibly a second, a third outbreaks is not expected. The main climate driver for British Columbia winters is the El Nino/La Nina cycle. Current conditions are just below El Nino thresholds and are not expected to reach El Nino levels. In the event an El Nino does develop, early predictions are that it will be of the weak variety.

Operational Preparations

Operational preparations are underway which include equipment overhauls, meetings to coordinate efforts amongst departments, and training for staff. Training is crucial for preparation and is always an integral part of the groundwork for each winter season. This training is to ensure a sufficient number of personnel are available to respond to inclement weather events.

The City has 960 metric tonnes of salt secured under contract with an additional 500 metric tonnes on reserve. Salt is stored at the Public Works and Sidaway yards. Storing salt at the Sidaway yard enables us to reduce response times and increase efficiencies.

Through a centralized control centre, staff closely monitor and record equipment locations, route start and completion times, and salt distribution. This allows us to respond accurately to enquiries and to better track expenditures that can be used to forecast costs for future events.

2013/2014 Winter Season Summary

During the past winter season we experienced four snow events and ten ice/frost events of varying duration and severity. The City used 1408 tonnes of salt to clear 6025 lane kilometres of 1st and 2nd priority roads.

Conclusion

Preparations for the 2014/2015 snow and ice season by all required departments are well underway and will be completed in time for the upcoming winter.

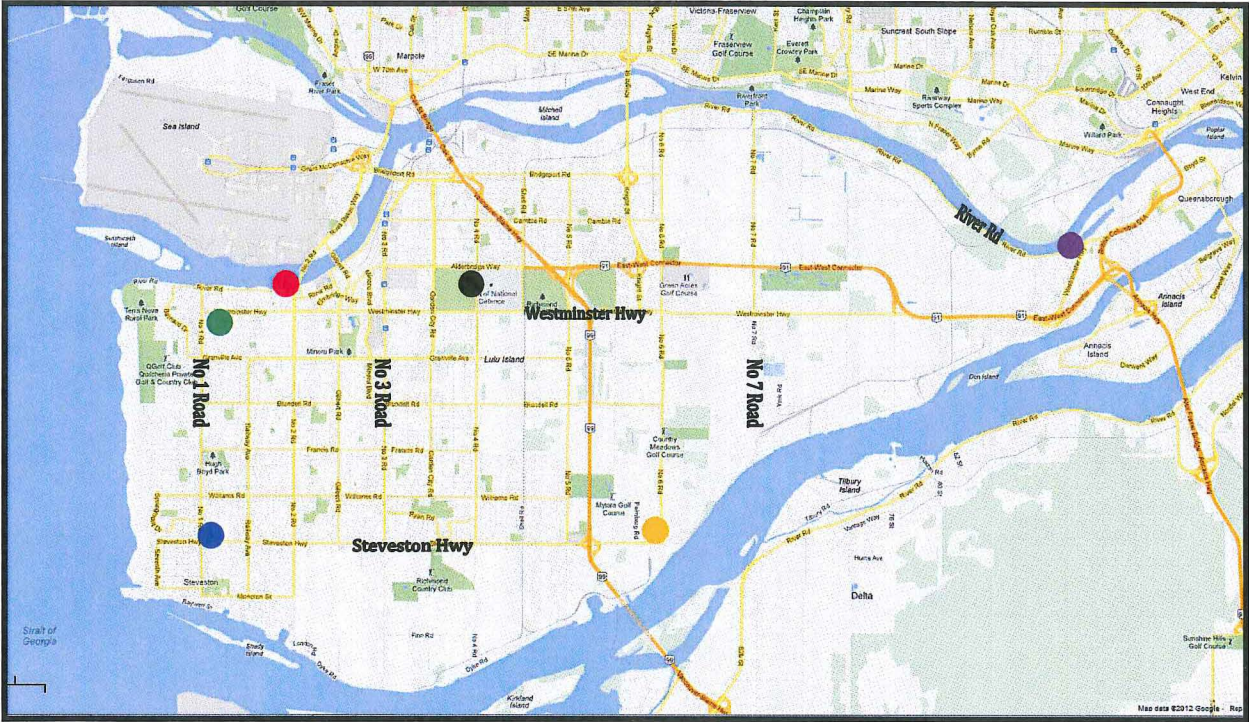


Ben Dias
Manager, Roads & Construction Services
(604-244-1207)

Att. 1: City of Richmond – Road Temperature Sensor Locations

Att. 2: City of Richmond – Snow Response Equipment

City of Richmond - Road Temperature Sensor Locations



Road Temperature Sensors:

- Armoury
- No. 6 Road South
- Oval
- Queensborough
- Steveston
- Forsyth (installed in 2013)

Attachment 2

City of Richmond - Snow Response Equipment

Number of Units	Description
4	Single-Axle Dump Trucks with Flinks and Belly Plows
1	1-tonne Flat Deck Truck with Insert / Brine Tank
6	Tandem Dump Trucks with Insert and Plough Attachments
1	Crane Truck with Insert
5	F550S with Snow Plows
1	Flusher Truck (Brine)
4	Mobile (Walk-Behind) Snow Blowers
5	Backhoes
1	Front End Wheel Loader
1	Holder
2	Bobcat Skid Steer
3	Hydro Excavators
1	Brine Mix (for pre-wetting)
2	Brine Applicator Inserts
960 tonnes	Salt



City of Richmond

Report to Committee

To: Public Works and Transportation Committee
From: John Irving, P.Eng. MPA
 Director, Engineering
Re: Sustainability Progress Report

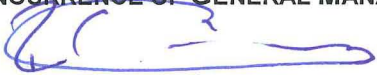


Date: October 15, 2014
File: 10-6125-07-01/2014-Vol 01

Staff Recommendation

That the staff report titled "Sustainability Progress Report", dated October 15, 2014, from the Director, Engineering, be received for information.



John Irving, P.Eng. MPA
 Director, Engineering
 (604-276-4140)

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Communications	<input checked="" type="checkbox"/>	
Economic Development	<input checked="" type="checkbox"/>	
Arts, Culture & Heritage	<input checked="" type="checkbox"/>	
Community Social Development	<input checked="" type="checkbox"/>	
Parks Services	<input checked="" type="checkbox"/>	
Recreation Services	<input checked="" type="checkbox"/>	
Engineering	<input checked="" type="checkbox"/>	
Engineering & Public Works	<input checked="" type="checkbox"/>	
Fleet	<input checked="" type="checkbox"/>	
Fire Rescue	<input checked="" type="checkbox"/>	
Development Applications	<input checked="" type="checkbox"/>	
Policy Planning	<input checked="" type="checkbox"/>	
Transportation	<input checked="" type="checkbox"/>	
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS: 	APPROVED BY CAO 

Staff Report

Origin

In 2010, Council adopted a *Corporate Sustainability Framework*, which established focus areas through which the City has been creating a sustainable community. The Sustainability Framework informed the development of Richmond's 2041 *Official Community Plan – Moving Towards Sustainability*.

This Sustainability Progress Report describes each of the Sustainability Framework's focus areas; provides an overview of a variety of initiatives the City has undertaken that contribute to Richmond's sustainable development; and notes key sustainability-related targets.

On September 17, 2014, the Public Works and Transportation Committee provided a referral for staff to "assemble a cross-departmental package showcasing Richmond's efforts with regard to climate action and present it to Council". This report addresses that referral.

This report supports Council's Term Goal #8 Sustainability:

8.1. Continued implementation and significant progress towards achieving the City's Sustainability Framework, and associated targets.

Analysis

Background

In 2010, Council adopted a Corporate Sustainability Policy, which states:

The City of Richmond recognizes that a sustainable community is essential for achieving the City's Corporate Vision of 'being the most appealing, liveable and well-managed community in Canada'.

The City of Richmond is committed to becoming a recognized leader in sustainability, advancing local community sustainability through excellence in local governmental sustainability practice and serving as an inspiration for greater collective change.

Building on this policy, in 2010, Council adopted a *Corporate Sustainability Framework*. The *Sustainability Framework* articulates key focus areas and goals to guide the City's efforts to foster a sustainable community in Richmond. Key focus areas include:

- Climate & Energy Action
- Sustainable Resource Use & Waste Management
- Compact, Complete Community
- Mobility & Access
- Green Built Environment
- Thriving Natural Environment
- Local Agriculture & Food Security

- Resilient Economy
- Inclusive, Accessible & Safe Community
- Vibrant Community.

In turn, the *Sustainability Framework* guided the preparation of Richmond's 2041 *Official Community Plan – Moving Towards Sustainability*, which was adopted on November 19, 2012. The 2041 OCP's goals, objectives and policies guide future growth, land use, social development, transportation, infrastructure, community amenities, ecological protection and enhancement towards achieving a sustainable community including: achieving a resilient and prosperous economy, a diverse, healthy community, improved social wellbeing, and environmental health.

Defining Sustainability

The 1987 United Nations World Commission on Environment and Development report "Our Common Future" popularized and defined "sustainable development" as:

Development that meets the needs of current generations without compromising the ability of future generations to meet their own needs.

This definition is reflected in the 2041 OCP's vision of a Sustainable Richmond:

A healthy island city that meets the needs of the present without compromising the ability of future generations to meet their own needs. It is a place where people live, work, and prosper in a welcoming, connected, accessible and vibrant community.

Ultimately, the pursuit of a sustainable community is an ongoing process of optimizing social, environmental, and economic outcomes, and integrating them in all the City's actions – ensuring a better quality of life for all, now and in the future.

The Sustainability Progress Report

The Sustainability Progress Report (Attachment 1) describes how the City is forwarding a more sustainable community. It is intended to inform the public, Federal, Provincial and Regional stakeholders (e.g., Metro Vancouver, TransLink) and City staff.

Each chapter of the Sustainability Progress Report describes how the City is advancing sustainability in each of the key focus areas defined in the City's *Sustainability Framework*. For each of these focus areas, the Progress Report:

1. Provides context and describes how the topic contributes to greater community sustainability.
2. Documents a variety of City initiatives and associated outcomes that contribute to Richmond's sustainable development. These initiatives are drawn from across City departments, illustrating the multi-disciplinary and holistic approach to sustainability practiced in Richmond.
3. Identifies key targets and important documents relating to that topic.
4. Provides a timeline of major achievements and milestones in recent years.

Key initiatives and achievements profiled in the Sustainability Progress Report include:

- Richmond's action on district energy, including the award-winning Alexandra District Energy Utility and plans for future utilities in the Oval Village.
- Energy management in City buildings, which saves hundreds of thousands of dollars annually.
- Climate change adaptation planning as part of the 2008-2031 Richmond Flood Protection Management Strategy.
- Key sustainable community planning catalyst projects, including the Olympic Oval, Lansdowne Road transformation, and innovative means of funding the Capstan Skytrain station.
- Expanded recycling programs, such as the Green Cart Program.
- Supporting sustainable transportation modes, through expanding Richmond's active transportation networks, and supporting transit improvements, car-sharing and electric vehicles in Richmond's community.
- Encouraging "beyond building code" performance for new developments undergoing rezoning, and supporting sustainable energy upgrades to existing buildings.
- Enhancing Richmond's Ecological Network, through habitat protection in the Terra Nova Rural Park, Garden City Lands, Northeast Bog Forest, Bath Slough, urban forest planting, and other projects.
- Supporting farming and food security, through implementing the Agricultural Viability Strategy, community gardens, and the allocation space in the Gardens Agricultural Park for an "Incubator Farm".
- Working with local businesses to foster a resilient economy and ensure adequate employment lands.
- Fostering an inclusive, safe and accessible community through crime and fire prevention; programs to support vulnerable youth; implementing the Affordable Housing Strategy, and facilitating the construction of affordable housing; improving the accessibility of pedestrian spaces; negotiating childcare spaces in new developments; and orienting newcomers to Richmond's community.
- Creating a more vibrant community by investing in recreation assets, such as the City Centre Community Centre and Minoru Recreation Complex; providing recreation access for low-income residents; supporting Richmond Public Arts Program and the Arts and Culture Grants program; and heritage protection and restoration.

Tracking and Communicating Progress

The City will continue to report out on progress towards its sustainability goals. The Sustainability Progress Report is anticipated to be updated every 3-4 years.


Additionally, the City has recognized the need for an easily visible "dashboard" system that can provide an ongoing, near real-time report on measurements which relate to community sustainability, as well as the performance of the City's corporate activities. A Corporate Performance System and associated Dashboard are currently being prepared by City staff to facilitate the tracking and reporting of key sustainability topics.

Financial Impact

None.

Conclusion

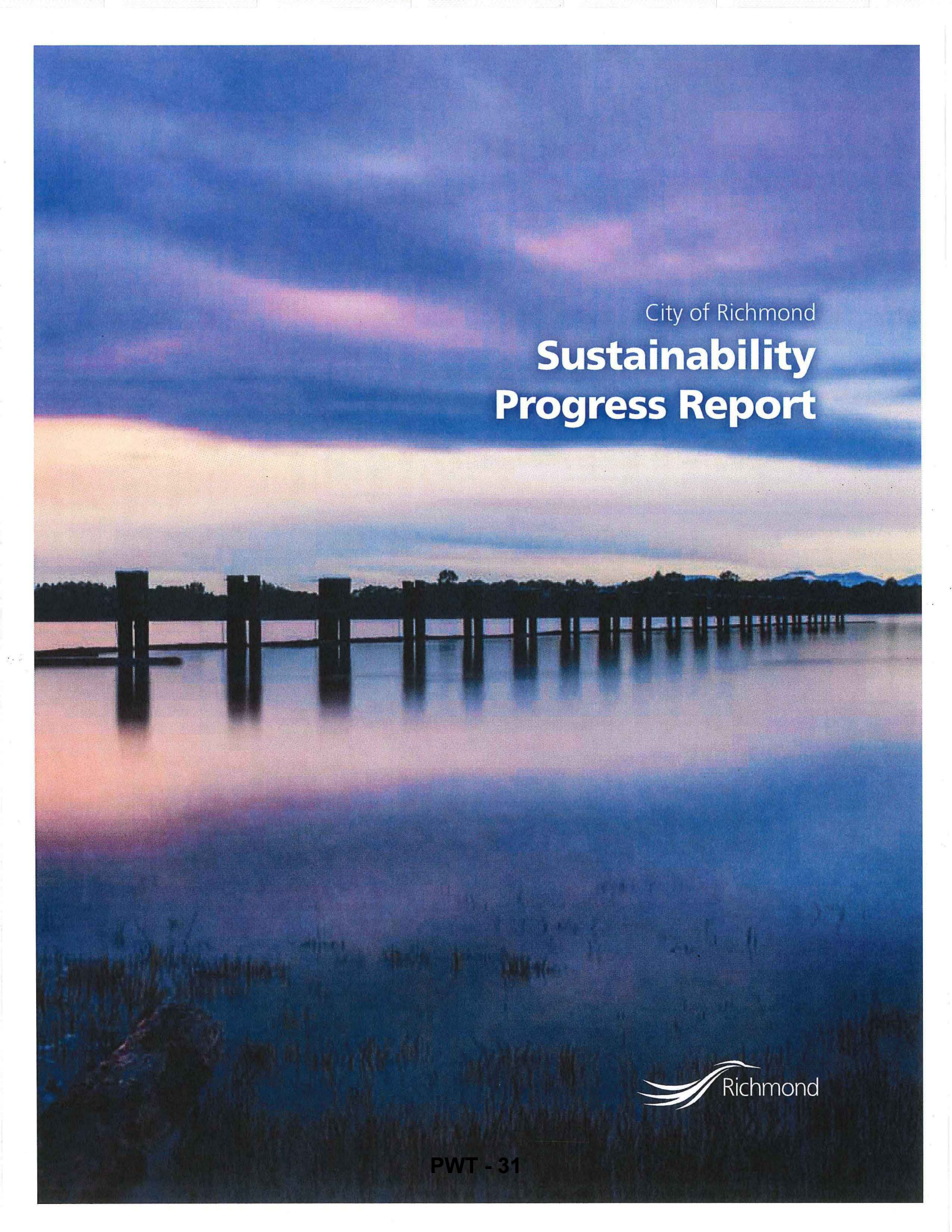
This Sustainability Progress Report provides a high-level overview of a wide range of initiatives the City is undertaking to advance greater economic prosperity, social wellbeing, and environmental performance in Richmond's community. As noted in the Progress Report, the City has set aggressive targets for Richmond's sustainability on a range of fronts – from greenhouse gas reductions, to waste diversion, to economic development. The City will continue to pursue excellence and innovate to achieve its sustainability related goals, which are recognized as critical to Richmond's Vision of "being the most appealing, liveable and well-managed community in Canada".



Brendan McEwen
Manager, Sustainability
(604-247-4676)

BM:bm

Att. 1: Sustainability Progress Report



City of Richmond
**Sustainability
Progress Report**



Contents

Introduction.....	2
Climate & Energy Action.....	4
Sustainable Resource Use & Waste Management.....	8
Compact, Complete Community.....	12
Mobility & Access.....	16
Green Built Environment.....	20
Thriving Natural Environment.....	24
Local Agriculture & Food Security.....	28
Resilient Economy.....	32
Inclusive, Accessible & Safe Community.....	36
Vibrant Community.....	40
Conclusion.....	44

Introduction

Committed to a Sustainable Richmond

The City of Richmond is committed to developing a resilient and sustainable community. Indeed, the pursuit of sustainability is enshrined in Richmond's Official Community Plan, which articulates a vision for a Sustainable Richmond:

A healthy island city that meets the needs of the present without compromising the ability of future generations to meet their own needs. It is a place where people live, work, and prosper in a welcoming, connected, accessible and vibrant community.

