



MAPPING THE SPIKES

Great Surrey

QING XU (Population and jobs)
LIN JI (Green Infrastructure)
XUE LIU (Transportation and Transit)
Oct. 21, 2005

LARC 504 SUSTAINABLE URBAN DESIGN STUDIO



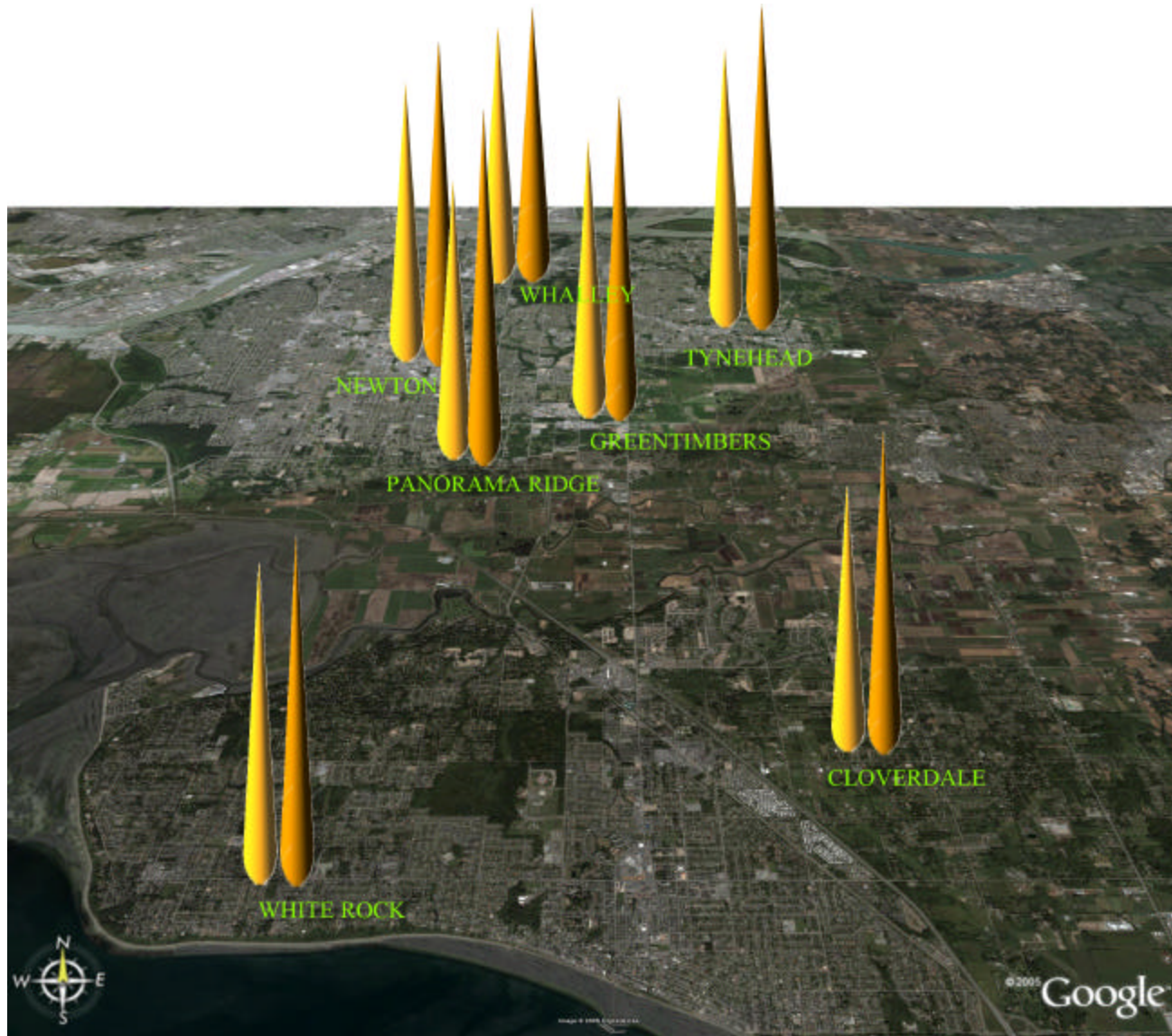
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Pointer 49°06'50.57" N 122°49'24.37" W elev 190 ft

Streaming 100%

Eye alt 16.06 mi



Great Surrey:

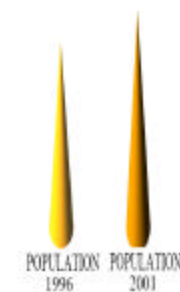
This map shows the population growth in Del-Surrey area from 1996 to 2001. Great Surrey is among the municipalities with fastest population increase. This increase is expected to continue in next 5 to 10 years.

