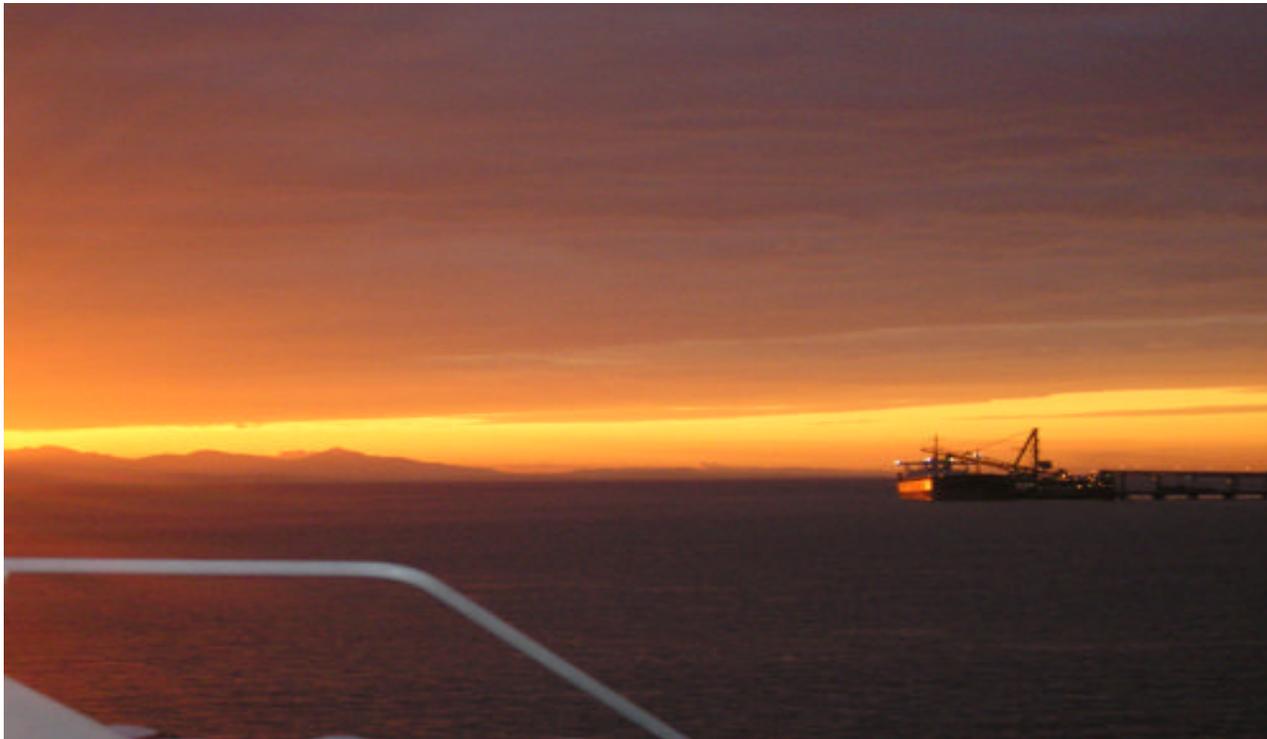