The City of Richmond considers this desired outcome as integral to our vision to be "the most appealing, livable, and well-managed community in Canada".

What is a Sustainable Community?

A sustainable community is one where all residents have the opportunity to lead fulfilling, happy lives, while at the same time enhancing the well-being of future generations and the long-term integrity of our ecosystems. Working towards sustainability is about optimizing social, environmental and economic outcomes and integrating them in all the City's actions – ensuring a better quality of life for all, now and in the future.

A sustainable community enables healthy lifestyles; fosters social engagement and vibrant culture; provides equal opportunities for all its members; supports biodiversity; eliminates environmental harm from human activities; and provides meaningful, enjoyable work and economic opportunities.

"Sustainable development meets the needs of current generations without compromising the ability of future generations to meet their own needs".

United Nations' Brundtland Commission. 1987. Our Common Future.

Planning for Sustainability

Achieving Richmond's vision requires action from citizens, businesses, non-profits, and all levels of government. The City has a number of areas of influence by which it implements its vision, dictated by its legislated authorities, operations (e.g. maintenance of civic facilities), and influence it has with community stakeholders and other governments. To define the City's specific role, Richmond's City Council adopted a Sustainability Framework in 2010. This Framework outlined broad goals that guide City actions in the following areas:

- Climate & Energy Action
- Sustainable Resource Use & Waste Management
- Compact, Complete Community
- Mobility & Access
- Green Built Environment
- Thriving Natural Environment
- Local Agriculture & Food Security
- Resilient Economy
- Inclusive, Accessible & Safe Community
- Vibrant Community

These goals subsequently informed the development of the City's 2041 Official Community Plan, Richmond's 30-year plan for sustainable development.

Purpose of this Document

This Sustainability Progress Report provides a brief update on various aspects of how Richmond is working to create a sustainable community, organized around the goal areas noted above. This document explains how each of these goal areas contributes to Richmond's sustainable development, and highlights some of the key initiatives, milestones, and projects the City will pursue in coming years that will contribute to greater sustainability in Richmond. Together, they tell a story of how Richmond is becoming a better community for people today, and for future generations.



CITY TARGETS

Reduce community GHG emissions 33% below 2007 levels by 2020, and 80% by 2050.

Reduce community energy use 10% by 2020 below 2007 levels.

KEY DOCUMENTS:

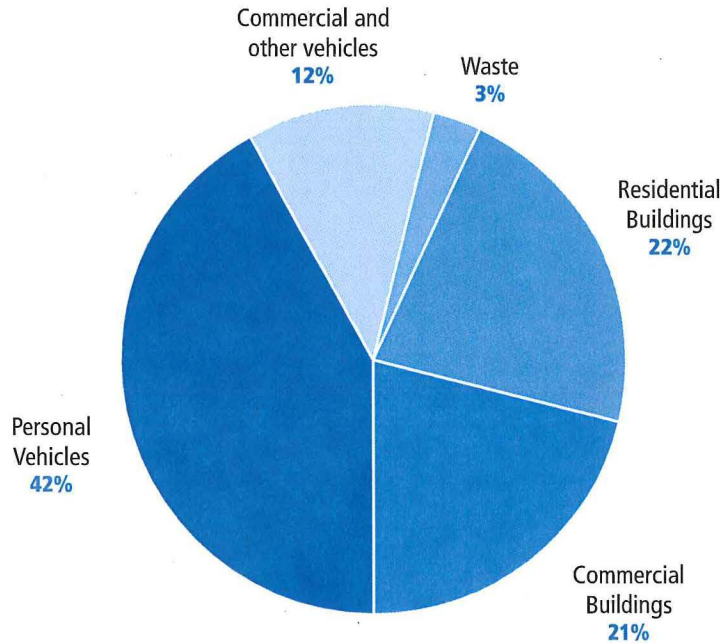
- 2041 Official Community Plan
- Community Energy & Emissions Plan
- Flood Protection Management Strategy

Climate & Energy Action

Human-caused greenhouse gas (GHG) emissions are changing our global climate. Communities around the world are acting to reduce the impacts of energy use, while anticipating and adapting to a changing climate.

Richmond’s 2041 Official Community Plan commits the City to aggressive GHG and energy reduction targets. Encouragingly, the energy actions the City is taking to address climate change will also improve Richmond’s quality of life – moving away from fossil fuels to low carbon alternative sources of energy will make the air we breathe cleaner and our streets quieter and more pleasant. Designing walkable, bike and transit friendly neighbourhoods will support healthier lifestyles, and great neighbourhoods with convenient access to amenities. Improving our buildings’ energy use can provide healthier indoor spaces, while lowering households’ and businesses’ energy costs. Climate action is already creating a range of new opportunities for Richmond enterprises.

Richmond 2010 Community Emissions



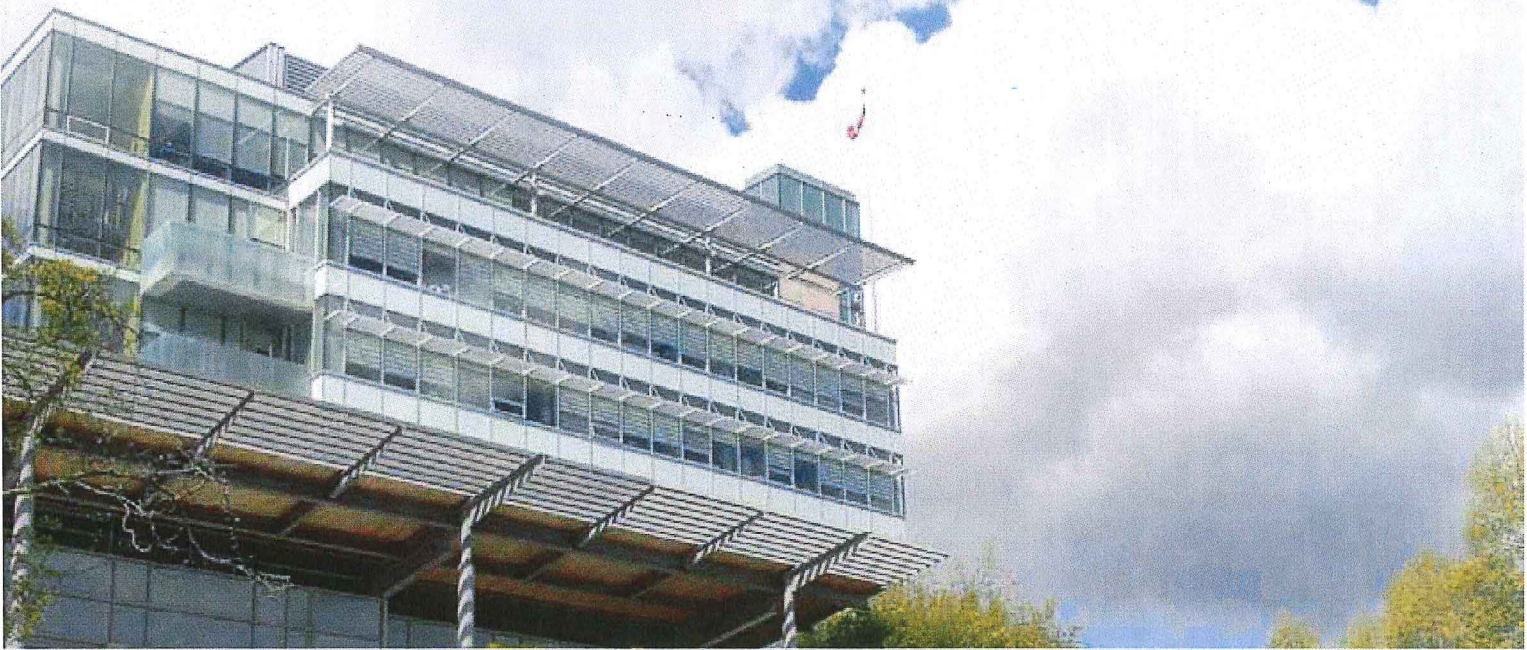
ACHIEVEMENTS

2008	2012
City signs Climate Action Charter committing to carbon neutrality in corporate operations 2008–2031 Flood Protection Management Strategy	Launch of Alexandria District Energy Energy and emissions targets adopted in OCP

Select Initiatives and Outcomes include:

District Energy Innovation — Richmond is a recognized leader in North America for its development of low carbon district energy systems, which provide energy for entire neighbourhoods from a centralized source. In 2012, the City launched the Alexandra District Energy Utility (ADEU), which uses renewable ground-source energy to heat and cool buildings in the West Cambie neighbourhood, and will ultimately serve over 3,000 households. ADEU has been recognized for engineering and environmental excellence by provincial, national and international organizations. In 2013, the City established Lulu Island Energy Company to manage future district energy systems, including a new development in the Oval Village, using heat recovered from a sewer. New buildings in Richmond’s City Centre are required to be ready for district energy, which will allow them to connect to these low-carbon systems.

Energy Management in City Facilities — Since 2007, the City’s energy management program for City facilities has saved approximately 28.4 GWh of energy and 5,000 tonnes of carbon dioxide emissions – the equivalent of taking 1,500 cars off the road for a year. In 2013, the City implemented energy saving projects that will avoid additional annual operating costs by approximately \$100,000.



ACHIEVEMENTS

2013	2014
City establishes Lulu Island Energy Company to manage district energy systems Dike Master Plan – Phase 1 establishes long-term solution to upgrade Steveston Dike	Community Energy & Emissions Plan Energy Utility bylaw for Richmond Oval neighbourhood established Inaugural Richmond Energy Challenge launched

Youth Engagement — Over the last five years, more than 6,700 Richmond Grade 6 students participated in the Climate Change Showdown. Together they have reduced the carbon-equivalent of taking 1,000 cars off the road for a year.

Advanced energy systems in private-sector developments — New private developments are integrating efficient, low-carbon energy systems. For example, the Parc Riviera development will connect households to ground-source heating. The City works to encourage green, energy efficient building during rezonings for new developments.

Climate Change Adaptation — As an island community in the Fraser River floodplain, Richmond will need to manage rising sea levels from climate change. The City manages the dikes and drainage systems that help prevent flooding in Richmond, and was one of the first cities in BC to establish a dike utility. In 2008, Council adopted the 2008–2031 Richmond Flood Protection Management Strategy which has been updated and refined annually. As part of its Flood Protection Strategy and Dike Master Plan, the City has planned to accommodate up to 1m of sea level rise by 2100.



“Big Breakthroughs” needed to meet our climate action targets

Richmond adopted its Community Energy and Emissions Plan in 2014, identifying key “Big Breakthroughs” required to meet the City’s climate action goals, including:

- Deep energy improvements to Richmond’s existing buildings.
- Increasing walking, bicycling, and transit.
- Adoption of low carbon and electric vehicles.

TARGETS

Divert 70% of all waste from the landfill by 2015 and 80% by 2020.

KEY DOCUMENTS

- Integrated Solid Waste and Resource Management Plan
- Report 2013: Recycling and Solid Waste Management - Achieving Goals Through Community Engagement
- Sustainability Framework: Proposed Solid Waste Strategic Program

Sustainable Resource Use & Waste Management

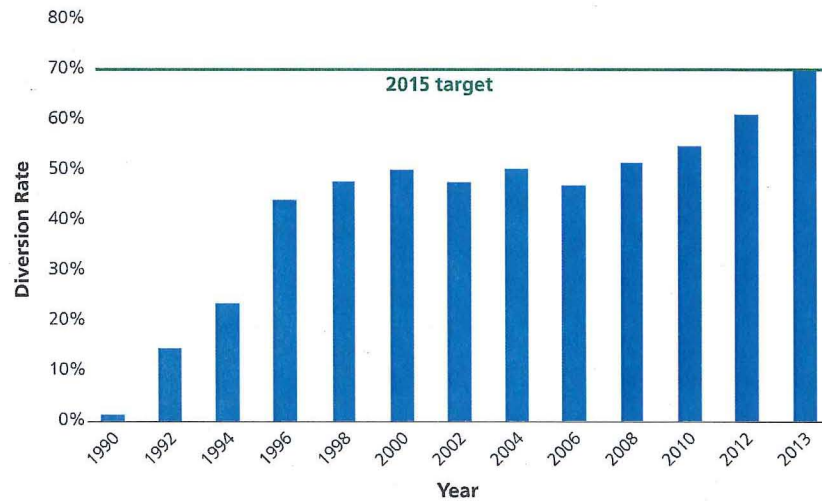
We use a tremendous amount of “stuff” in our modern lifestyles – think of all the materials it takes to construct a building, or all the products you use in your home, school and workplace. These products impact both the environment and human well-being over all the stages of their life cycle: resource extraction, manufacturing, distribution, use, and disposal.

Recycling and waste management are a core City service, and thus one of our key opportunities to advance resource sustainability. Better waste management realizes multiple sustainability benefits:

- Reduced greenhouse gas emissions from decomposition at the landfill.
- Reduced energy and emissions use in materials for new products.
- Reduced tipping fee costs for government.
- New economic opportunities for entrepreneurs.

Richmond has markedly improved waste management over the past three decades. Despite significant population growth, we have almost halved the total volumes of waste sent to the landfill, and increased recycling.

Percentage of Waste from Single Family Homes



ACHIEVEMENTS

2010	2011
<ul style="list-style-type: none"> Green Can expanded yard/garden trimmings collection program to include food scraps Launched Green Ambassadors program Published design guidelines for garbage collection in commercial buildings 	<ul style="list-style-type: none"> Launched a 9-months food scraps recycling pilot program for townhomes

Select Initiatives and Outcomes include:

Contributing to regional sustainability — Richmond endorsed Metro Vancouver's 2010 Integrated Solid Waste and Resource Management Plan (ISWRMP), which outlines goals and strategies concerning waste reduction, reuse and recycling. The plan establishes the goal to divert 70 per cent of all waste from the landfill by 2015, 80 per cent by 2020. In 2013, the City achieved 70 per cent diversion for single-family homes, an increase of 9 per cent beyond 2012 levels, and is working to help multi-family and commercial buildings meet these levels.

Leadership on Zero Waste Initiatives — Richmond's Mayor Malcolm Brodie serves as the Chair on the Zero Waste Committee and chair of the National Zero Waste Council, contributing to policy and programs that aim to reduce waste destined for the landfill regionally and nationally.

Ensuring producer responsibility — Richmond works with local companies and organizations like Product Care and Encorp to support BC's Product Stewardship Programs. The City's Recycling Depot is a Product Stewardship collection site for paints, solvents, pesticides, flammable liquids, pesticides, lights, lighting fixtures, small appliances, used batteries, cellphones, Styrofoam, and glass bottles and jars. Richmond is also partnering with Multi Materials BC to expand Blue Box and Blue Cart recycling for packaging and printed paper.

"The waste coming out of our houses is just the tip of the iceberg. For every one garbage can of waste you put out on the curb, 70 garbage cans of waste were made 'upstream' during that junk's production. So recycling helps, but we need to do even more."

Annie Leonard, The Story of Stuff.

ACHIEVEMENTS

2013 **2014**

Enhanced Green Cart recycling for food scraps and yard trimmings
41,000 households received carts. Pilot program for multi-family
Launched Large Item Pick Up program for more than 41,000 residential units
Single-Family achieved 70% waste diversion target 2 years ahead of schedule
Received "Golden Shovel Award" from Harvest Power

Expanded Blue Box and Blue Cart recycling programs to include a broader range of materials through partnership with Multi-Material BC
Received Bronze Quill Award of Excellence for Green Cart program

Expanding recycling programs — Richmond continues to expand the opportunities for residents to recycle by creating new and enhanced programs for recycling at home and on the go. The City was one of the first municipalities in the Lower Mainland to introduce curbside food scraps collection through the Green Can program in April, 2010. With the introduction of the Green Cart Program in June 2013, Richmond provided the enhanced Green Cart to single-family homes and expanded the program to include more than 11,000 townhomes for recycling food scraps and yard trimmings.

Richmond also expanded the materials accepted at the City's Recycling Depot to include Styrofoam, used books, batteries, cell phones and plastic bags. The City's new Large Item Pick Up program was also launched in 2013, making it easier for residents to recycle and safely dispose of larger household items like mattresses, appliances and furniture.



Best practices in City demolitions — The City frequently achieves close to 90 per cent recycling rates in City demolition projects, well above typical recycling rates in the demolition industry. In 2014, the City adopted a policy, requiring that City demolitions divert a high percentage of waste from the landfill.

Supporting youth awareness and education — Through partnerships with students, teachers and the School District, Richmond sponsors theatrical shows, awareness programs and volunteer opportunities to increase understanding of recycling and the benefits of reducing waste. In 2013, the City sponsored Clean Up Your Act and Zero Heroes, shows that reached more than 3,800 students and 200 teachers. Richmond also partnered with the Richmond School District to develop the Green Ambassadors program where dedicated high school students participate in monthly workshops to learn about environmental sustainability and apply what they have learned as volunteers at City events and activities. In 2013, approximately 185 students in the program contributed about 3,250 volunteer hours to promote recycling at community events and organize the Richmond Earth Day Youth Summit. These energetic and environmentally conscious individuals also manage green initiatives in their school.



KEY DOCUMENTS

- 2040 Regional Growth Strategy
- 2041 Official Community Plan
- City Center Area Plan

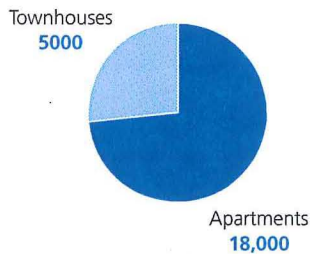
Compact, Complete Community

Richmond’s health, well-being, economy, and environmental quality, are profoundly linked to how we use land and design our communities. The City’s land use planning guides Richmond’s future development towards these more sustainable patterns.