POPULATION GROWTH

TABLE 1 POPULATION SURVEY

Electoral Districts	1996 Population	2001 Population
Whalley	47,759	48,686
Green Timbers	49,315	53,132
Newton	43,199	50,281
Tynehead	47,786	59,081
Panorama Ridge	43,555	53,289
Cloverdale	41,925	49,122
White Rock	48,516	52,770

LEGEND



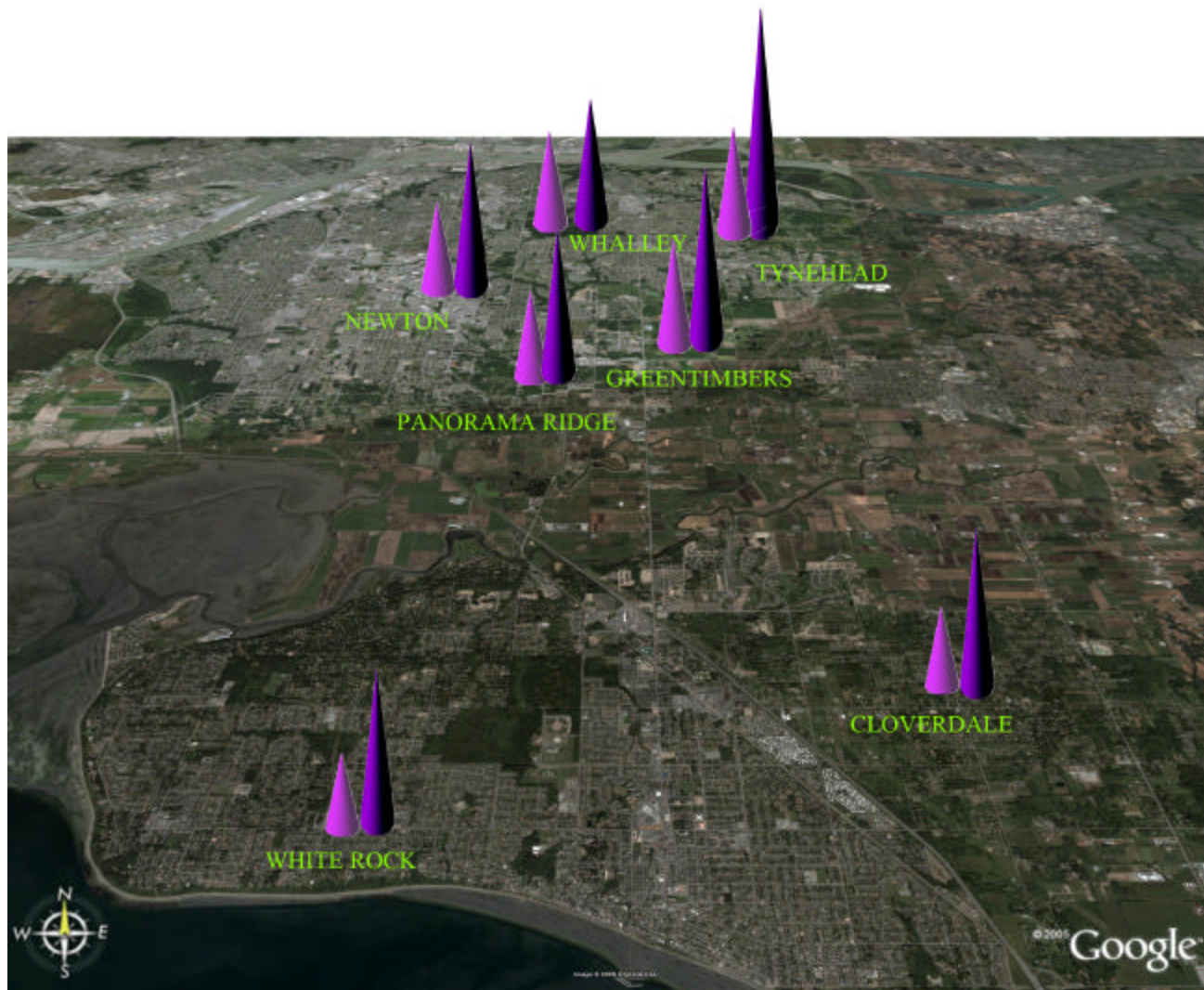


TABLE 2 EMPLOYMENT SURVEY

Electoral Districts	1996 Employed	2001 Employed
Whalley	17,300	22,580
Green Timbers	17,185	25,040
Newton	16,365	24,160
Tynehead	17,696	29,670
Panorama Ridge	15,893	25,570
Cloverdale	16,010	25,335
White Rock	13,239	23,950

LEGEND



Great Surrey:

As the result of fast population growth being carried on in Great Surrey between 1996 to 2001, the work opportunities And job demands have greatly increased, too, and not hard to predict, the work and job demands in this area will keep Increasing in next 5 to 10 years.