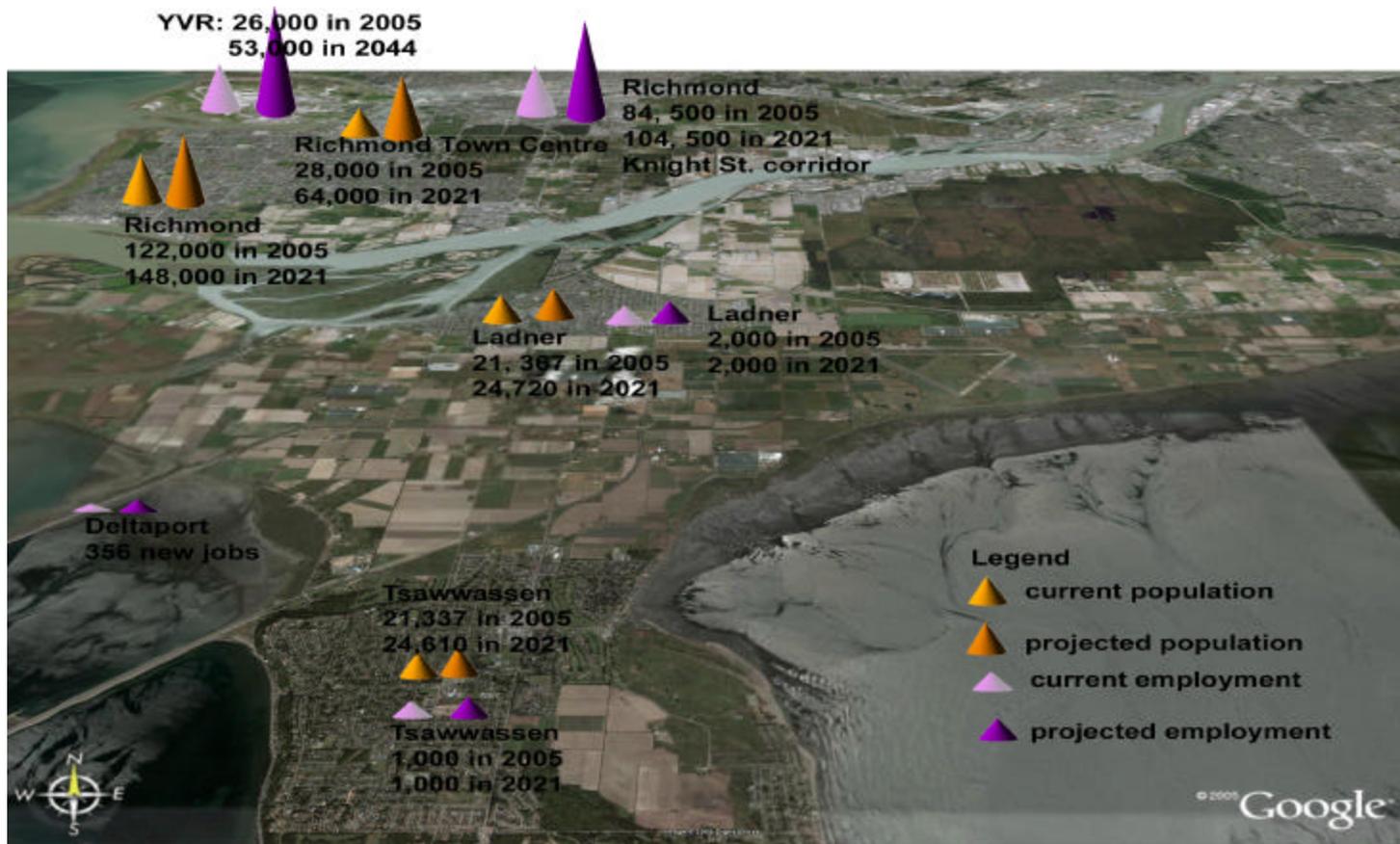