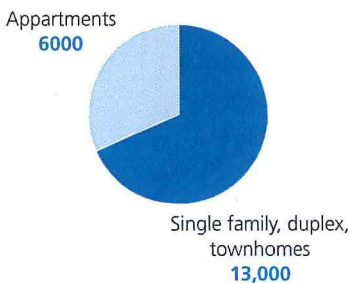
2014 – 2041 Richmond Demographics (Est)

	2014	2041
Population	207,500	280,000
Employment	148,000	180,000

**City Centre —
New Housing to 2041**



**Rest of Richmond —
New Housing to 2041**



By 2041, Richmond’s population is expected to grow by 40 per cent, and employment by a third. This growth can serve as a powerful lever to create a better quality of life in Richmond. By providing opportunities to live, work, shop, play and learn in compact urban village centres with mixed land uses, we can create a more vibrant, diverse community. Higher densities of residences and jobs in neighbourhoods can support local businesses and improve services, amenities, and recreation. We can provide our community members the choice to walk, bike, roll (wheelchair, scooter, etc.) or take transit to meet their daily needs. Investments in our communities provide the opportunity to make our public spaces more beautiful. And compact land use avoids sprawling development that incurs on natural areas and farmland, helping preserve the landscapes treasured by our community and throughout the region.

As land use changes, Richmond can provide a range of housing types and options to enable different types of families, and people of different ages and incomes, to live in our neighbourhoods. We can support more affordable housing, and allow existing community members the choice to “age in place” in their communities.

Compact, complete land use can decrease the per capita costs of infrastructure that citizens must pay. Better land use is as much about fiscal prudence as it is about building wonderful, walkable communities.

ACHIEVEMENTS

2008	2009	2011
Richmond Oval Opened	City Centre Area Plan Steveston Village Heritage Conservation Strategy	2040 Metro Vancouver Regional Growth Strategy (RGS)

Select Initiatives and Outcomes include:

Regional Planning

In July 2012, after 23 local governments, by consensus, agreed to accept the 2040 Regional Growth Strategy (RGS) "Shaping Our Future" the Metro Vancouver Board approved it. The RGS enables the parties to co-operatively plan and manage Metro Vancouver's regional growth. The RGS focuses on: creating a compact urban area; fostering a sustainable economy; protecting the environment; responding to climate change impacts; developing complete communities; supporting sustainable transportation choices.

Recent Major Community Plans Approved

2041 Official Community Plan (OCP) — In November 2012, Council approved the 2041 Official Community Plan (OCP) 'Moving Towards Sustainability'. It clarifies how the City will achieve the 2040 Metro 2041 RGS goals and guides our community's development to support healthy urban living; environmental performance; economic vitality; and a broad range of high-quality amenities, including affordable housing.

City Centre Area Plan (CCAP) — In 2009, Richmond updated its CCAP, which enables the City to accommodate most City growth in the City Centre. This approach will facilitate greater access to the Canada Line, transit, services, parks, and amenities for Richmond's residents, all within walking, rolling (wheel chair, scooter), or biking distance.

Steveston Area Plan — The 2009 update to the Steveston Area Plan guides the balance of residential development, heritage, and Steveston's role as a key port for the Pacific fishing fleet.

Hamilton Area Plan — In 2014, Richmond updated its Hamilton Area Plan. The Hamilton neighbourhood is anticipated to grow from a population of about 5,000 currently, to 12,000 in 2041, as well as adding 2,000 jobs. The plan focuses on establishing Hamilton as a distinct village centre, with a "high street" including buildings up to four stories, and greater amenities such as new library space, more public recreation space, and a new North Arm Waterfront Park.

ACHIEVEMENTS

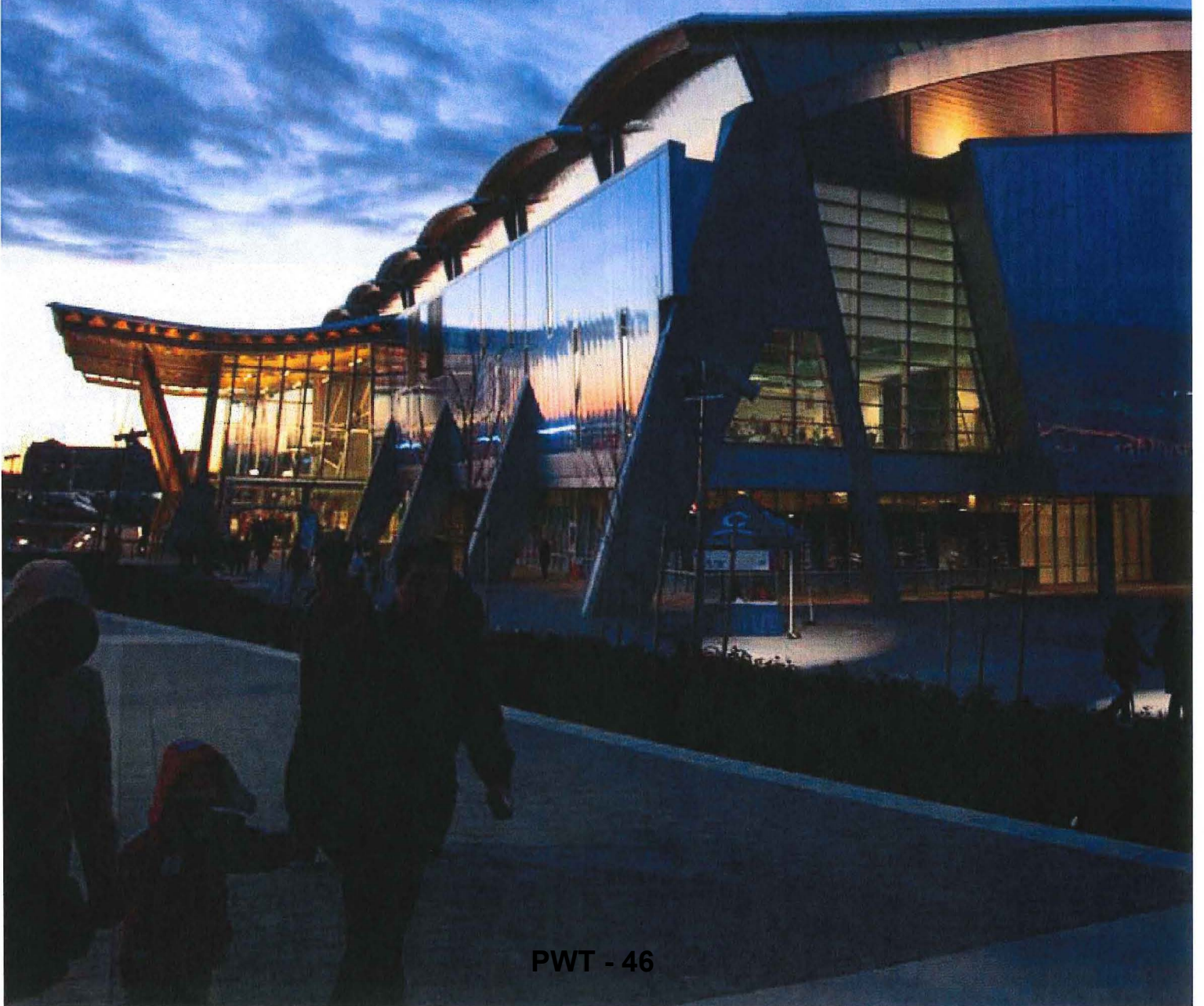
2012

2041 Official Community Plan
Lansdowne Road West Transformation Project launched
Capstan station funding agreement signed with landowners, TransLink

2014

Garden City Lands Master Plan
Hamilton Area Plan

Richmond Olympic Oval — The Richmond Olympic Oval is both an award-winning sports and events facility, and also a model of green design and community building. The Oval is anchoring a new urban village along Richmond's waterfront, helping to catalyze development that provides our community members with new amenities and a greater connection to the Fraser River and Richmond's natural ecology. The Oval continues to grow in popularity. Since opening, the Oval has hosted over 3.5 million visitors. In 2013, it hosted 46 different special events, in addition to its regular programming.

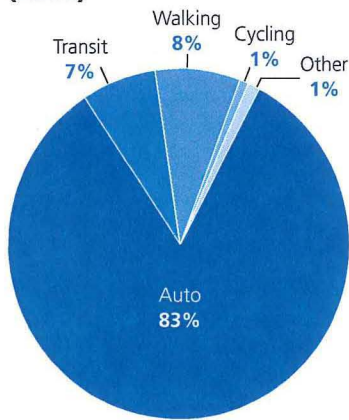


Lansdowne Road Transformation — The City is planning for the transformation of Lansdowne Road between Garden City Road and the Oval Villages. The City envisions Lansdowne Road serving as a model urban promenade serving pedestrians, bikes, and transit routes, anchored by a linear park.

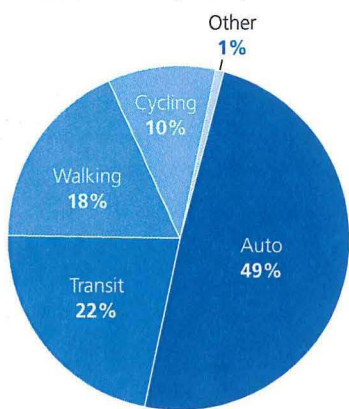
Capstan Skytrain Station Funding — The City has organized an innovative way of funding the development of a new (fifth) Canada Line transit station on Capstan Way. The “first of its kind” agreement allows funding for the new station to be collected by the City from developers building new residential buildings. Residents will benefit with rapid transit access right to their doorstep, increasing the livability of the community and providing valuable sustainable transportation options.



Richmond Mode Share (2008)



Target Richmond Mode Share (2041)



Mobility & Access

Safe, convenient and enjoyable travel to our workplaces, schools, parks, natural areas, shopping, and other destinations improves our quality of life. Incorporating walking, bicycling, rolling (wheelchairs, scooters, etc.) and other forms of human-powered “active transportation” will also improve our health and happiness. Regular physical activity is associated with reduced rates of obesity, heart disease, diabetes and some cancers, and improved mental health.

B.C. households spend nearly \$11,000 on transportation annually—reducing dependence on fossil fuel vehicles will help reduce these costs for families and keep more money in our community.

Support for non-vehicular forms of transportation is important for our community’s social justice—we must ensure that all types of people, not just drivers, have safe, reliable and enjoyable travel modes that meet their needs. Richmond provides for the mobility needs of young people, older people and those that do not own a vehicle.

Mobility and access are also critical to a thriving economy. Businesses must be able to move goods efficiently to different markets at a reasonable cost and need their customers to be able to access their services. Providing for walking, biking, rolling and transit, and smarter parking policies can increase retail sales, reduce congestion, and support businesses in Richmond.

Finally, shifting our transportation modes is critical to achieving our environmental goals. Private vehicles and commercial transport together represent 53 per cent of Richmond’s greenhouse gas emissions, and result in a host of other environmental impacts including: air pollution, noise pollution, the urban “heat island” effect, stormwater pollution, and loss of open space and habitat to pavement. Switching to lower impact transportation options will improve Richmond’s environmental performance.

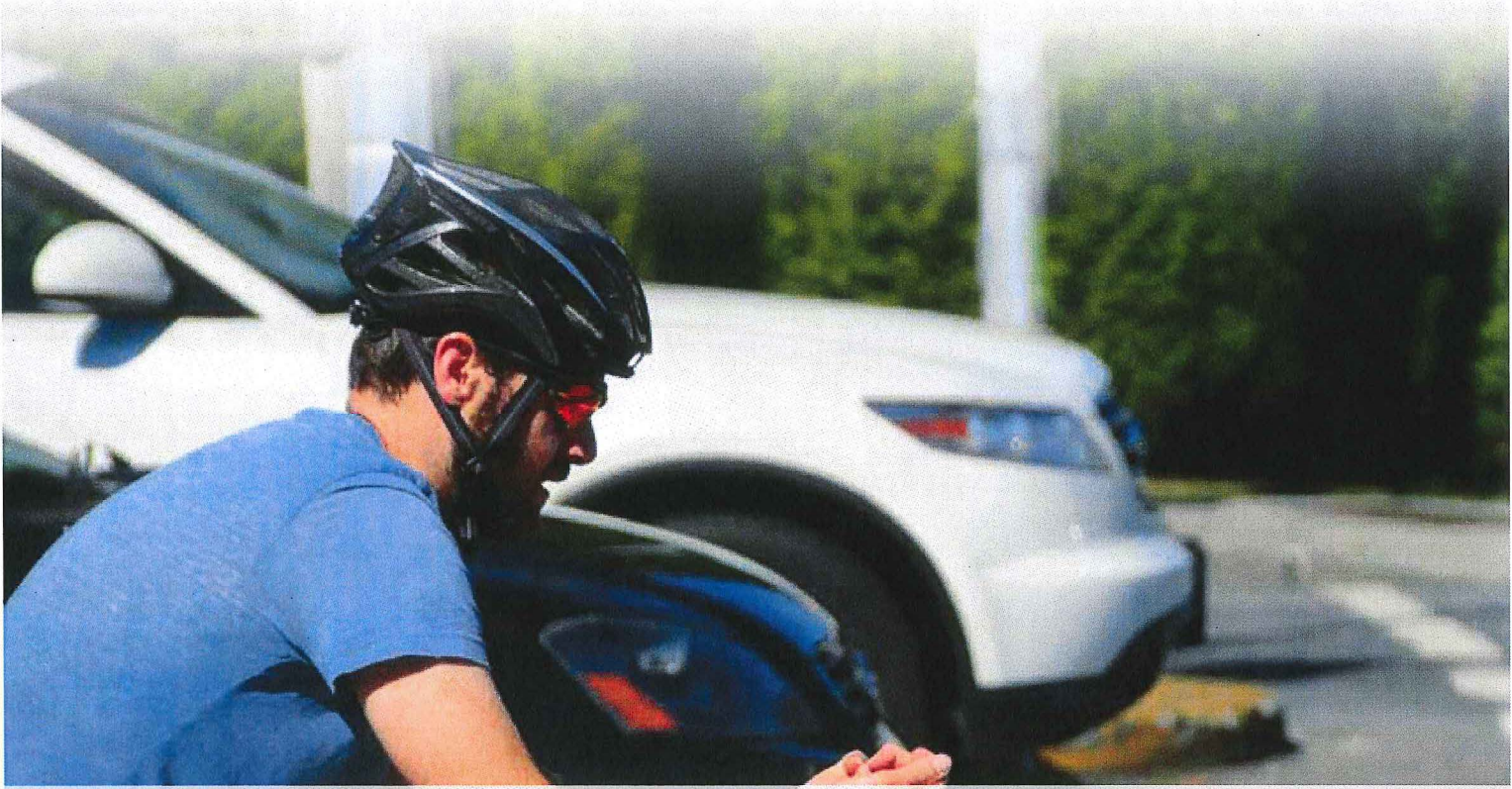
ACHIEVEMENTS

2009	2010	2011
Canada Line and its Bike Bridge opens	Average daily ridership of 228,000 on Canada Line during 2010 Winter Olympics Average weekday ridership of 100,000 on Canada Line, three years earlier than forecast	Smarter intersections – Steveston “scramble” intersection implemented at No. 1 and Moncton

Select Initiatives and Outcomes include:

The Canada Line and other Transit Improvements — The Canada Line opened in 2009, providing rapid transit to the heart of Richmond City Centre. As of March 2014, average weekday ridership is over 122,000, far exceeding the original forecast of 100,000 by 2013. The City will continue to work with the regional transportation authority, TransLink, to refine Richmond’s hierarchy of transit services to best match the needs of the community, and improve appropriate routes via higher frequencies, longer operating hours and greater capacity.

Expanding Richmond’s Active Transportation Network — The City adopted its first On-Street Cycling Network Plan in 1996. Since that time, the City has invested regularly in a network that now encompasses 60 km of bicycle routes and over 55 km of greenways and trails. The City recently completed the Railway Corridor, a multi-modal pathway connecting Steveston with the City Centre. Richmond will continue to extend our active transportation network, and improve the safety, enjoyment and ease of cycling, walking and rolling.