JOB GROWTH

RESOURCE LINK

Official community plan of White Rock

<http://www.city.whiterock.bc.ca/index.php>

Official community plan of Surrey

<http://www.city.surrey.bc.ca/default.htm>

BC STATS

<http://www.bcstats.gov.bc.ca/index.asp>

2001 Census of Canada

<http://www12.statcan.ca/english/census01/home/index.cfm>

Surrey profile

<http://www.landfood.ubc.ca/urbanstudio/urbanstudio2002/pdf/PUBLIC%20POLICY.pdf>

Pubic policy

<http://www.issbc.org/newsletter/surrey.pdf>

Surrey

http://www.gvrd.bc.ca/livablecentres/surrey/rtc_surr_profile.pdf

Key fact

<http://www.smartgrowth.bc.ca/downloads/Tables.PDF>

Table

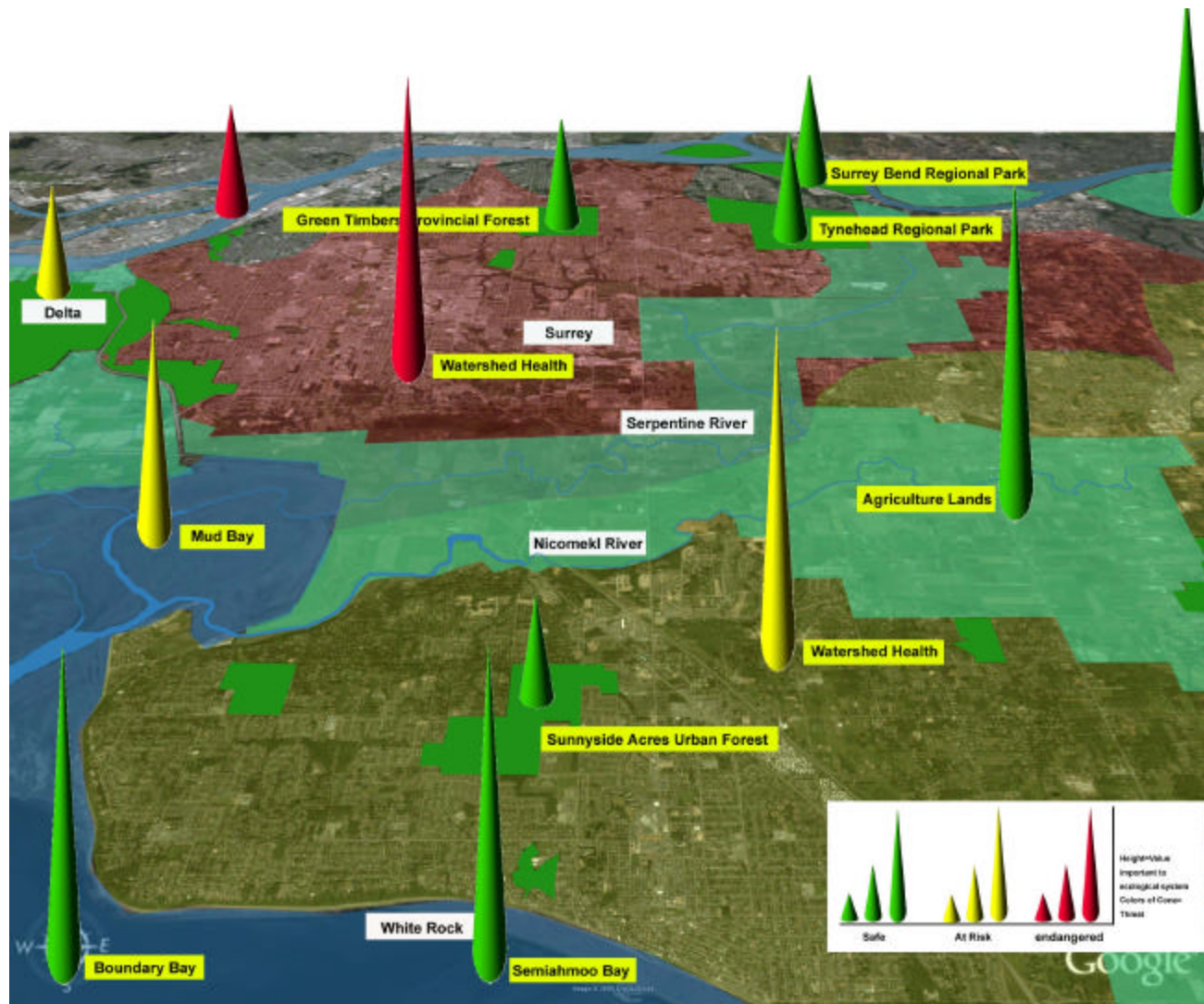
<http://www.spl.surrey.bc.ca/NR/rdonlyres/e4dgjjowkgnxo3fizeupx6pwflxbegxtvvuyvyutmj67e3sqliegz5zvtug3vglju6wikcpc3zhxr2owflpkf47zhc/FacilitiesMasterPlan2020Vision.pdf>