# The Lowlands

## Richmond, Ladner and Tsawwassen





### The Lowlands

Sea Island (YVR), Richmond (Lulu Island), Ladner and Tsawwassen

## Population and Employment in the Lowlands

### Population and Employment are linked

In the Lowlands region employment growth follows population growth closely.

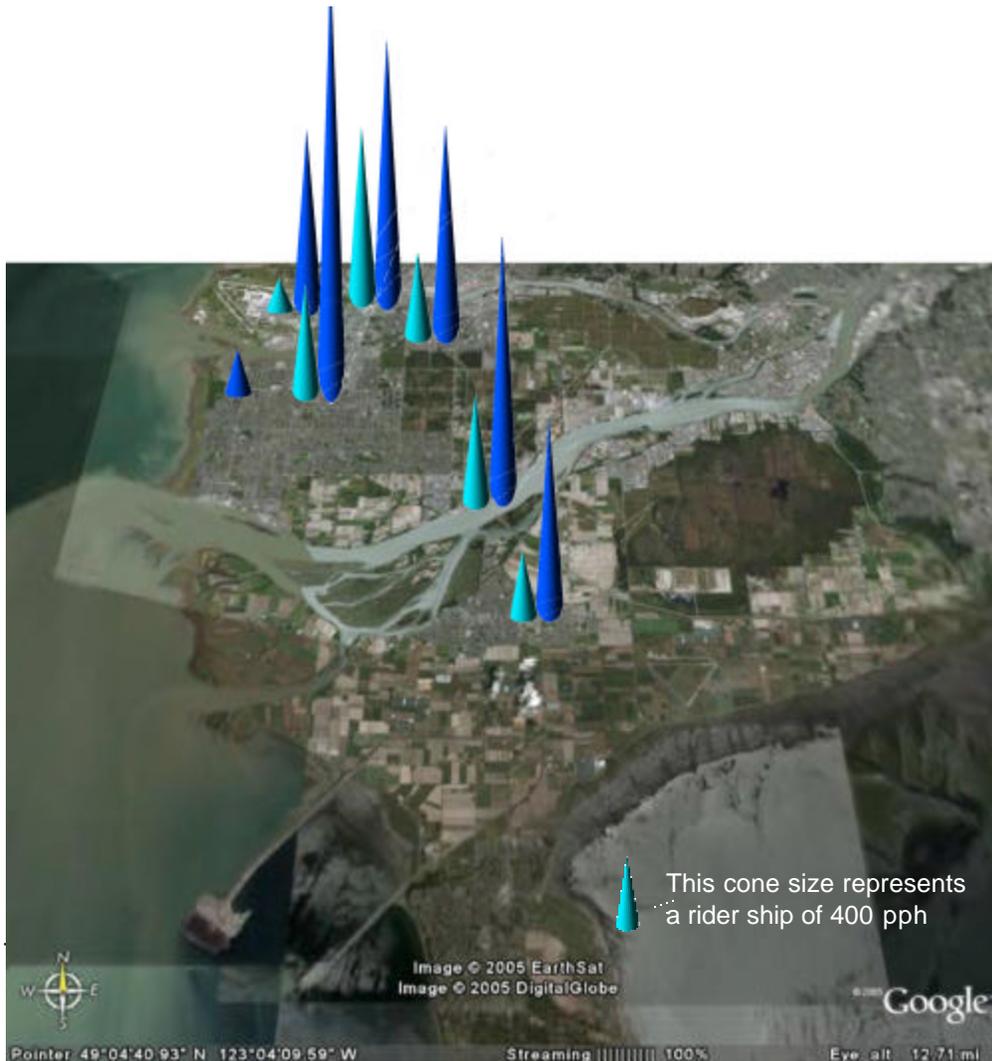
#### Lowland Population Growth:

Richmond Town Centre (densification area) is experiencing the most growth, doubling by 2021.

South Delta is experiencing the least growth. Populations here are almost unchanged.

#### Lowland Employment Growth

YVR's work force is doubling in size and leading the region. Richmond's Knight St. business parks are second. South Delta's job growth is almost unchanged. Deltaport is the exception.



Major transit hot spots in the area are in the Richmond Towncenter which is serviced by the 98B express bus to downtown, and is a major destination for the local buses. The planned new Skytrain line (RAV line) will connect the airport and Richmond Towncenter to Downtown Vancouver by 2010. This line is expected to increase rider ship by at least a factor of 5.

Other hot spots are shown along the mayor route from Vancouver through Richmond to the southern and eastern lying suburbs. The Arthur Laing Bridge, the Oak Street Bridge, and the Deas Tunnel are major traffic and bus route convergence points, and therefore are transit hotspots. The growth in rider ship along these points indicates the overall growth in transit demand for this area of the region.