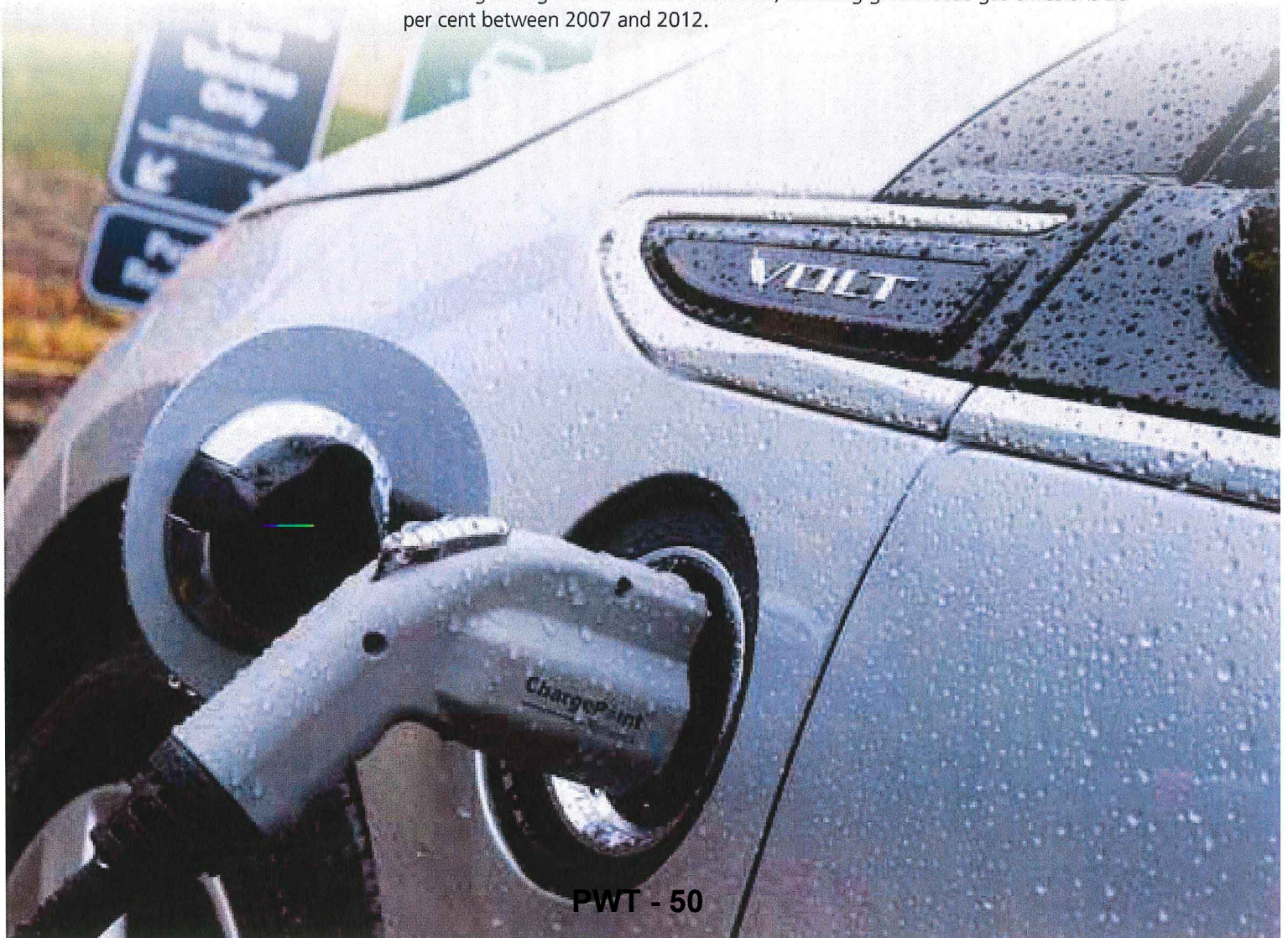
ACHIEVEMENTS

2012	2013	2014
First City fleet electric passenger vehicles Crabapple Ridge Bike Route completed, first neighbourhood cycling route along local roads	First car-share vehicle comes to Richmond	Opening of Railway Avenue Greenway

Supporting Car-Sharing — Car-share services provide the benefits of private cars without the costs and responsibilities of ownership. Car-sharing typically results in a net reduction in per capita driving and the replacement of six to eight private cars for every shared car. The City supports car-share operations, notably Modo, ZipCar, and Car2Go, by enabling access to public parking infrastructure and securing off-street parking spaces in new developments.

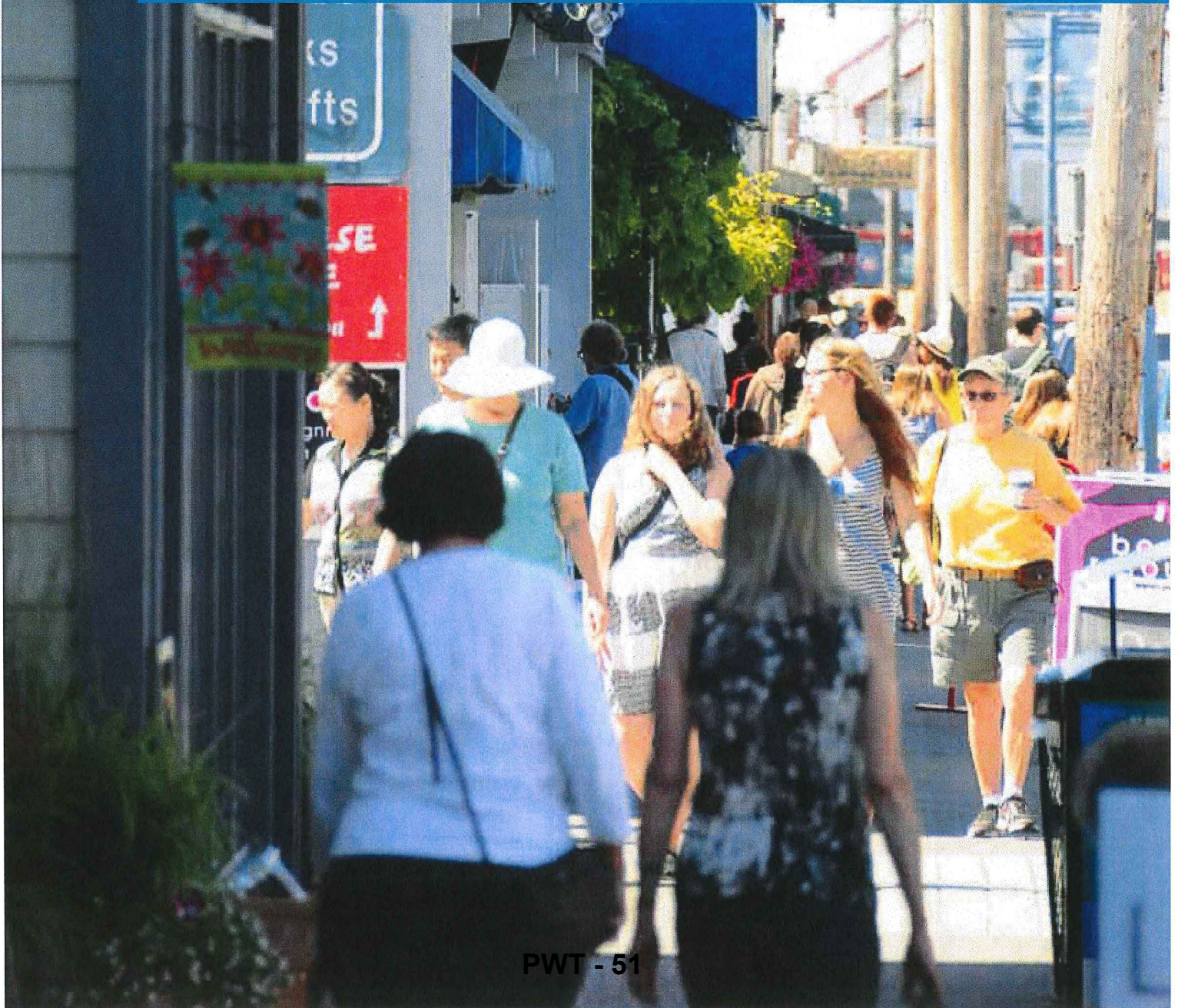
Facilitating Electric Vehicles — Electric vehicles represent a key opportunity to reduce the emissions, air pollution, and noise associated with driving, while reducing spending on gasoline. Since 2012, the City requires that new multifamily residential developments provide electric vehicle charging equipment for 25 per cent of vehicle stalls with a further 20 per cent pre-ducted for future installation. In 2013, the City partnered with the Province to install eight publicly accessible electric vehicle charging stations.

Greening the City's Vehicle Fleet — In 2013, Council adopted a Green Fleet Action Plan to improve fuel efficiency and reduce greenhouse gas emissions of City vehicles and fleet, targeting a 20 per cent reduction in emissions below 2010 levels by 2020. Richmond Fire-Rescue manages their own fleets, and are likewise achieving strong environmental outcomes, reducing greenhouse gas emissions 26 per cent between 2007 and 2012.



"You can't have good transit if you can't walk when you arrive. So pedestrian-oriented development is the heart and soul of great cities. Every city that you love is a city that you want to walk in."

Peter Calthorpe, Architect and Planner





PUBLIC DRINKING FOUNTAIN AT GARRY POINT.

Green Built Environment

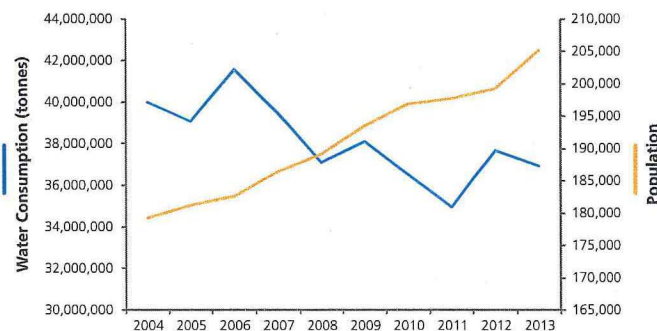
The built environment – the buildings and infrastructure that constitute our city – is central to our community's sustainability. The environmental impacts of buildings are substantial – they account for 43 per cent of Richmond's greenhouse gas emissions; 40 per cent of all the raw materials consumed around the world; and 45 per cent of all the solid waste produced in Metro Vancouver. We spend 90 per cent of our time in buildings, so they are crucial to our health and well-being. Encouragingly, numerous leading projects show that it is possible to develop buildings with a net-positive impact on the planet, while contributing to a more beautiful, socially enriching community.

In addition to buildings, a host of infrastructure systems support Richmond. City infrastructure includes our water distribution system; stormwater drainage, flood protection, and irrigation systems; the municipal sanitary sewer; and energy utility systems. The City's long-term financial management strategy ensures that we have sufficient funds to invest in the continued renewal of these systems. The City recognizes it can extend these systems' life, and reduce costs and environmental impacts, by managing the demand for the services they provide.

Notably, as part of the "ecological network" approach specified in Richmond's 2041 Official Community Plan, the City is implementing "green infrastructure" into our community. Green infrastructure uses natural systems to help meet human needs – for example, well-functioning watercourses such as the wetlands constructed at the Richmond Olympic Oval serve human needs including drainage, erosion protection, flood storage, water filtration, the potential for trails and transportation corridors, and other functions. They also provide important natural habitat and beautify communities.

Investing in our buildings and infrastructure to reduce energy and resources, can increase our comfort, save money, protect the environment, and support local jobs.

Water consumption and population in Richmond



ACHIEVEMENTS

2005	2006	2008
High Performance Building Policy	Fire Hall No. 5 the first LEED Gold certified Firehall project ever	Richmond Oval receives LEED Silver certification Oval includes innovative "green infrastructure" wetland Flood Management Strategy

Select Initiatives and Outcomes include:

Sustainably managed infrastructure — Richmond has made strides in the long-term financial management of its aging infrastructure, ensuring adequate funding for the renewal of streets, drainage systems, dikes, water and sanitary sewer systems in coming decades.

Delivering clean water and conserving resources — The City of Richmond consistently delivers high quality drinking water – the 2013 Water Quality Report includes findings from nearly 2,000 test sites, which consistently found outstanding water quality. To ensure a sustainable water supply and limit costs of expanding infrastructure, the City engages in a variety of water efficiency programs. These efforts include the leak detection program, the multifamily water metering program, and educational efforts including hosting over 500 elementary students for the water conservation initiative Project WET, and 16 “H2Whoa!” theatrical presentations.

Flood protection and water drainage — Private and public land with improvements in Richmond are valued at approximately \$63 billion. The City manages and improves 49 km’s of dikes, 622km of drainage pipes, 178km of ditches, and 41 drainage pumping stations to help protect our communities, and provide irrigation to agricultural lands. Richmond’s flood protection and drainage systems are among the best managed and most robust in the region. The City is responding to evolving demands on our infrastructure, including sea level rise, and the need for seismic improvements to dikes. The City implemented \$45M of drainage and diking improvements since 2008, and a further \$9.9M of drainage and diking improvements will be implemented in 2014.



ACHIEVEMENTS

2012	2013	2014
Alexandria District Energy Utility becomes operational	Lulu Island Energy Company created Phase 1 – Dike Master Plan Richmond Community Safety Building LEED Gold	Alexandria District Energy Utility receives Canadian National Energy Globe Award and the Canadian Geo-exchange Coalition Excellence Award High Performance Building Policy update Hamilton Firehall LEED Silver

Encouraging “Beyond Code” performance — It is the City’s policy for developments in the City Centre undergoing rezoning to achieve green building performance measured with the LEED rating system. Likewise, the City requires industrial or office building developments to achieve stormwater management, via green roofs, landscaping features, and/or use of the LEED system. The City continues to evaluate how to foster green building performance in private developments.

Encouraging sustainability in households, businesses and existing buildings — Starting in 2012, the City supported 11 Richmond businesses participating in ClimateSmart, a program to help manage and reduce greenhouse gas emissions and energy costs. The City also recruited households and businesses into the energy efficiency programs offered by BC Hydro, Fortis BC, and the Province. In 2014, the City launched the inaugural Richmond Building Energy Challenge, a friendly and informative competition to reduce energy use in institutional, commercial and multifamily buildings.



High Performance City buildings — In 2005, the City adopted its High Performance Building Policy, which requires LEED Silver accreditation for new City construction over 2,000 square metres. The policy was modified in 2014 with yet deeper targets for energy efficient buildings and a commitment to develop carbon neutral buildings by 2030. The City has frequently exceeded the targets specified in the policy. Notably, the Richmond Community Safety Building (home to the Richmond RCMP) has achieved LEED Gold accreditation, and the Steveston Firehall has achieved the same accreditation.

Steveston Firehall—A high performance green building.



PWT - 55

KEY DOCUMENTS

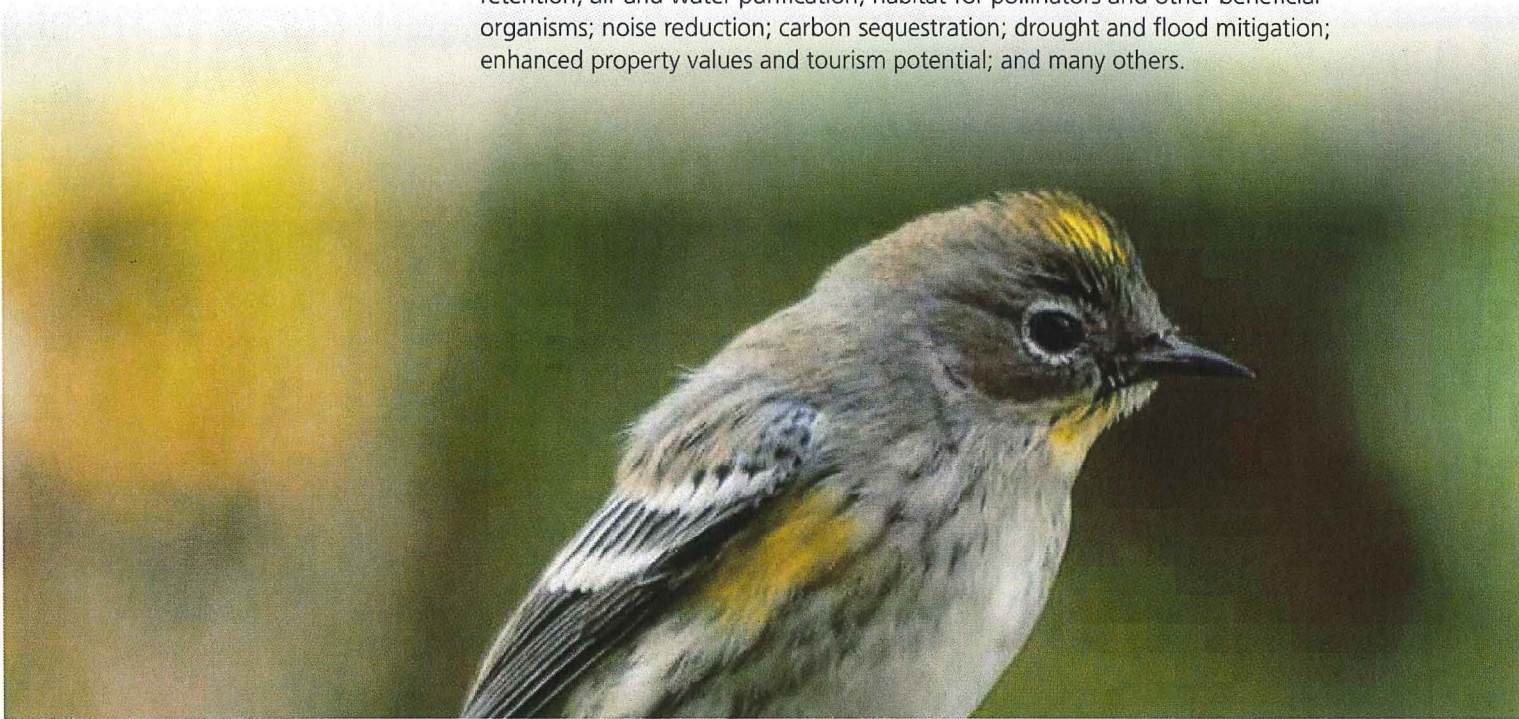
- Ecological Network Management Strategy

Thriving Natural Environment

Richmond is endowed with many areas of high ecological value, supporting a rich array of biodiversity. Richmond is surrounded by the Fraser River, one of the world's most productive salmon rivers, and the Salish Sea, an extraordinarily biodiverse inland sea. The Fraser estuary is a vital link in the Pacific Flyway bird migration route, and each year millions of birds visit Richmond, mainly along Sturgeon Bank, South Arm Islands and island foreshore habitats. Other important natural assets include Richmond's sloughs and canals; bogs and marshes; urban trees and forests, parks and open spaces; cultivated and uncultivated agricultural lands; and garden lands. Our region is world renowned for these natural assets.

Richmond's natural areas are a source of inspiration and beauty to residents and visitors alike. They support recreation, social interaction, and psychological and spiritual renewal. The City recognizes the intrinsic value of its natural places and ecosystems.

