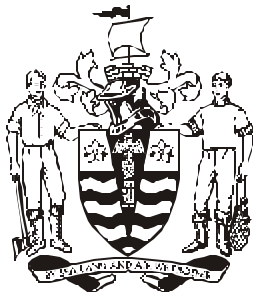


# 2000 - 2002 Engineering Capital Budget Closeouts

City of Vancouver  
May 2004



Below is a summary of the capital projects identified for close out in the Engineering Capital programs, including Streets, Communications, Street Lighting, Sewers, Waterworks, and Sewer and Water Combined Connections. Some of the accounts being closed represent projects which commenced prior to the year 2000 and some were programs/projects provided in the 2000-2002 Capital Plan, for which funding and expenditures occurred over a number of years.

The account close-out details for each capital area are shown on the following pages. Explanations are provided for projects which have variances in excess of the established limit of \$50,000 and 15% of the approved budget. The net overall unexpended balance resulting from the close-out in each area and the recommendation for allocation of the closeout surpluses or deficits are also summarized in the following sections.

## **Streets Capital Account Closeout Summary**

A majority of the pre-2000 Streets Capital accounts were closed out in May 2003. This report will now close the balance of the pre-2000 accounts. Most of these projects started prior to the year 2000.

Most of the projects in this report have been completed and their accounts now will be closed out, with only a few projects ongoing. For administrative reasons we are closing out all the pre-2000 Streets accounts. Due to the magnitude of the completed Georgia Street Reconstruction Project, Engineering intends to include this project in this closeout process. Ongoing projects will be brought forward to the 2003-2005 Capital Plan accounts as indicated in the closeout table. Projects with a variance over \$50,000 and 15% of budget are reported on the following pages.

The result of closing the Pre-2000 projects is a net surplus of \$8,897,495. \$1,433,284 of the Pre-2000 surplus will be used to offset the \$1,947,138 deficit in the 2000 - 2002 Georgia Street Reconstruction Project. The remaining deficit of \$513,854 in the 2000 - 2002 Georgia Street Reconstruction Project will be transferred to the current 2003 Georgia Street Reconstruction project accounts. We anticipate receiving confirmation of additional funding from TransLink of approximately \$1,025,000 later this year, and this funding will be used to offset the current costs in the 2003 Georgia Street accounts.

## Streets Capital Closeout Summary

### Pre-2000 Basic Capital Budget Programs

Program or Project Description	Budget (\$)	Actual (\$)	Unexpended Balance (\$)	Variance (%)
<b>A1 - Infrastructure</b>				
A Ongoing Old Unappropriated	365,000	0	365,000	100.0%
B Main St, 40th - 50th Ave	125,888	85,092	40,796	32.4%
B 19th Ave: Fraser - St George	196,950	61,692	135,258	68.7%
C Granville Br: Repl PCB Lubricant	170,000	9,389	160,611	94.5%
<b>Subtotal</b>	<b>857,838</b>	<b>156,173</b>	<b>701,665</b>	<b>81.8%</b>
<b>A2 - Pedestrians and Bicycles</b>				
A New Sidewalks - C/R June 17/97	(288,018)	(302,159)	14,141	-4.9%
B Court of Revision-June 22/95	6,012	261	5,751	95.7%
B Court of Revision-Dec 6/94	40,322	169	40,153	99.6%
B Court of Revision-June 17/97	(19,516)	(5,718)	(13,798)	70.7%
B Court of Revision-June 16/98	63,101	1,847	61,254	97.1%
C Europe Hotel	1,517	1,526	(9)	-0.6%
G Miscellaneous Projects	11,666	3,369	8,297	71.1%
H Ridgeway - West Extension	931,500	663,390	268,110	28.8%
H Wellness Walkway	(1,511)	(1,429)	(82)	5.4%
H McLeery Trail - NH	147,000	74,380	72,620	49.4%
H Ridgeway/Greenway:East Extension	783,300	785,130	(1,830)	-0.2%
<b>Subtotal</b>	<b>1,675,373</b>	<b>1,220,766</b>	<b>454,607</b>	<b>27.1%</b>
<b>A4 - Transit and Safety</b>				
A Marpole HOV Lanes	50,840	248	50,592	99.5%
A E Blvd @ 41st Ave: LTB -	0	(19,436)	19,436	
A Ongoing Property Acquisition/Appraisal	100,000	79,802	20,198	20.2%
A Ongoing Old Unappropriated	231,500	0	231,500	100.0%
C Bus Shelters - Capital Plans	16,938	16,937	1	0.0%
C Wheelchair Bus Stop Program	56,049	1,230	54,819	97.8%
E Property Fund 97/99	343,874	350,000	(6,126)	-1.8%
E Property Fund - 1999 BCB	0	(89,373)	89,373	
<b>Subtotal</b>	<b>799,201</b>	<b>339,408</b>	<b>459,793</b>	<b>57.5%</b>
<b>A5 - Local Areas Traffic Plans &amp; Other</b>				
A Kits Points Signs - DTL	5,900	1,783	4,117	69.8%
B W/S Vine:10th to 11th	57,419	0	57,419	100.0%
H Old Unappropriated	230,029	0	230,029	100.0%
J Gastown Steam Clock Improvements	0	366	(366)	
L DCL's	(630,100)	(630,100)	0	0.0%
L Signals	19,331	1,591	17,740	91.8%
L Sidewalks	238,349	183,845	54,504	22.9%
L Bulges	36,516	33,588	2,928	8.0%
L Miscellaneous	6,243	8,136	(1,893)	-30.3%
L Heather: 68th to L/N 70th	118,966	50,657	68,309	57.4%
L Traffic Calming 600/700 W. 45th	(15,161)	(898)	(14,263)	94.1%
L Greenway: S/S 59th: Oak-Laurel	128,700	(25,514)	154,214	119.8%
<b>Subtotal</b>	<b>196,192</b>	<b>(376,545)</b>	<b>572,737</b>	<b>291.9%</b>