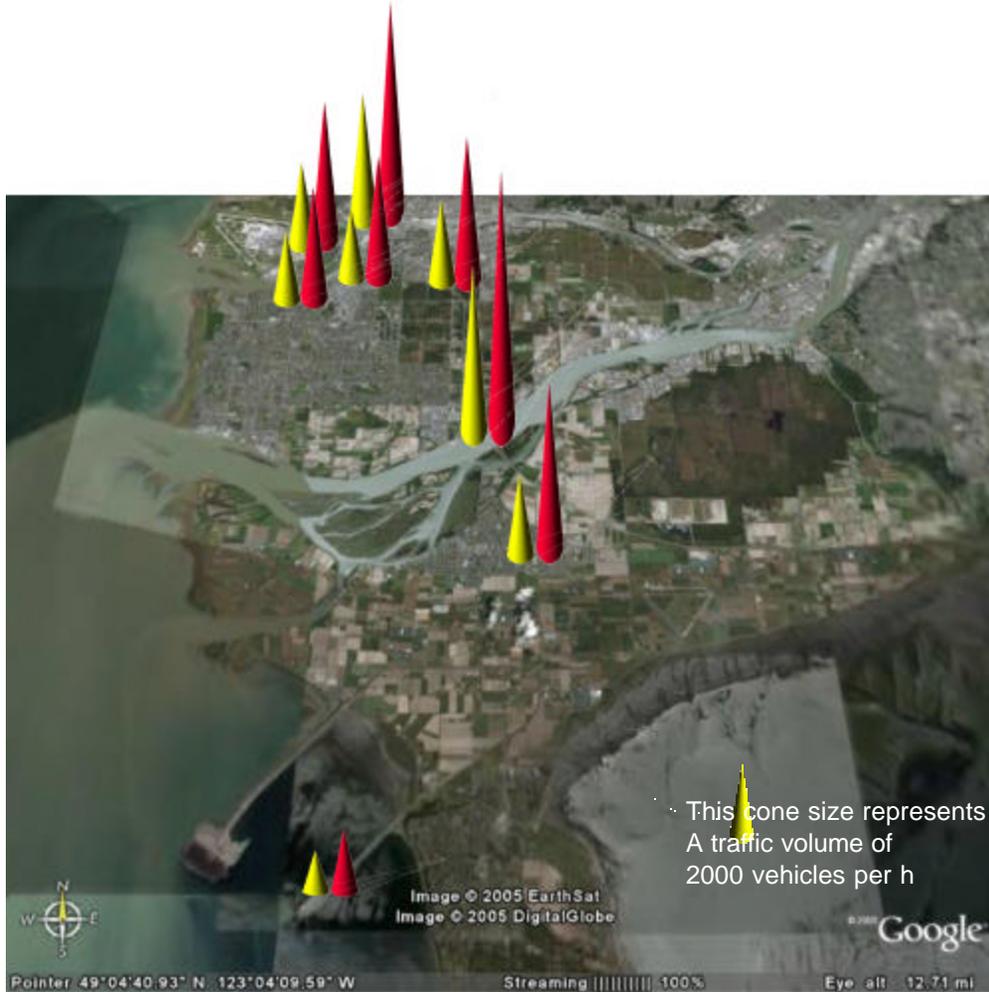
## Transit Rider Ship Hot Spots for Richmond, and South Delta Area now and projected



Rider ship now  
Based on 1991 and 2003 data



Rider ship projected  
for 2021



The current traffic hot spots are the Arthur Laing Bridge, the Oak Street Bridge, the No 2 Rd Bridge, Highway 99 and the Deas Tunnel. Congestion in Richmond occurs mainly around the town center, especially along No 2rd. Richmond's overall traffic is predicted to increase by 28% by 2021. Traffic in South Delta is only predicted to increase by 11%, but increased ferry traffic and transportation of goods are expected to hike up traffic along the Highway 99.

The transportation hot spots stay the same. In the case of the bridges and the tunnel, the traffic volumes are predicted to grow substantially. In order to speed up goods movement and decrease congestion along Hwy 99, a new highway from the Ferry Terminal towards Surrey heading East is planned for the future. Richmond's traffic volumes will greatly depend on the success of the RAV line in increasing transit use and decreasing congestion.