What is more, Richmond's natural areas provide a range of economic and social benefits, or "ecosystem services", including: Temperature regulation; stormwater retention; air and water purification; habitat for pollinators and other beneficial organisms; noise reduction; carbon sequestration; drought and flood mitigation; enhanced property values and tourism potential; and many others.



ACHIEVEMENTS

2007

CPRA Award of Excellence for Innovation for Terra Nova Rural Park

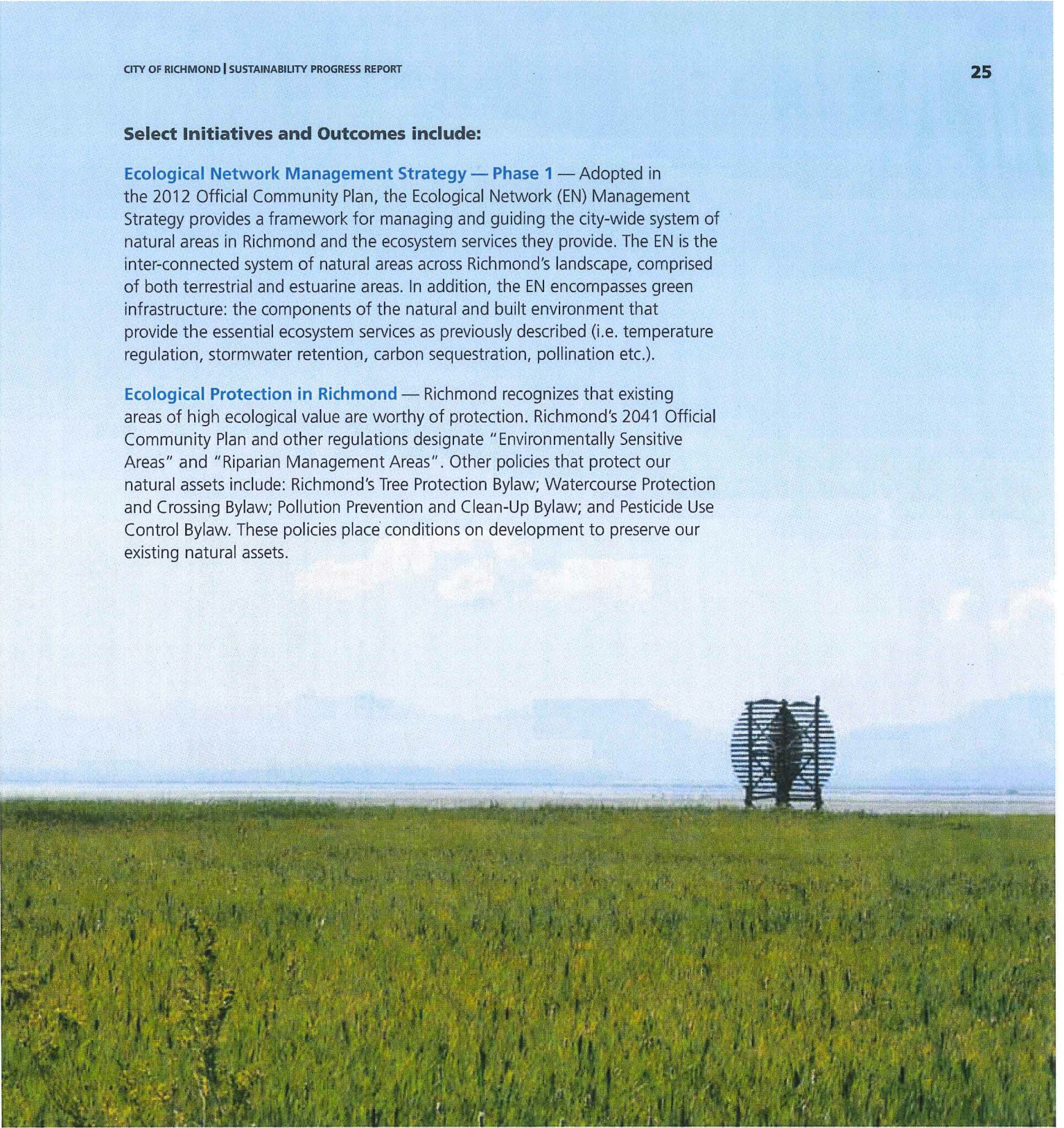
2010

Purchase of Garden City Lands

Select Initiatives and Outcomes include:

Ecological Network Management Strategy — Phase 1 — Adopted in the 2012 Official Community Plan, the Ecological Network (EN) Management Strategy provides a framework for managing and guiding the city-wide system of natural areas in Richmond and the ecosystem services they provide. The EN is the inter-connected system of natural areas across Richmond's landscape, comprised of both terrestrial and estuarine areas. In addition, the EN encompasses green infrastructure: the components of the natural and built environment that provide the essential ecosystem services as previously described (i.e. temperature regulation, stormwater retention, carbon sequestration, pollination etc.).

Ecological Protection in Richmond — Richmond recognizes that existing areas of high ecological value are worthy of protection. Richmond's 2041 Official Community Plan and other regulations designate "Environmentally Sensitive Areas" and "Riparian Management Areas". Other policies that protect our natural assets include: Richmond's Tree Protection Bylaw; Watercourse Protection and Crossing Bylaw; Pollution Prevention and Clean-Up Bylaw; and Pesticide Use Control Bylaw. These policies place conditions on development to preserve our existing natural assets.



ACHIEVEMENTS

2012

OCP – Chapter 9, Island Natural Environment.
Ecological Network Concept adopted
OCP establishes targets for distribution of parks in Richmond
Grauer Land purchase by the City in partnership with Ducks Unlimited Canada
North East Bog purchase, northern parcel

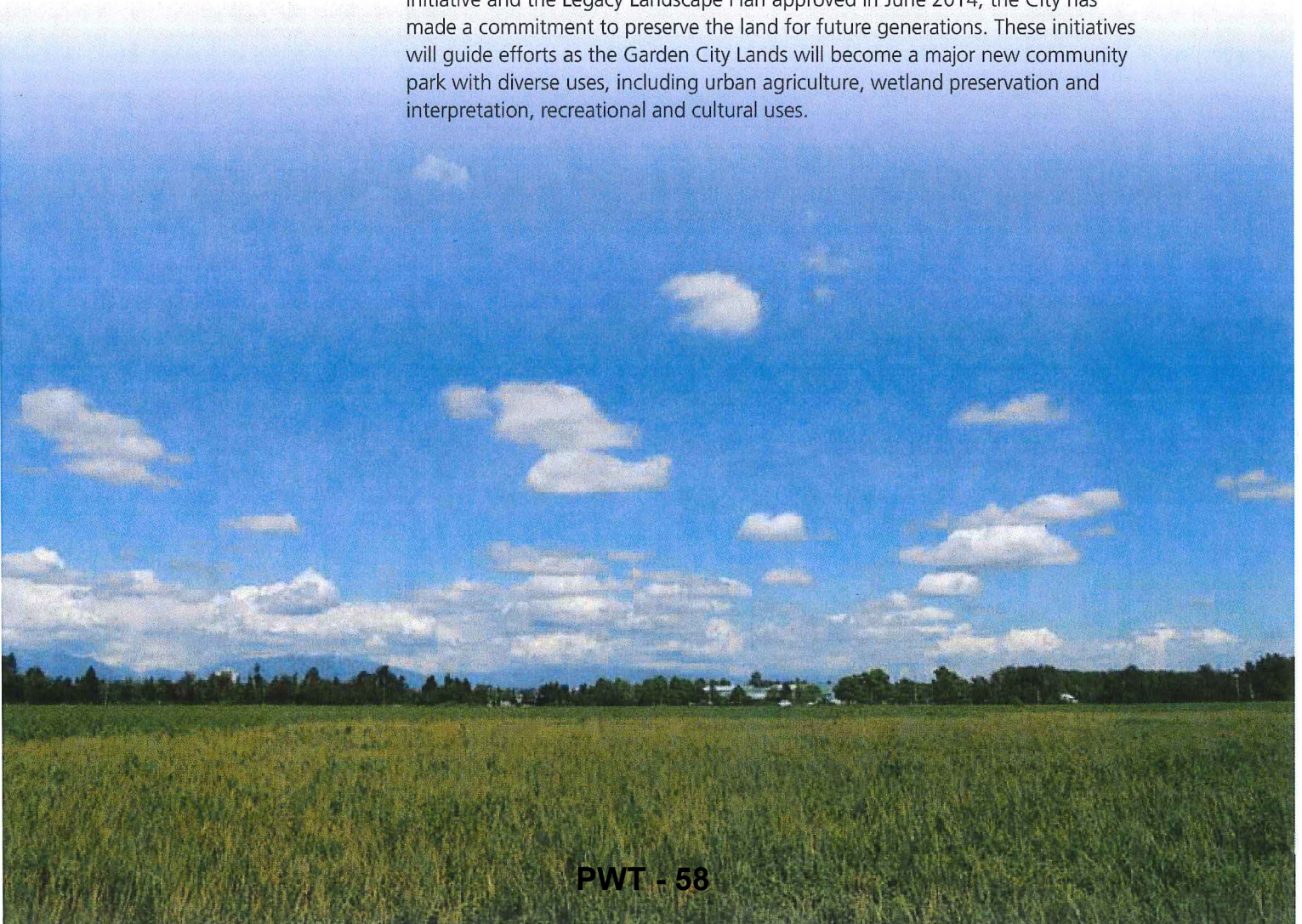
2014

Ecological Network
Management Strategy
– Phase 1
Garden City Legacy Landscape
Plan approved by Council

Supporting natural habitat in Terra Nova — Terra Nova Rural Park is a 25.5 hectare city-wide nature park adjacent to the West Dike in the Thompson area with historic buildings, a community garden and a picnic area and provides habitat for birds and other wildlife in the area. The area was honoured with the Innovation Award from the World Leisure Organization for its development of Terra Nova Rural Park, the sixth major award the City has received since 2007 for Terra Nova Rural Park, including provincial, national and international honours. The Terra Nova Nature Preschool was launched in the fall of 2014 – an innovative new collaboration between Thompson Community Centre, Richmond School Yard Society, and the City that encourages 3 and 4 year old students to explore the natural landscape.

Supporting our urban forest — The City has planted an average of 550 new trees each year for the past 10 years, and also maintains existing trees. The City's Tree Protection Bylaw ensures that Richmond's urban forest on private property thrives.

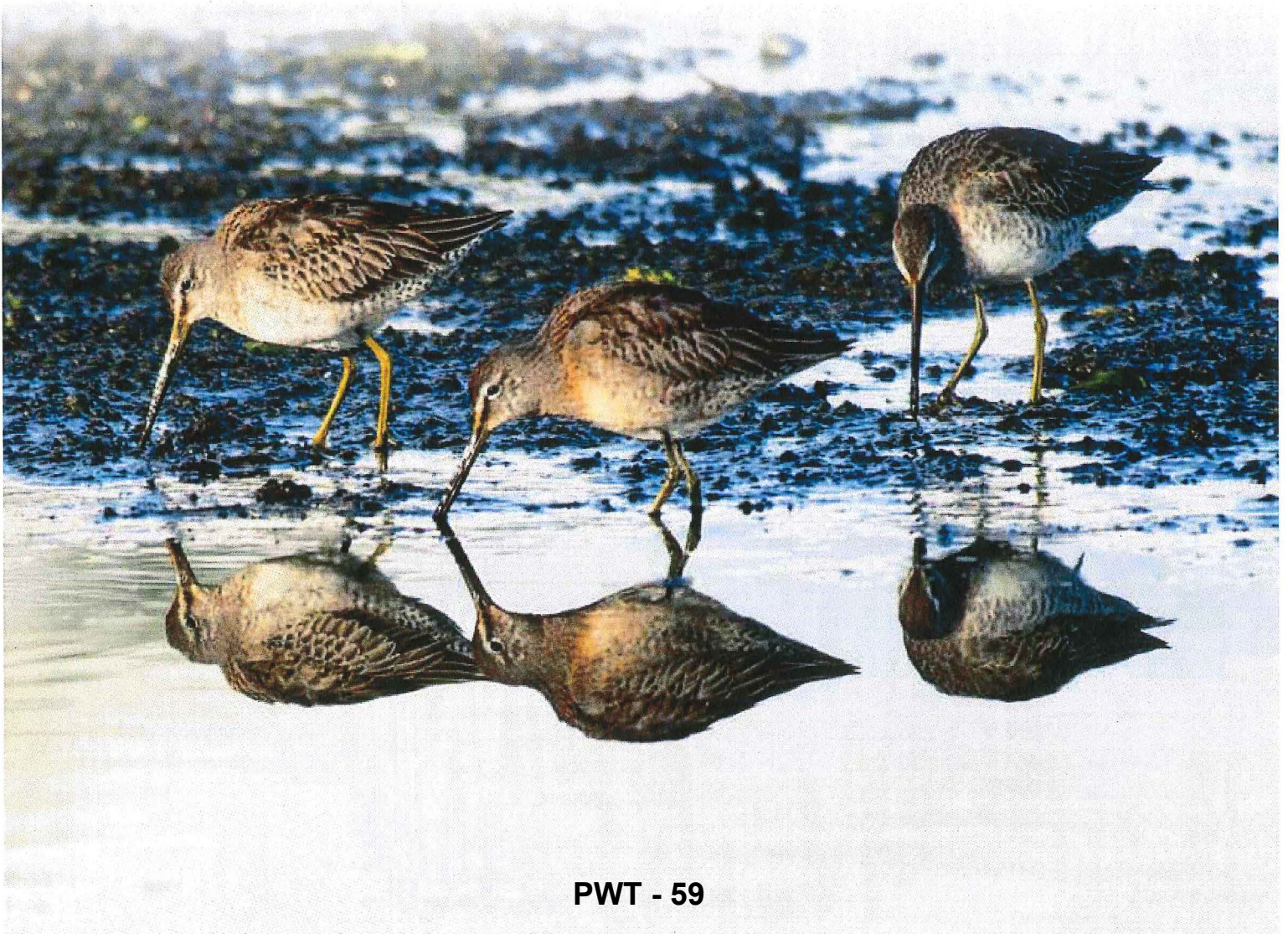
Creating a Legacy for the Garden City Lands — The Garden City lands comprise natural and semi-natural areas with important environmental values, which may also be used for recreation, park, agricultural and food production purposes. The ecological value of the Garden City Lands is recognized by the community, and through the development of the Create Garden City Lands initiative and the Legacy Landscape Plan approved in June 2014, the City has made a commitment to preserve the land for future generations. These initiatives will guide efforts as the Garden City Lands will become a major new community park with diverse uses, including urban agriculture, wetland preservation and interpretation, recreational and cultural uses.



Bath Slough — One of Richmond's last remaining sloughs, and today has a catchment area spanning 750 hectares of industrial, commercial agricultural, and residential land in the Bridgeport neighbourhood. The Bath Slough Revitalization Initiative seeks to improve and restore ecological connectivity within Bath Slough, as the slough connects inland areas to important habitat on the Fraser River shoreline. The Bath Slough initiative is a flagship pilot project supporting the City's Ecological Network, as it will demonstrate an integrated slough revitalization, stewardship, and civic enhancement program.

Northeast Bog — In 2011, The City purchased the last 6 hectares of Richmond's northeast bog forest, named the Northeast Bog Forest. The lands complete a 19 hectare parkland bog forest. The bog represents an important remnant of the historical Lesser Lulu Island Bog, and houses a rich array of plants and wildlife.

Sturgeon Bank, Grauer Land Purchase — The City, in partnership with Ducks Unlimited Canada, has purchased the Grauer Lands that are part of an internationally important section of the Fraser River Estuary. These lands will be protected as wildlife habitat and parkland. Through preservation of these foreshore wetlands the City will be protecting a vital part of the Pacific Flyway for migratory birds as well as creating valuable park space for today and for generations to come.



TARGETS

Maintain Richmond's agricultural land base protected in the Agriculture Land Reserve, with no loss of ALR lands (unless consultation with agricultural community determines the project will realize a substantial benefit for the farming community).

KEY DOCUMENTS:

- Agricultural Viability Strategy

Local Agriculture & Food Security

A sustainable community requires that its members have access to food that supports healthy people and a healthy planet – food that is tasty, nutritious, safe, affordable, and appropriate to their culture and personal beliefs. As a society, we need a food system that protects the well-being and dignity of people involved in providing food, and that is economically and environmentally viable.

Our food comes from all over the world, impacting our environment and social well-being in a variety of ways. Approximately 20 to 30 per cent of global greenhouse gas emissions stem from our food system, and around 70 per cent of water use. Likewise, supplying food results in a range of social impacts relating to job quality, worker safety, food affordability, immigration patterns and other issues. Sustainable food systems can improve the quality of the environment, while supporting human well-being now and in the future.

Richmond is blessed with a strong agricultural tradition and some of the finest farmlands in Canada. Agriculture in Richmond supports our communities' sustainability in a variety of ways – it provides food; economic activity and employment; a range of natural assets; and is a key part of our culture and heritage. Richmond residents understandably place a strong priority on protecting farmlands. Thirty-nine per cent of Richmond's land is within the bounds of the Agriculture Land Reserve, which protects farmlands from development that would degrade their agricultural potential.

To maintain Richmond's farming traditions and land base, agriculture needs to be economically viable. However, the agricultural industry in Richmond faces challenges. Continuing to support viable agriculture is a priority for Richmond.

Likewise, it is important that our community has food security, including: meeting immediate food needs; increasing people's capacity to grow, market, and prepare nutritious and sustainable food; supporting a robust local food economy; and improving the environmental and social outcomes of our food system. The City works to help develop a more food secure community.