Employment & Income

<http://www.gvrd.bc.ca/livablecentres/surrey-residents.htm>

<http://www.bcstats.gov.bc.ca/data/cen91/issue29.pdf>

JOB GROWTH/POPULATION GROWTH



Great Surrey:

The image shows the most important green zones, streams, watershed health and their status in Surrey & Delta. Those elements are represented by height and colors of cones.

GREEN INFRASTRUCTURE

Area: 317 square kilometers Over 6,000 acres of designated parkland and green space.

Watercourses: 1400 kilometers of urban streams Major Rivers: Nicomekl River and Serpentine River

Parks: 5,400 acres of park and green space. More than 500 parks and greenbelts, 15 golf courses and driving ranges. Home to the former Air Canada Championship

Agriculture: Approximately 35% of the land designated as agricultural use.

Watershed Health: In the GVRD Watershed Map, the status of watershed health in northern Nicomekl River is poor and fair for the south.

Natural Protection Plan: Official Community Plan, the Strategic Natural Areas Management Plan, The City's 10-Year Servicing Plan, Tree Preservation By-law, Fish protection, Waterways Protection By-Law

RESOURCE LINK

GVRD green zone map & Watershed Health map
<http://www.city.surrey.bc.ca/default.htm>

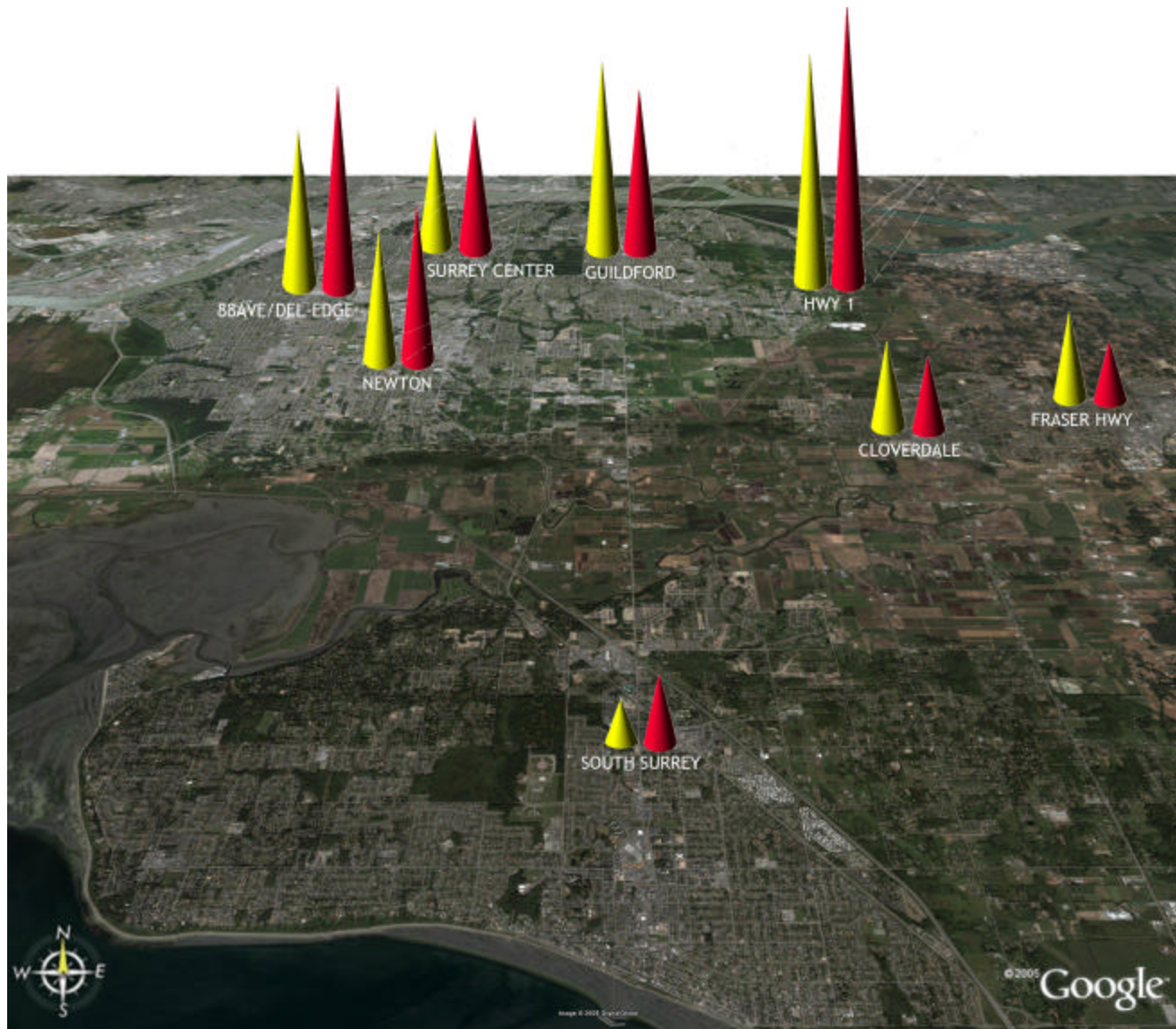




TABLE 1 TRAFFIC VOLUME

	1993	2002
		
Surrey Center	28700	29125
Newton	30225	30300
Guildford	34325	34150
Cloverdale	21975	21550
South Surrey	18125	19525
88Ave /Del-edge	31500	34800
HWY1	43825	46400
Fraser HWY	21725	18975

RESOURCE LINK

City of Surrey Engineering
Department
<http://www.city.surrey.bc.ca/Living+in+Surrey/Utilities+Transportation+and+Projects/Transportation/default.htm>

Great Surrey:

This shows traffic volume conditions at major traffic intersections in area of Del/Surrey in 1993 and 2002. Heavy traffic happens in North and East-North area; however, distinctive growth happens in South area.