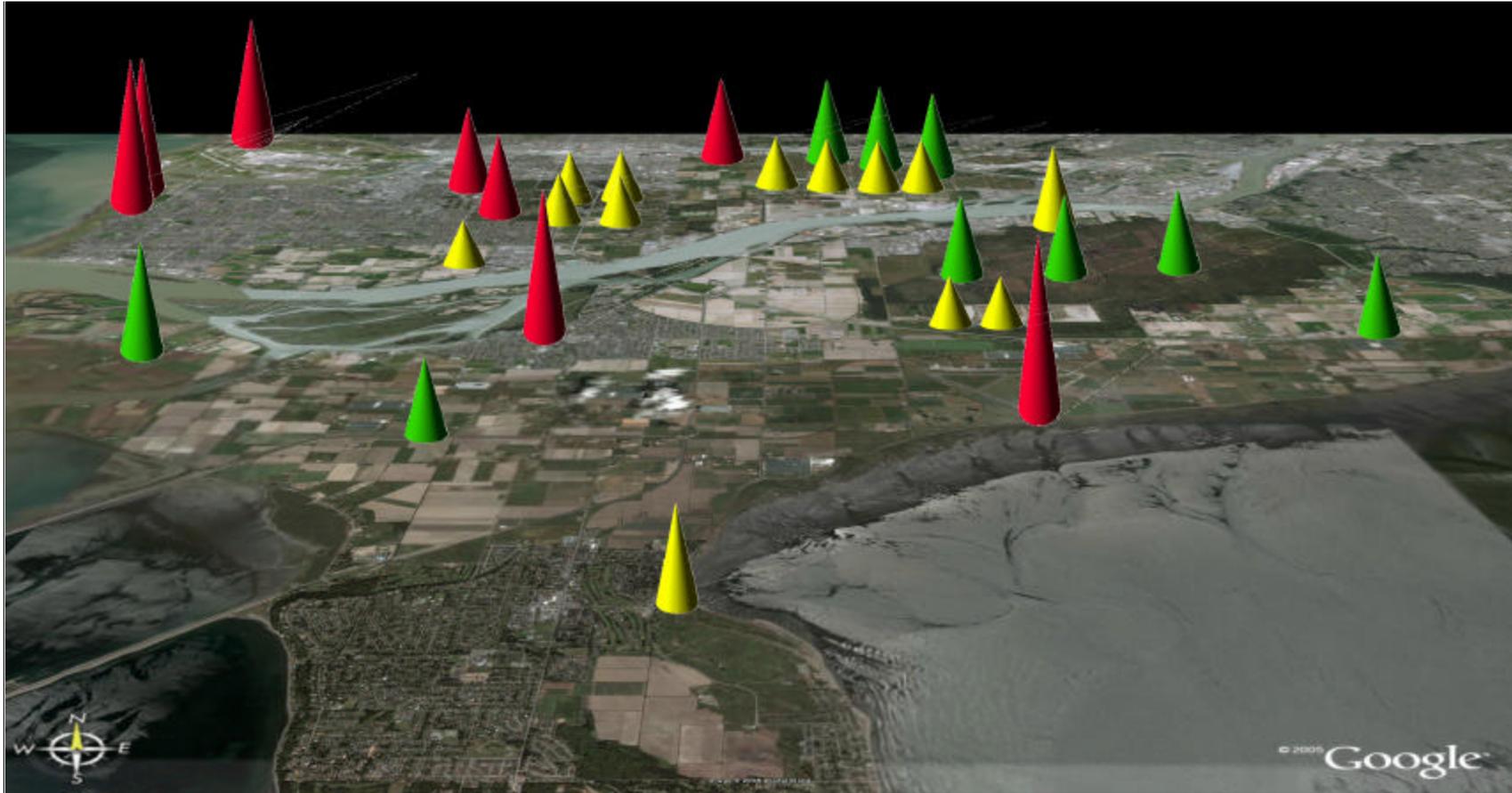
## Transportation Hot Spots for Richmond, and South Delta Area now and projected



Transportation now  
Based on 1991 and 2003 data



Transportation projected  
for 2021



Critical parts of the Fraser Estuary and the ALR , the Foreshores may come under threat from development or global warming.

## FIRST ORDER HABITATS THREATENED

### “Necessary” development jeopardizes habitat

Much of the lowlands area lies below sea level. Many of the areas at the mouth of the Fraser are first order habitats with high productivity.(FREMP data) They are unfortunately also areas for transportation hubs.

Both of the airports in this region, Richmond and Boundary Bay are at the mouth of the Fraser. Both are likely to expand by 2056 and thus destroy valuable habitat areas. Vancouver airport (YVR) is on the Pacific flyway and its expansion could disrupt migratory patterns of birds not only in this region but the entire Pacific bird population.

Other threats to the ecological balance of the region lie in the expansion of urban fabric onto the ALR and foreshore. Although Delta has provisions in its OCP to protect the Foreshore, it excludes that directly adjacent to Ladner. If Ladner grows during the next 50 years with the same wording in the OCP, other areas of the Foreshore not currently being threatened may come under threat.

The Lowlands: Jamie, Greg, Marina

# Sources

## **YVR**

Airport Jobs 26,000 direct and indirect.

[http://www.yvr.ca/authority/facts/eco\\_impact.asp](http://www.yvr.ca/authority/facts/eco_impact.asp)

20million by 2010.

<http://www.aviation.ca/content/view/1443/117/>

2044, 53,000

[http://www.yvr.ca/pdf/authority/sustainability\\_report\\_2004.pdf](http://www.yvr.ca/pdf/authority/sustainability_report_2004.pdf)

## **Richmond**

2021 population, 20%-25% seniors.

122 000 Rest now, City Centre 28,000 now and 64,000 then, rest 1 48 000.