ACHIEVEMENTS**2003**

Agricultural Viability Strategy
Richmond Agricultural Advisory
Committee (AAC established)

2012

Launch of Richmond Farm Incubator with
Kwantlen Polytechnic University
Agricultural Viability Strategy
updated as part of 2041 OCP

Select Initiatives and Outcomes include:

Supporting farms — The City's 2003 Agricultural Viability Strategy articulates how the City will support farming and food systems in Richmond. The City continues to implement this strategy, providing for the infrastructure, policies and programs required to support a viable agricultural sector.

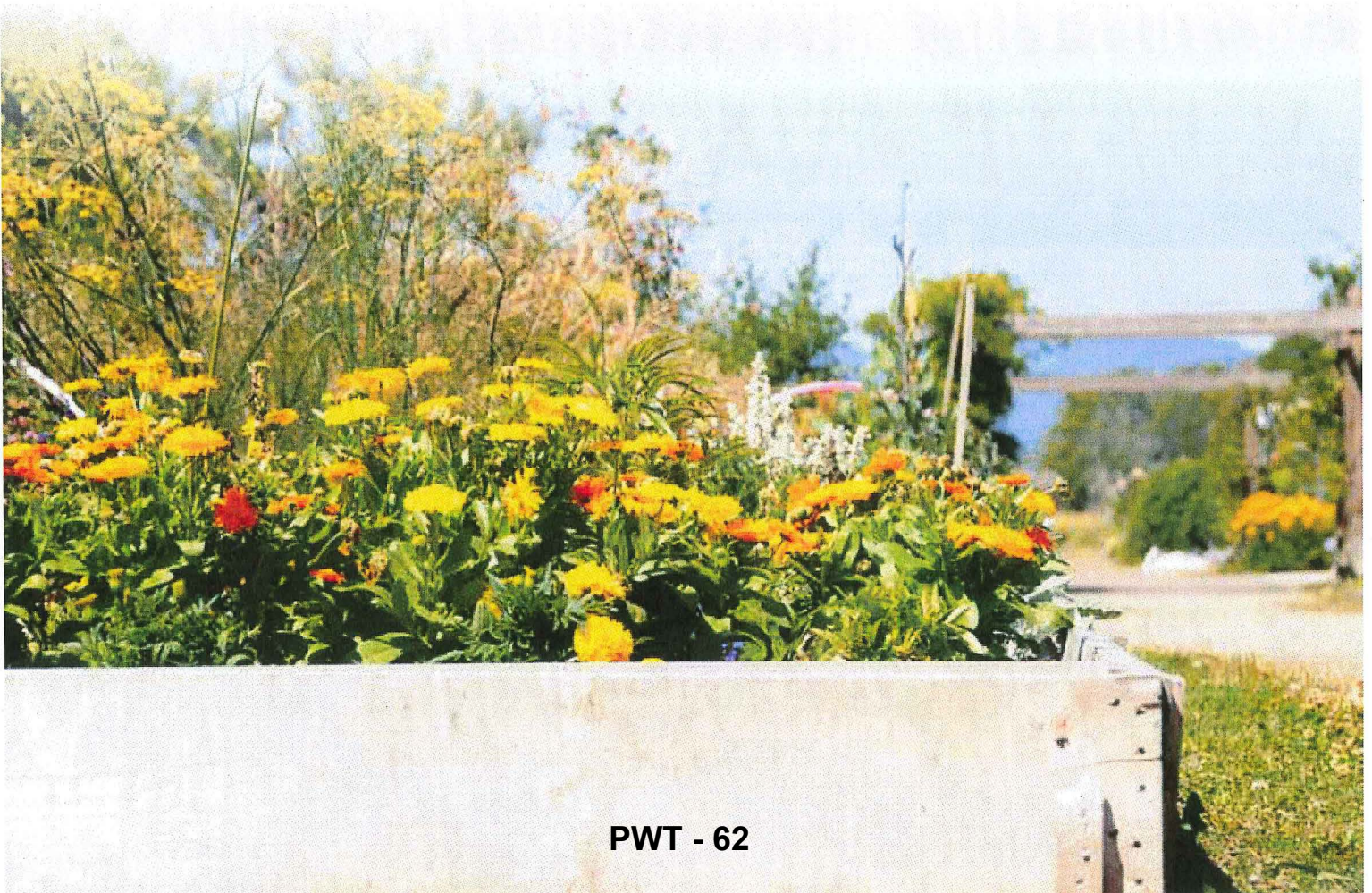
The Agricultural Land Base — Located in the Fraser River delta, Richmond possesses fertile soils and a climate well-suited to agriculture. Approximately 4,993 hectares of Richmond's land base, or 39 per cent of the City, is within the Agricultural Land Reserve (ALR). Richmond's Official Community Plan recognizes the ALR and the importance of agriculture as a contributor to the economy, a source of food, an environmental resource, and a heritage asset.

Encouraging greater food security through food sharing — The Sharing Farm is a non-profit organization with the mandate to grow produce to provide to charitable food distribution organizations, and to foster greater education and collaborative initiatives that support food security, reduce hunger, and enhance the sustainability of our food systems. Since 2008, the Sharing Farm Society has harvested and donated over 200,000 pounds of healthy fruits and vegetables to help low income families in need in Richmond. In May 2014, Council endorsed a five-year agreement for the Sharing Farm Society to continue to engage in growing organic fruits and vegetable on 1.1 hectares in Terra Nova Rural Park.

Community gardening — A number of Richmond Parks feature community gardens, which beautify neighbourhoods, build community, and provide community members the opportunity to grow nutritious food. Since 2010 the City of Richmond's community gardens have been managed by the Richmond Food Security Society (RFSS). The RFSS currently manages community gardens at eight locations throughout the city proving over 300 plots.

Supporting Agricultural Education — Through a partnership with Kwantlen Polytechnic University's Department of Sustainable Agriculture and Food Systems, the City is educating a new generation of farmers to improve food security. In July 2012, Council endorsed the allocation of 1.8 hectares at the Gardens Agricultural Park (No. 5 Rd. and Steveston Highway) for the development of an "Incubator Farm". The Incubator Farm an opportunity for graduates of the Richmond Farm School program to continue learning by actively farming in an applied, cooperative and supported manner for up to three years

Terra Nova Rural Park — The City incorporated extensive opportunities for agriculturally oriented activities into the Terra Nova Rural Park, providing opportunities to learn about and appreciate growing food. These include a Waterwise Demonstration Garden, Community Garden, use by the Fruit Tree Sharing Project, and the Terra Nova School Yard Project.



How can the average household reduce its food carbon footprint?

- Eat what you buy (e.g., saving leftovers and keeping things in the fridge)—**25%** reduction to carbon footprint.
- Reduce meat and dairy consumption—**25%**.
- Eat seasonally, avoiding hothouses and air freight—**10%**.
- Avoid excessive packaging and recycle—**6%**.
- Cook using less energy (i.e. turn off the stove when not in use)—**5%**.

Source: Michael Berners-Lee. 2011. *How Bad are Bananas? The Carbon Footprint of Everything.*

TARGETS

Maintain Richmond's share of regional employment at approximately 10%

KEY DOCUMENTS:

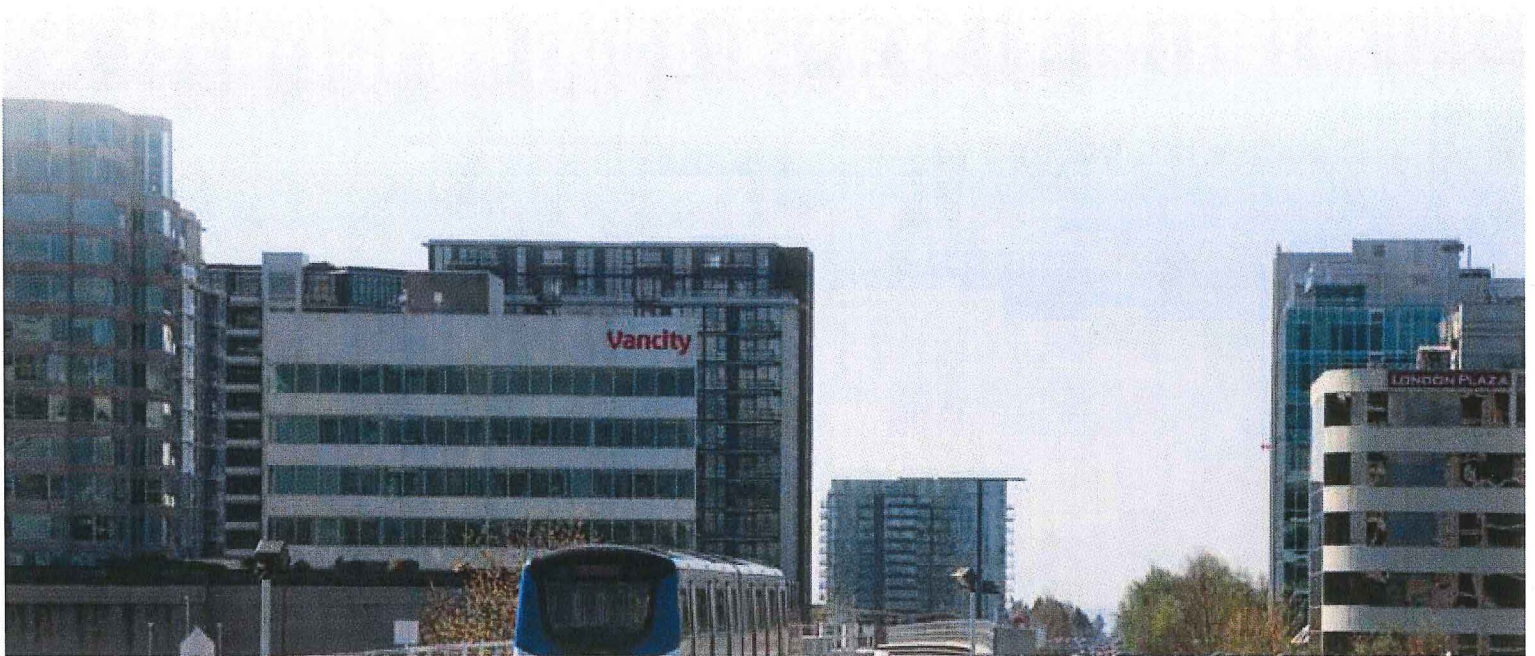
- Resilient Economy Strategy
- 2041 Employment Lands Strategy

Resilient Economy

Economic activity is fundamental to Richmond's well-being. Our economy allows people to meet their wants and needs. Having fulfilling, secure employment adds to peoples' sense of satisfaction and purpose. A bustling streetscape full of thriving local businesses makes for vibrant neighbourhoods. And the City depends on tax revenue to provide services to our community. For all these reasons, Richmond requires a strong, resilient economy – an economy that can thrive in the face of global economic and environmental change.

Richmond has a diverse economy, with key clusters including transportation, warehousing and logistics; manufacturing; wholesale; and tourism. The City is supporting and growing these sectors, to ensure a stable base of employment and economic opportunity.

Richmond's resilient economy is accomplished through a focus on business retention, as the existing commercial and industrial tax base and associated jobs support the City's ability to provide its residents with services and facilities. Maintaining a steady share of regional employment growth in sectors where Richmond has a competitive advantage also strengthens the local economy's ability to withstand major economic, social or environmental shifts.



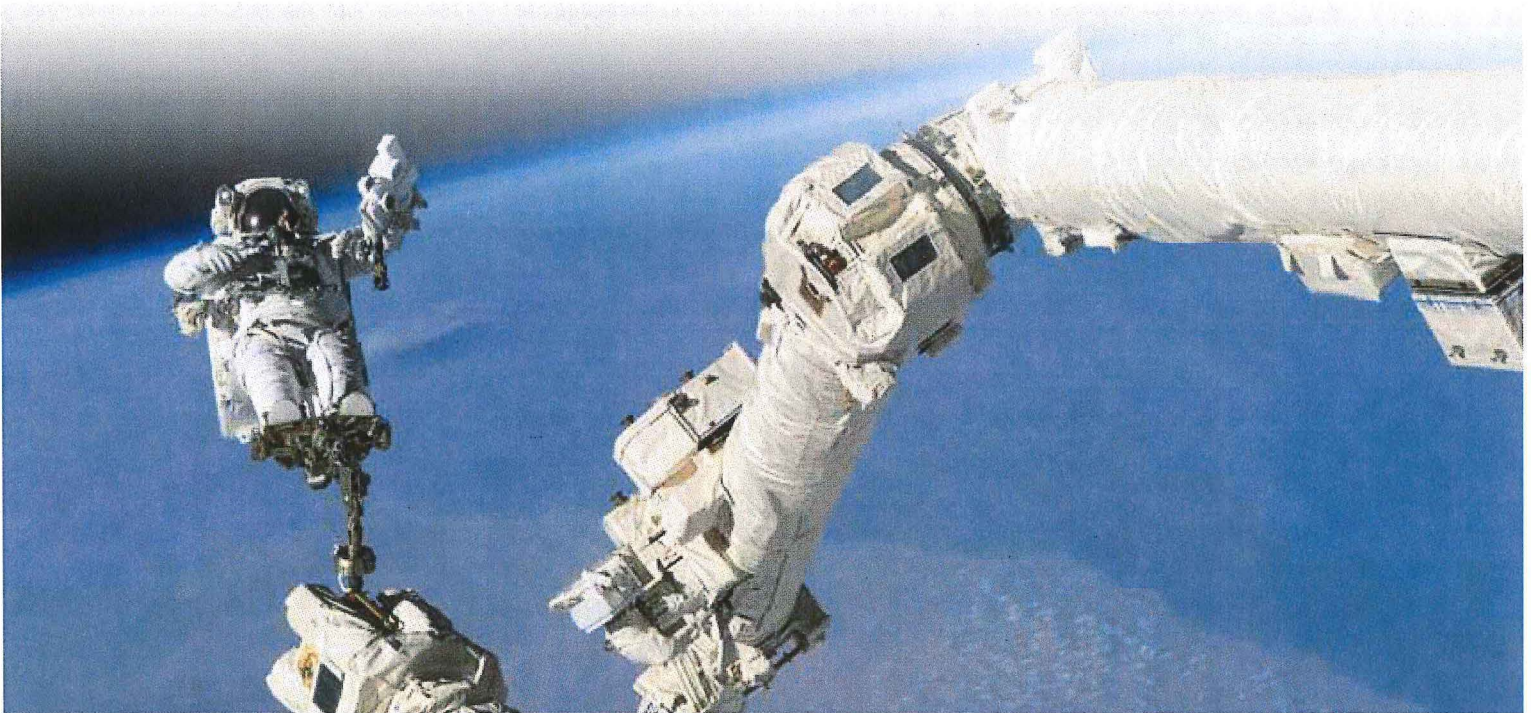
ACHIEVEMENTS

2002	2006	2010
1st ever Richmond Economic Development Strategy adopted	Business Retention, Expansion and Attraction Strategy adopted	Venue City for the 2010 Olympic and Paralympic Winter Games

Select Initiatives and Outcomes include:

Identifying strategies to support a resilient economy — The City adopted its Resilient Economy Strategy in 2014, a strategic-level blueprint for the City's economic development efforts in the coming years. The Strategy includes nine core initiatives, some focused on supporting key industry clusters such as transportation and logistics, while others focused on strengthening the City as a location for a range of businesses.

Working with our local businesses — The City's economic development efforts are anchored by its Business Development Program. Through the program, the City helps businesses expand or relocate in Richmond; provides information and gathers data and statistics; identifies resources and incentives; and helps businesses access City processes and departments, other government agencies, and business services and resources. Collaboration with business and facilitation between stakeholders will continue to be the basis of Richmond's economic development.

**ACHIEVEMENTS****2011**

1st ever Richmond Economic Development Strategy adopted

2013

Business Retention, Expansion and Attraction Strategy adopted

2014

Venue City for the 2010 Olympic and Paralympic Winter Games

Ensuring adequate employment lands — Key sectors of Richmond’s economy, such as light industry and office, face pressures on their land base. Both these sectors are important to maintaining existing businesses, and attracting clusters of industries that support high-paying jobs. Through its Employment Lands Strategy and other planning initiatives the City has worked to ensure that sufficient lands for key sectors, including light industry and office are available.

Working with the Province and other partners to expand the capacity to move goods, while improving our community’s liveability — The City continues to work to ensure that Gateway related infrastructure projects do not exacerbate auto-dependency or sprawl, and improve the livability of our communities. Opportunities include prioritizing goods movement and transit in highway developments, and implementing pedestrian and bicycle infrastructure as part of major transportation infrastructure projects.



“Public discourse about climate change has resulted in the erroneous idea that it’s all about cost, burden and sacrifice. Acting on climate change is really about profit, jobs and competitive advantage.”

Amory Lovins



KEY DOCUMENTS:

- Social Development Strategy
- Affordable Housing Strategy
- Intercultural Strategic Plan
- Older Adults Service Plan
- Youth Service Plan
- Richmond Community Wellness Strategy
- 2009–2016 Richmond Child Care Needs Assessment and Strategy
- Richmond Substance Abuse Strategy
- The Fire-Rescue Plan

Inclusive, Accessible & Safe Community

At the heart of the concept of sustainability is social equity – the idea that all people, present and future, deserve the opportunity to lead a fulfilling life that maximizes their innate capabilities. The opportunity to live a fulfilling life can be diminished by poverty; income inequality; inaccessible environments for people with disabilities or special needs; a lack of access to education, health, and other services; and discrimination based on gender, ethnicity, language, age, sexual orientation, and other factors.