TRANSPORTATION-TRAFFIC VOLUME

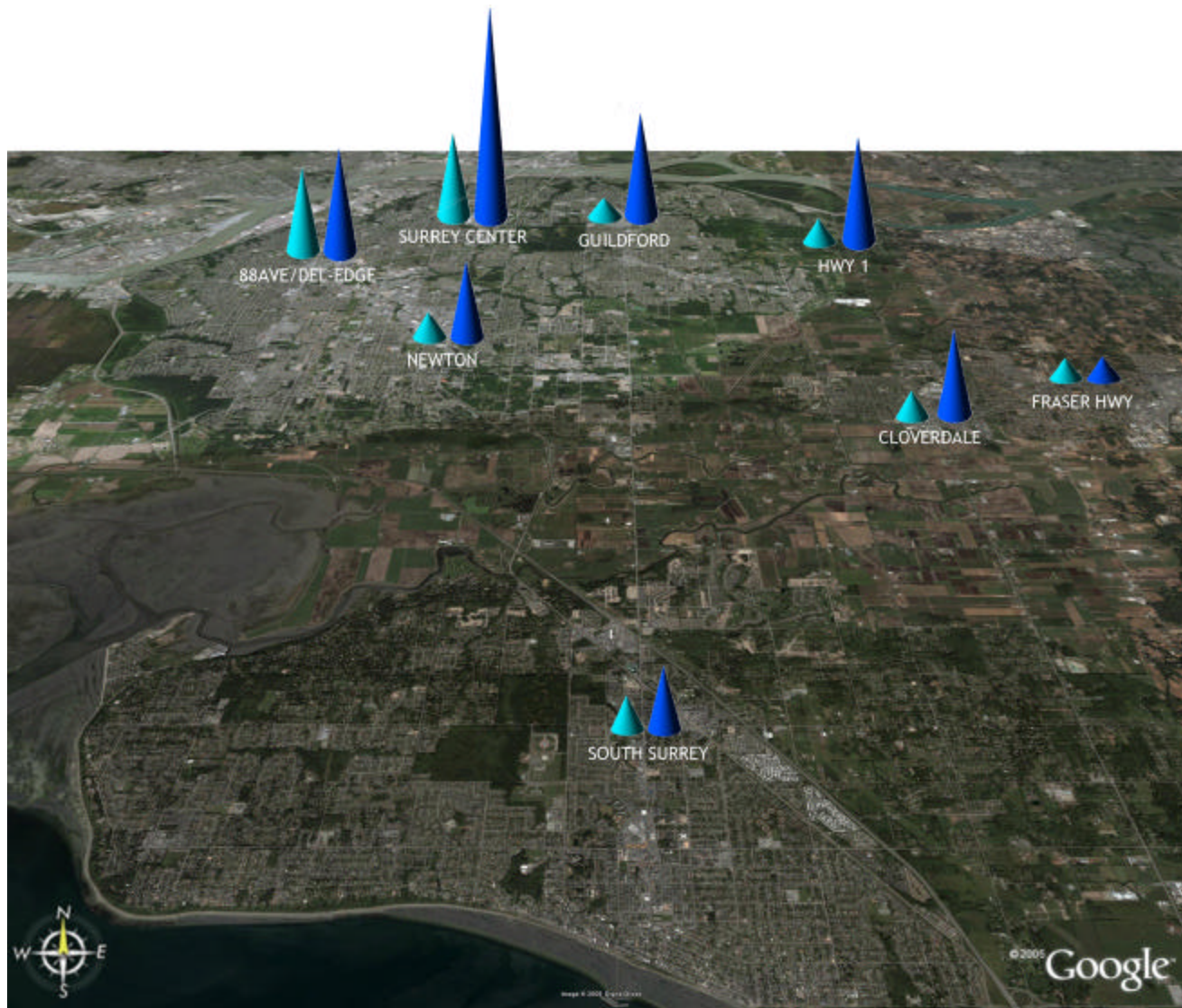




TABLE 2 TRANSIT DEMAND

	1991	2021
		
Surrey Center	1500-2500	7500-8500
Newton	200-400	1800-2000
Guildford	150-250	2900-3500
Cloverdale	360-400	2150-2500
South Surrey	600-650	1300-1350
88Ave /Del-edge	1500-1900	3000-3500
HWY1	100-150	2900
Fraser HWY	50-150	50-150

RESOURCE LINK

GVRD Regional Development
Transit 2021
<http://www.gvrd.bc.ca/growth/transport2021.htm>

Great Surrey:

This shows the transit demand in Del/Surrey in 1991 and 2021. Del/Surrey is expecting great growth in public transit in the next 20 years in all the sub areas.

TRANSIT-TRANSIT DEMAND