<http://www.richmond.ca/services/planning/ocp/history/ocp202.htm>

Residents are clustered with little sprawl

<http://www.smartgrowth.bc.ca/downloads/Sprawl2004.pdf>

80,700resident work force, 104,500jobs

knight street corridor is main business park area.

7,683 commute to work in Richmond, 1024 from Richmond.

<http://www.city.vancouver.bc.ca/commsvcs/cityplans/transportation/insightintotransportation.htm>

Employment Growth Richmond

<http://www.city.vancouver.bc.ca/ctyclerk/cclerk/000914/pe6.htm>

20,000 new jobs in Richmond proper (knight street)

20,000 at YVR.

## **Delta**

Industry is located at Roberts Bank, Boundary Bay airport. Policy to build over vacant industrial land.

[http://www.corp.delta.bc.ca/assets/CPD/PDF/ocp\\_draft\\_20050901.pdf](http://www.corp.delta.bc.ca/assets/CPD/PDF/ocp_draft_20050901.pdf)

Land Use Maps

[http://www.corp.delta.bc.ca/assets/HRCP/PDF/community\\_profile\\_brochure.pdf](http://www.corp.delta.bc.ca/assets/HRCP/PDF/community_profile_brochure.pdf)

2000 jobs in Ladner and 1000 in Tsawwassen. 15000?

<http://www.gvrd.bc.ca/growth/transport2021/report9-part1.pdf>

Populations in 2021

<http://www.gvrd.bc.ca/growth/transport2021/report9-part1.pdf>

21800 now in Ladner

<http://www2.jurock.com/areainfo/ladner.asp>

Ladner and tsawwassen population

[http://www.corp.delta.bc.ca/assets/CPD/PDF/census2001\\_population.pdf](http://www.corp.delta.bc.ca/assets/CPD/PDF/census2001_population.pdf)

2021 population Ladner 21367 2021 (24720) and Twwassen 21337 2021 (24610)

[http://www.corp.delta.bc.ca/assets/CPD/PDF/ocp\\_draft\\_20050901.pdf](http://www.corp.delta.bc.ca/assets/CPD/PDF/ocp_draft_20050901.pdf)

[http://www.corp.delta.bc.ca/assets/CPD/PDF/census2001\\_population.pdf](http://www.corp.delta.bc.ca/assets/CPD/PDF/census2001_population.pdf)

Job growth is expected to stay flat

<http://www.gvrd.bc.ca/growth/transport2021/report9-part1.pdf>

Roberts Bank

[http://www.eao.gov.bc.ca/epic/output/documents/p212/d19622/1108348728953\\_f26c46a9c4474ae28f98bc46cce3d3f0.pdf](http://www.eao.gov.bc.ca/epic/output/documents/p212/d19622/1108348728953_f26c46a9c4474ae28f98bc46cce3d3f0.pdf)

Transpo- Deltaport

[http://www.corp.delta.bc.ca/assets/Environment/PDF/sfpr\\_municipal\\_presentation.pdf](http://www.corp.delta.bc.ca/assets/Environment/PDF/sfpr_municipal_presentation.pdf)

<http://www.portvancouver.com/media/speech.htm>

Richmond traffic information:

[http://www.richmond.ca/shared/assets/Traffic Flow Map AM9265.pdf](http://www.richmond.ca/shared/assets/Traffic_Flow_Map_AM9265.pdf)

Transit and traffic information present:

<http://translink.bc.ca/Library/Research.asp>

Transit and traffic information 1991 and 2021:

<http://gvrd.bc.ca/growth/transport2021.htm>

Report 3, 13 and 14

Habitat Health in Richmond from:

Fraser River Estuary Management Program(FREMP) @

<http://www.bieapfremf.org/fremf/managementplan/>

Development and pressure on the ALR:

“The Rise of Richmond” from Vancouver Courier, October 9<sup>th</sup>, 2005.

Sea Island, the Pacific Flyway and development disturbance. Lecture, Patrick

Mooney, October 3<sup>rd</sup>?, 2005.

Environmental protection measures in Delta OCP

[http://www.corp.delta.bc.ca/assets/CPD/PDF/ocp\\_draft\\_20050901.pdf](http://www.corp.delta.bc.ca/assets/CPD/PDF/ocp_draft_20050901.pdf)

Hydrological information from

<http://www.cmnbc.ca/>