Greater social well-being depends on a host of factors, including emergency services, safety, healthcare, housing, social services, and adequate income. In many cases, the City has limited jurisdiction to address social issues, which are predominantly the purview of senior levels of government – for example, the provision of healthcare, social services and social housing is historically a senior government responsibility.

Nevertheless, the City is committed to doing its part to continuing to make Richmond a more equitable, inclusive, accessible and safe community. The City is the “closest” level of government to our citizens. We can provide socially enriching services and programs, support affordable housing, and increase the capacity of different stakeholders in our community to address social issues. Moreover, given Richmond’s high proportion of immigrants and rapidly growing population, it is important that our community welcome and provide opportunity to newcomers.

An important aspect of improving our wellbeing is ensuring the safety of our community. The City supports community safety via police services, fire-rescue, and emergency planning and preparedness services.



ACHIEVEMENTS

2007

Council adopts the Richmond Affordable Housing Strategy
Affordable Housing Coordinator position established

2008

Social Planning Coordinator position established
Council adopts Older Adults Service Plan
Council adopts Youth Service Plan: Where Youth Thrive

2009

City leases building to Richmond Centre for Disability
First edition of Newcomer’s Guide released

2010

Council adopts the Richmond Community Wellness Strategy

Select Initiatives and Outcomes include:

Crime and Fire Prevention — In addition to responding response to crime, fire, and medical emergencies, the City of Richmond’s and RCMP Detachment and Fire Rescue are active preventing emergencies before they occur. In 2014, the City released its Crime Prevention Guide. Likewise, Fire-Rescue provides a range of education efforts, such as its Car Seat program, guidance on home and electrical safety, and other efforts. The City has introduced services such as Richmond RCMP’s Online Crime Reporting to improve services when crime does occur.

Social Development Strategy — In 2013, City Council adopted Building our Social Future: A Social Development Strategy for Richmond. Key goals of the Strategy are supporting greater social equity and inclusion; engaging Richmond’s citizens in civic life; and building on social assets and strengthening the capacity of community organizations to enhance Richmond’s social fabric.

Supporting youth — The Community Services Department’s Roving Leader Youth Outreach Program, initiated in 2001, is targeted to vulnerable Richmond youths aged 13-18. Roving Leaders provide youths with support and mentorship, developing and implementing services to meet the individual needs of program participants. The Roving Leaders establish positive relationships with the youths, helping them make the transition to using mainstream social and recreational opportunities and/or other community resources.

Action on Affordable Housing — On May 28, 2007, City Council approved Richmond’s Affordable Housing Strategy. This ensures access to safe and affordable housing, which is essential for building a strong and healthy community. As of December 2013, 460 subsidized housing units have been secured.

Enhancing Accessibility — In 2007, City Council approved the establishment of an annual program for the installation of enhanced pedestrian features at signalized intersections, special crosswalks and pedestrian signals that significantly improve the level of accessibility for people of different ages and abilities.



ACHIEVEMENTS

2011	2013	2014
City receives Provincial Child Care Award of Excellence in Municipal/Regional Government category	Council adopts Building our Social Future: A Social Development Strategy for Richmond West Cambie Child Care Centre Opens	Cranberry Child Care Centre Opens Web-based City Grant Program application process launched

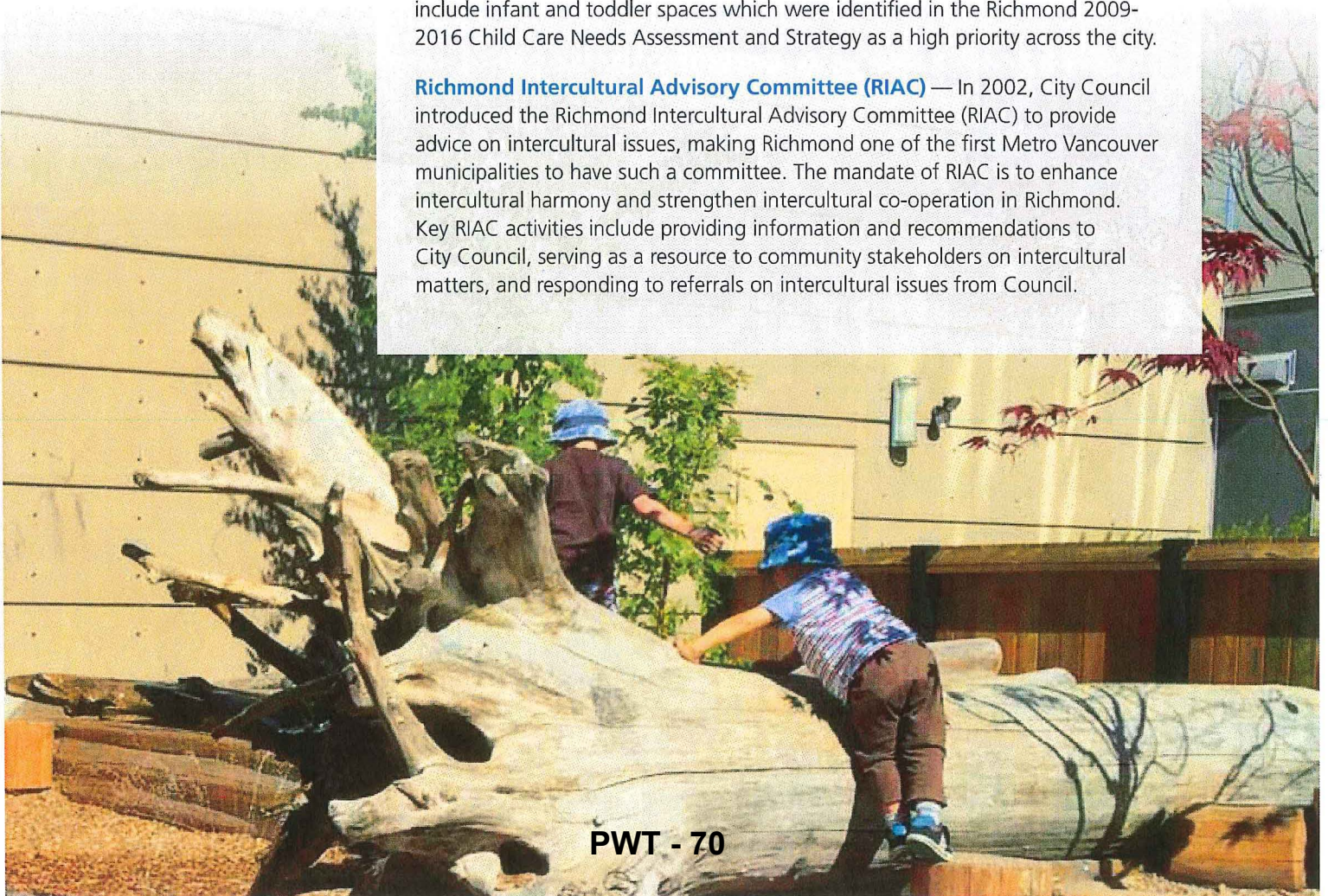
New affordable housing at the Storeys development to be opened in 2016

— The Storeys Development at Granville Avenue and Anderson Road is an innovative \$43M multi-stakeholder project that involves delivery of a high-performance, mixed-use building containing affordable housing and complimentary community services. Built on City-owned land, the project consists of 129 affordable rental units for a diverse group of low-income tenants, community/social enterprise spaces, and informal and formal supports to foster self-sufficiency, life skills and community connections.

Supporting vulnerable single parents — In 2013, in conjunction with the rezoning for Cressey Cadence development, Council approved the provision of 15 units of third stage transitional housing for lone-parent families and expectant mothers. The transitional housing will be part of a larger mixed-use residential and commercial development of 244 residential units. The transitional housing will be complemented by adjacent City-owned child care centre and a network of formal and informal community supports.

Child Care Initiatives — Since the 1990s, the City has pursued strategic opportunities to pursue child care facilities through the rezoning process for private developments. To date, these negotiations have resulted in the establishment of six City-owned child care facilities offering 195 licensed child care spaces serving infants/toddlers and 3 to 5 year olds. Five additional child care facilities have been negotiated and when completed will add over 200 more licensed spaces to the City's inventory. All of the recently negotiated facilities will include infant and toddler spaces which were identified in the Richmond 2009-2016 Child Care Needs Assessment and Strategy as a high priority across the city.

Richmond Intercultural Advisory Committee (RIAC) — In 2002, City Council introduced the Richmond Intercultural Advisory Committee (RIAC) to provide advice on intercultural issues, making Richmond one of the first Metro Vancouver municipalities to have such a committee. The mandate of RIAC is to enhance intercultural harmony and strengthen intercultural co-operation in Richmond. Key RIAC activities include providing information and recommendations to City Council, serving as a resource to community stakeholders on intercultural matters, and responding to referrals on intercultural issues from Council.



Orienting Newcomers — The City of Richmond’s Newcomers Guide to Richmond, a document available in five different languages that is aimed at assisting newcomers integrate quickly and easily into the community. The Guide, first produced in 2008, explains the role of municipal government and introduces newcomers to local services and opportunities (e.g., employment, recreation, youth and family support services).

Wellness Programs — The Community Services Department’s Seniors Wellness Program targets frail, isolated and at risk older adults, and is geared to allowing older adults to “age in place,” feel safe and remain independent. A key component of the program is Wellness Connections, a program that offers transportation to and from home, nutritious meals, fitness classes, education sessions related to health and tours of community amenities. Community Services offers seven wellness clinics to help older adults better manage their health, served by dedicated volunteer nurses and health practitioners.

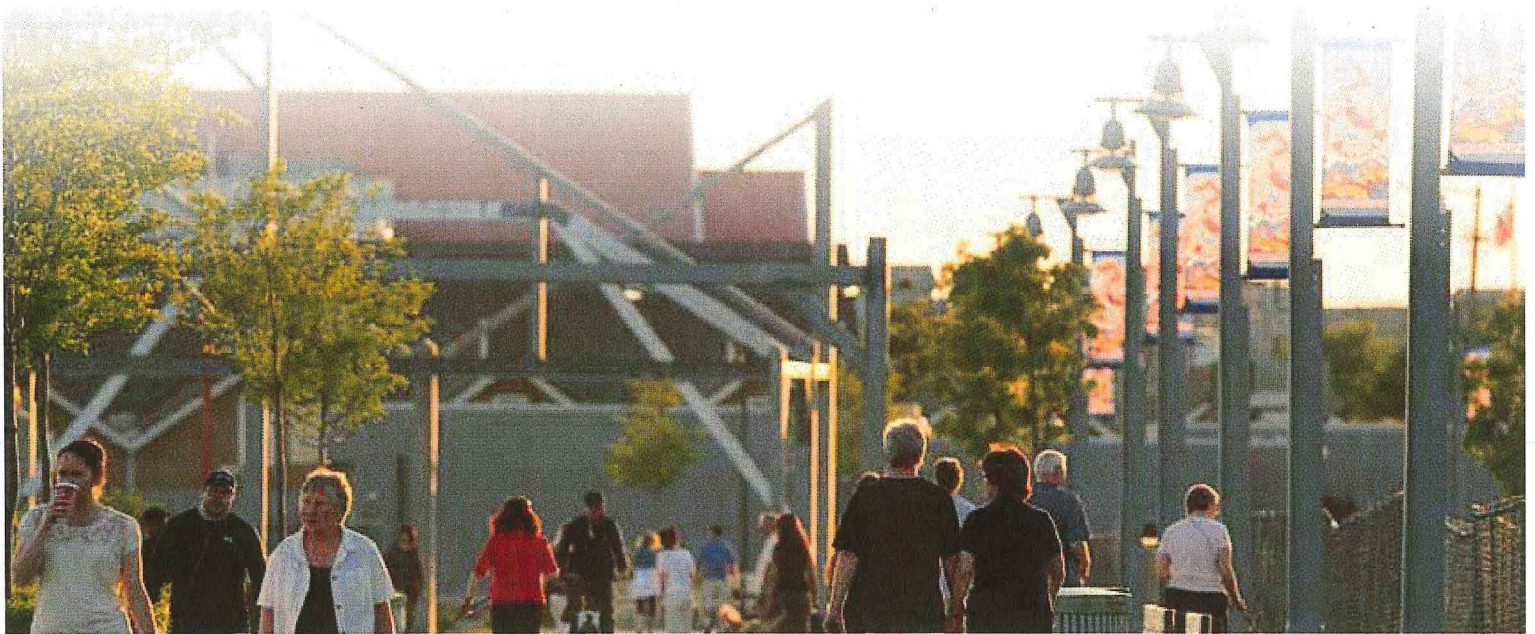


Vibrant Community

A sustainable community fosters well-being, health, and sense of community among its residents. Richmond is committed to supporting a flourishing culture and a high quality of life for its residents.

A flourishing cultural scene provides a City a distinct, shared identity. The City is committed to fostering a thriving, resilient, diverse and creative community. The City envisions a community in which: people have a strong sense of identity; citizens are empowered, engaged and connected; and there are opportunities for cultural engagement, lifelong learning, celebrating heritage, community revitalization and engaging in the creative economy. Fostering such a community both benefits our citizens and establishes Richmond as a tourism destination.

Likewise, the City provides a range of recreation services, programs and facilities to support community wellness. Through the City's parks and recreational services, such as Richmond's community centers, pools, playing fields, and other amenities, we provide opportunities for healthy, enriching lives for our citizens.



ACHIEVEMENTS

2008

2010 Arts and Culture Plan endorsed

2010

1st annual Doors Open
O Zone, Richmond's 2010 Winter Olympics Celebration Site 2010
Public Art Program Policy update

2011

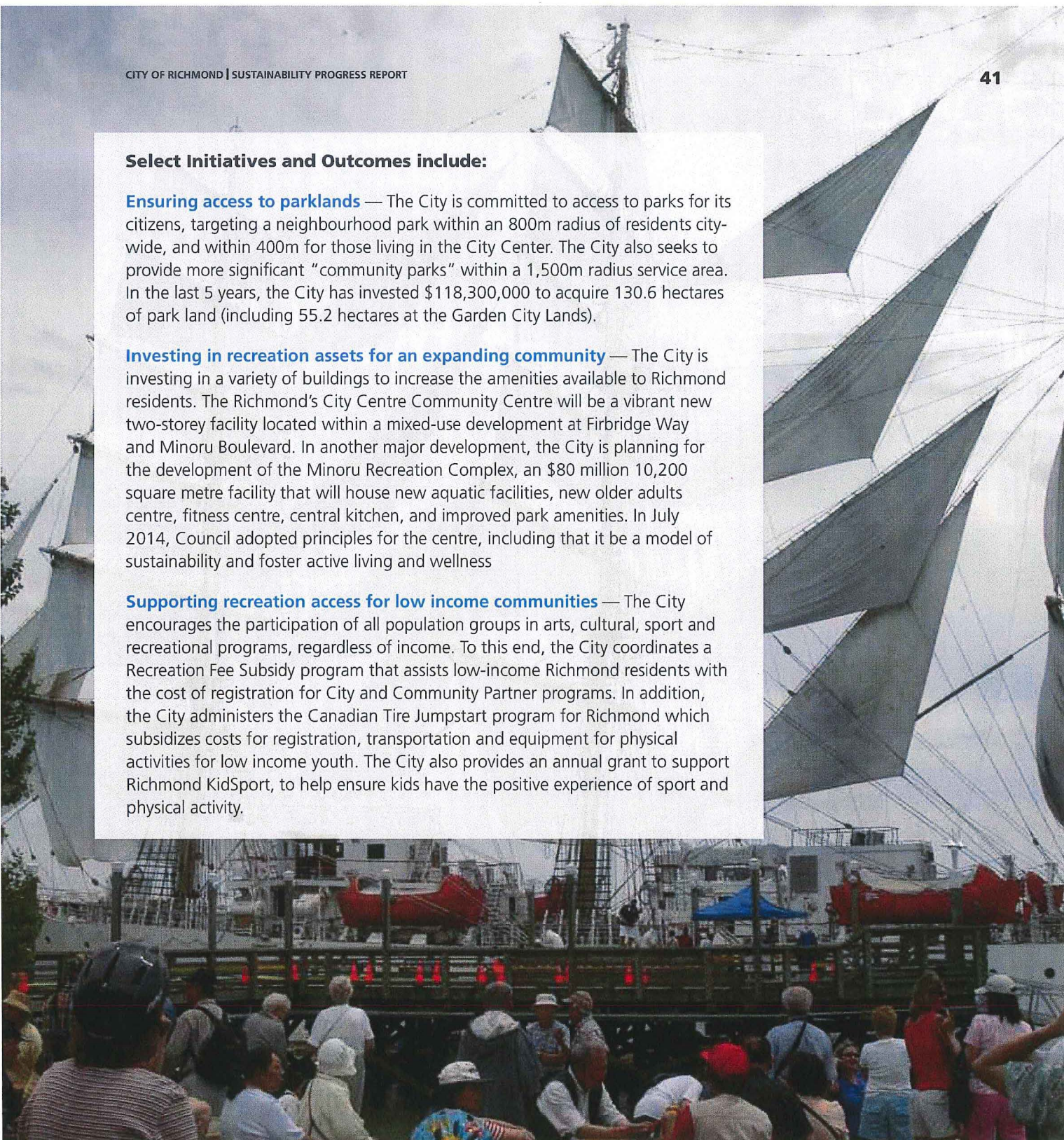
1st annual Culture Days, a celebration of arts and culture
Media Lab opens
1st annual Your Kontinent: Richmond International Film and Media Arts Festival

Select Initiatives and Outcomes include:

Ensuring access to parklands — The City is committed to access to parks for its citizens, targeting a neighbourhood park within an 800m radius of residents city-wide, and within 400m for those living in the City Center. The City also seeks to provide more significant “community parks” within a 1,500m radius service area. In the last 5 years, the City has invested \$118,300,000 to acquire 130.6 hectares of park land (including 55.2 hectares at the Garden City Lands).

Investing in recreation assets for an expanding community — The City is investing in a variety of buildings to increase the amenities available to Richmond residents. The Richmond’s City Centre Community Centre will be a vibrant new two-storey facility located within a mixed-use development at Firbridge Way and Minoru Boulevard. In another major development, the City is planning for the development of the Minoru Recreation Complex, an \$80 million 10,200 square metre facility that will house new aquatic facilities, new older adults centre, fitness centre, central kitchen, and improved park amenities. In July 2014, Council adopted principles for the centre, including that it be a model of sustainability and foster active living and wellness

Supporting recreation access for low income communities — The City encourages the participation of all population groups in arts, cultural, sport and recreational programs, regardless of income. To this end, the City coordinates a Recreation Fee Subsidy program that assists low-income Richmond residents with the cost of registration for City and Community Partner programs. In addition, the City administers the Canadian Tire Jumpstart program for Richmond which subsidizes costs for registration, transportation and equipment for physical activities for low income youth. The City also provides an annual grant to support Richmond KidSport, to help ensure kids have the positive experience of sport and physical activity.



ACHIEVEMENTS

2012	2013	2014
<ul style="list-style-type: none"> Arts and Culture Grants program created Arts Strategy update Museum Feasibility Study adopted 	<ul style="list-style-type: none"> Tram Building completed Seine Net Loft at Britannia restoration completed Japanese Fishermen’s Benevolent Society Building restoration begins Branscombe House restoration begins 	<ul style="list-style-type: none"> Tram restoration begins

Maximizing the benefits of our relationships and City volunteers — The City is recognized as a leader in collaborating with community organizations, other levels of government, non-governmental organizations, and the private sector to deliver cultural and recreational programming. Likewise, the City boasts a robust approach to coordinating volunteers and maximizing the benefits of volunteering in our community – through the City's online Volunteer Recruiter systems (icanhelp.richmond.ca), the City facilitates a wide variety of volunteer opportunities for students, adults and seniors. Richmond's volunteer system helps participants give back to their community, have fun, and build valuable skills.

Supporting public art — First adopted in 1997 and updated in 2010, the Richmond Public Art Program promotes, supports and facilitates the creation of public art within the City. The aim of the Public Art Program is to create a collection of highest quality art works through private and public development contributions. Public art works have been added to the City's public realm and numerous programs focusing on art in the public realm including the annual Lulu Series talks and Pecha Kucha evenings have been initiated.

Grants for arts and culture — In 2012 Council created the Arts and Culture Grants program. Designed to strengthen the infrastructure of arts and culture organizations, increase the investment in arts opportunities, show support for the careers of local artists and support a wide range of artistic and cultural activity, the program offers two types of grants—operating assistance and project assistance.



Live-Work Space for Artists — Two rezonings in the Arts District of City Centre approved by Council which include 37 affordable artist live work units. Scheduled to be completed in 2015, the ARTS units will provide affordable living and working spaces for artists allowing them to live and create and contribute to the cultural ecology of the City.

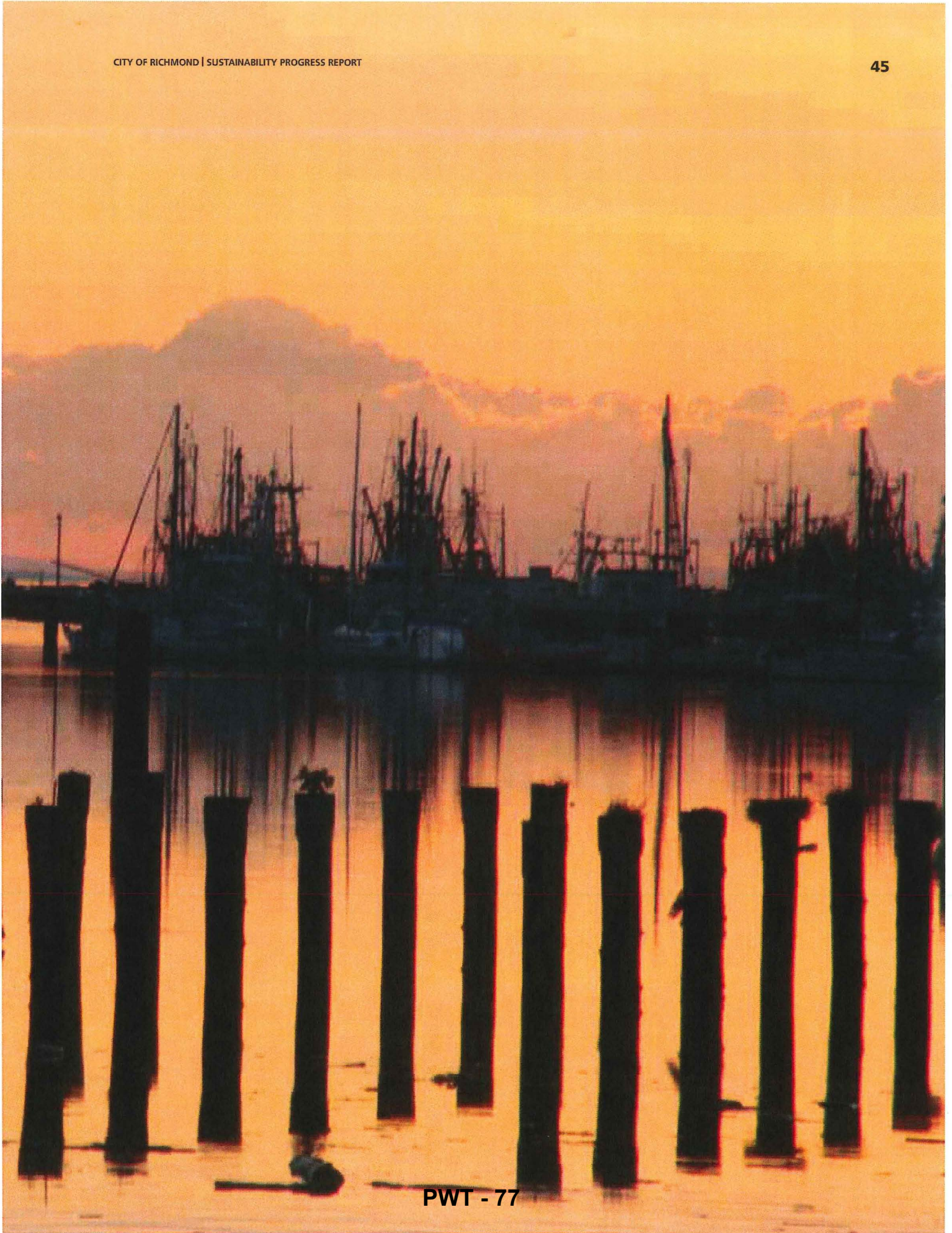
Restoring Branscombe House — In 2012 a unique and creative partnership was formed for the restoration of the historic Branscombe House. The strategy involved philanthropic support and in-kind labour enabling the City to initiate the required work to conserve and protect this valued heritage resource. Completion of the upper floor in the fall of 2014 will allow public use of this building.

Media Lab — The City has transformed an under utilized space in the Cultural Centre into a Media Lab. With a particular focus on youth, the Media Lab provides residents the opportunity to access and develop media and computer skills which can be applied towards artistic activities and marketable job skills.

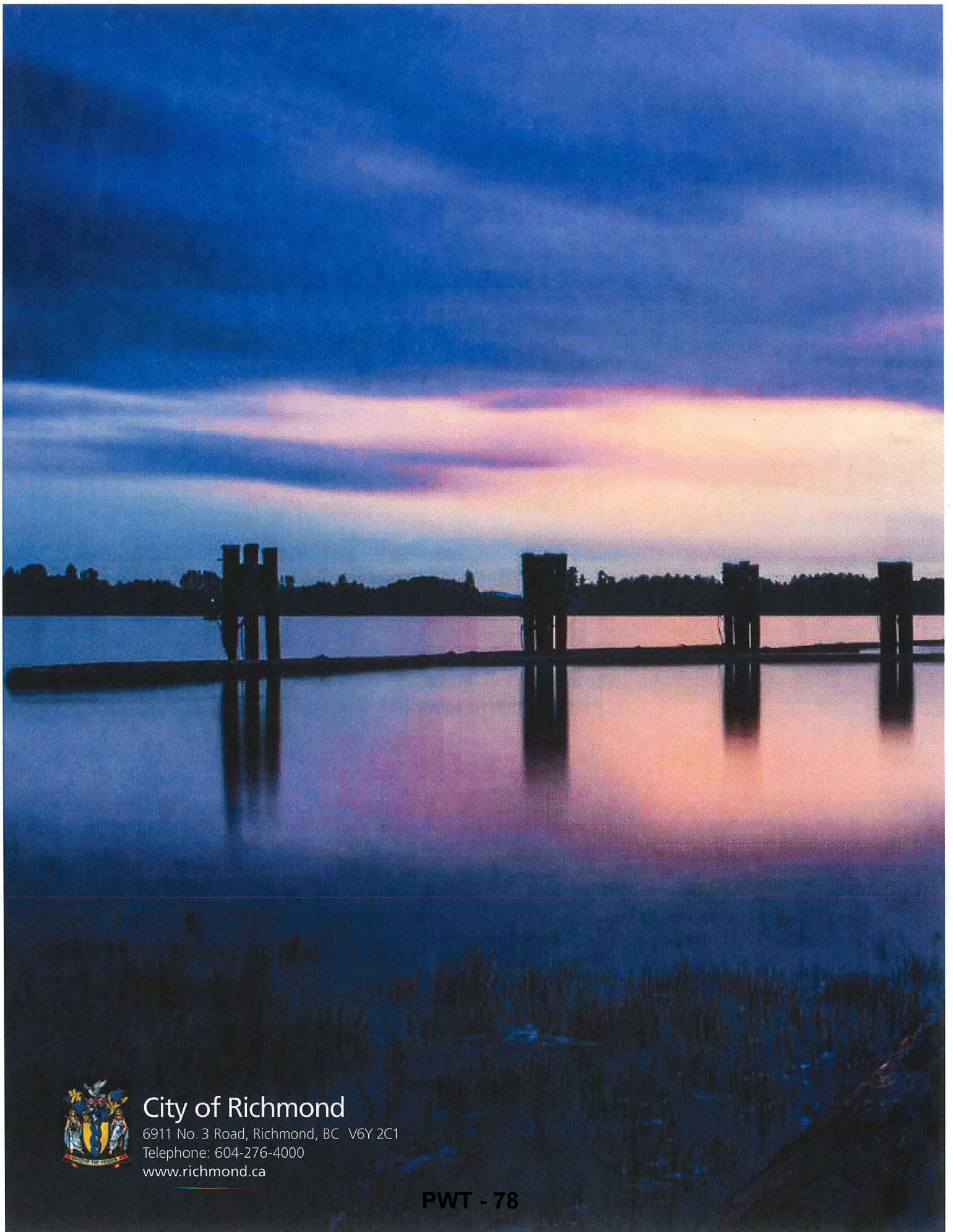


Conclusion

This document highlights some of the many ways in which the City is working towards a more sustainable Richmond. These efforts position the City as a leader in our region and beyond. The future will hold challenges and opportunities associated with social and demographic changes; a rapidly evolving economy; and environmental and climate change. The City will continue to work to enhance Richmond's sustainability and resilience – a community that optimizes social well-being, economic prosperity, and a thriving environment.



PWT - 77



City of Richmond

6911 No. 3 Road, Richmond, BC V6Y 2C1

Telephone: 604-276-4000

www.richmond.ca

PWT - 78



City of Richmond

Report to Committee

To: Public Works and Transportation Committee **Date:** October 29, 2014
From: John Irving, P.Eng. MPA **File:** 10-6600-10-02/2014-
 Director, Engineering Vol 01
Re: **Alexandra District Energy Utility Phase 3 Capital Project**

Staff Recommendation

That \$8.0 million from unspent utility capital projects, previously approved by Council, be utilized to fund design, construction and commissioning expenditures related to the expansion of Alexandra District Energy Utility Phase 3.

John Irving, P.Eng. MPA
 Director, Engineering
 (604-276-4140)

REPORT CONCURRENCE		
ROUTED TO: Finance Division	CONCURRENCE <input checked="" type="checkbox"/>	CONCURRENCE OF GENERAL MANAGER
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS: 	APPROVED BY CAO

Staff Report

Origin

At the Regular Council Meeting of July 28, 2014, Council adopted the following motion:

That:

- 1. The expansion of the Alexandra District Energy Utility include additional geo-exchange fields in the West Cambie Neighbourhood Park, with supplemental conventional energy systems for back up, as presented in the report titled "Alexandra District Energy Utility Expansion Phase 3", dated July 3, 2014, from the Director, Engineering, be endorsed; and*
- 2. Capital submissions totalling \$12.3M for design, construction and commissioning of the ADEU Phase 3 be submitted for Council's consideration as part of the City's Five Year Financial Plan (2015-2019).*

The purpose of this report is to detail the funding requirements and obtain approval to utilize up to \$8.0 of the \$12.3 million required through temporary financing from unspent utility capital projects for capital expenditures for construction, and start up costs related to the expansion of Alexandra District Energy Utility Phase 3.

Analysis

ADEU Expansion

The current system is estimated to be sufficient to service the three existing connected sites: Remy, Mayfair and Omega. In order to service more buildings, both heating and cooling capacity and associated infrastructure will need to be expanded.

Based on the most current construction schedules provided by developers, the system needs to be expanded to provide energy services to new customers in the third quarter of 2015. The most advanced project is Polygon's development, Alexandra Court, planned for the first occupancy in May 2015. In addition, more developments, including SmartCentres, are projected to be completed in years 2015 to 2018. Timelines and building sizes are summarized in Table 1.

A portion of the energy required to service new customers will be provided by an additional geo-exchange field along the eastern edges of the West Cambie Neighbourhood Park, planned to be constructed in the summer 2015. Additional natural gas boilers and cooling towers will be installed in Spring 2015 for supplement and backup. Large format retail customers (SmartCentres) would receive heating and cooling from an air source heat pump system currently scheduled to be installed in early 2016.

Table 1: Development Timing in the ADEU Service Area

	Floor Area (ft²)	Use	Occupancy Date*
Alexandra Court	515,000	Residential	May 2015
Jamatkhana Temple	26,500	Institutional	2015
9500 Cambie	108,000	Residential	2015
Alexandra Gate	194,000	Residential	2015
SmartCentres	286,000	Commercial	2016
Jingon	132,000	Residential	2016
Polygon East	262,000	Residential	2018

* Note: Occupancy typically occurs over the course of several months after occupancy is issued.

The existing energy centre will be expanded to accommodate all equipment necessary for the full build out of the ADEU system. First detailed design concept shows that the total building area will be around 600 m².

New energy transfer stations (ETS) will be built in each new customer building. The cost of design and construction of the ETS's will be funded from Service Connection Installation Fees collected from developers.

It is estimated that \$12.3 million 2014 dollars (inclusive of design, project management and contingency) will be required for ADEU Phase 3 expansion, which will include:

- expansion of the energy centre (to accommodate equipment requirements for the full build out);
- extension of the distribution piping to service new customers south of Odlin Rd;
- installation of air source heat pumps and natural gas boilers to service SmartCentres, with connection to ADEU so that excess energy can be delivered to residential customers; and
- increase in heating and cooling capacity to service new customers in the north and south loop via a geo-exchange field along the eastern edge of the West Cambie Neighbourhood Park, as well as boilers and cooling towers.

This funding will be needed over the next four years to complete the Phase 3 expansion. Funding for this expansion will provide infrastructure to service an additional seven developments and a 1,530,000 square feet floor area. Once this expansion is completed, ADEU will be servicing a 2,280,000 square feet floor area that represents 65% of the planned serviced floor area. Phase 1 and 2 funding of \$4.8M provided infrastructure to service three developments and a 750,000 square feet floor area.

Financing Strategy

In the report titled "Alexandra District Energy Utility Expansion Phase 3," dated July 3, 2014, staff recommended that the cost of the Phase 3 expansion be funded by the City's existing Utility General Surplus, which has a current balance of \$24.4M. The Utility General Surplus balance is comprised of Water and Sanitary Sewer General Surplus balances of \$15.2M and \$9.2M respectively. The Utility General Surplus is not restricted in use (as with Reserves) or directed for a

specific purpose (as with Appropriated Surplus). Any internal borrowing from existing surplus funds will be repaid with interest.

The timing of the internally borrowed funds can be adjusted to match the timing of construction over the next four years. The repayments will be funded by revenues generated from the customer fees. The repayment terms can be arranged to correspond with the timing of revenues received. The revenues will increase over the first three years of the Phase 3 expansion as the additional developments are completed.

Financial Impact

\$8.0 million will be temporarily financed from unspent utility projects in 2014 due to the requirement to start construction immediately to service first developments in the Spring of 2015. Staff will include a submission for the full capital project in the 2015 capital budget and once approved all amounts borrowed from the existing capital projects will be returned. All ADEU capital and operating costs will be recovered through revenues from user fees, and all borrowed amounts will be repaid with interest as incorporated into the financial model.

Conclusion

Based on the most current construction schedules provided by developers, the ADEU system needs to be expanded to provide energy services to new customers early next year. It is recommended that \$8.0 million be borrowed immediately from unspent utility projects to provide project funding in 2014 for capital expenditure for design, construction and commissioning of Phase 3 system expansion.



Alen Postolka, P.Eng., CP
Acting Senior Manager, Sustainability and District Energy
(604-276-4283)

AP: ap