Program or Project Description	Budget (\$)	Actual (\$)	Unexpended Balance (\$)	Variance (%)
<b>A6 - Major Projects</b>				
A Interurban Car #1207	12,984	16,108	(3,124)	-24.1%
B Cambie Bridge Replacement	5,181	1,363	3,818	73.7%
B Burrard Bridge Bikeway Funding	6,708,000	0	6,708,000	100.0%
<b>Subtotal</b>	<b>6,726,165</b>	<b>17,471</b>	<b>6,708,694</b>	<b>99.7%</b>
<b>Total for Pre-2000 Street Capital Closeout</b>	<b>10,254,769</b>	<b>1,357,274</b>	<b>8,897,495</b>	<b>86.8%</b>
<b>2000 - 2002 Streets Capital</b>				
<b>A4 - Transit and Safety (2000 - 2002 Capital Plan)</b>				
A Georgia, Causeway to Nicola Upgrades	1,225,000	3,172,138	(1,947,138)	-159.0%
<b>Total for 2000 - 2002 Streets Capital</b>	<b>1,225,000</b>	<b>3,172,138</b>	<b>(1,947,138)</b>	<b>-159.0%</b>
<b>Total surplus(deficit) to be carried forward to 2003-2005 Plan</b>	<b>11,479,769</b>	<b>4,529,412</b>	<b>6,950,357</b>	<b>60.5%</b>

### Proposed Allocation of Funding (Deficit) to be carried forward to 2003 - 2005 Capital Plan:

#### Pre-2000 Basic Capital Budget Programs

Program or Project Description	Budget (\$)
Granville Br: Repl PCB Lubricant	160,611
Ridgeway - West Extension	268,110
Greenways Unallocated	72,620
Ridgeway/Greenway:East Extension	19,138
Wheelchair Bus Stop Program	54,819
W/S Vine:10th to 11th	35,000
Traffic Calming 600/700 W. 45th	(8,300)
Greenway: S/S 59th: Oak-Laurel	154,214
Burrard Bridge Bikeway Funding	6,708,000
To partially fund 2000-2002 closeout deficit	1,433,284
<b>TOTAL</b>	<b>8,897,495</b>

#### 2000 - 2002 Capital Closeout - Allocation

Deficit offset by transfer from Pre-2000 Closeout	(1,433,284)
Deficit transferred to 2003 Arterial Reconstruction - Georgia Street	(513,854)
<b>TOTAL</b>	<b>(1,947,138)</b>

<b>Net Total transfer to 2003-2005 Capital Plan</b>	<b>6,950,357</b>
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**Streets Capital Program Closeout Variance Explanations**

Program or Project:	Ongoing Old Unappropriated		
Order Group(s):	C07A1AAXXA1		
Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 365,000	\$ 0	\$ 365,000	100.0%

## Explanation for Variance:

A few streets reconstruction projects were anticipated prior to 2000 but have since been cancelled. This order group can be closed out and the surplus can be carried forward to fund other projects.

Program or Project:	19 <sup>th</sup> Ave. - Fraser to St. George		
Order Group(s):	C07A1B0005		
Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 196,950	\$ 61,692	\$ 135,258	68.7%

## Explanation for Variance:

This streets construction project is complete and will not require the surplus funding. This project budget was estimated as a single project in this area. During construction, there were other projects in the same area therefore there was a cost saving due to work planning and efficiencies.

Program or Project:	Granville Bridge PCB Lubricant Replacement		
Order Group(s):	C07A1C0003		
Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 170,000	\$ 9,389	\$ 160,611	94.5%

## Explanation for Variance:

The funding is for the ongoing review and assessment of the Granville Bridge PCB Lubricant Replacement Project. A detailed assessment and work plan is required and on March 9<sup>th</sup> 2004 Council approved that \$160,000 be transferred from the pre-2000 account to a 2004 account to continue with this work. This enables staff to hire a consultant to conduct a detailed assessment study on the rehabilitation of the steel expansion bearings of the Granville Bridge and also to proceed on Phase 1 of the rehabilitation work. (Carry Forward to 2003-2005 Capital Plan)

Program or Project:	Court of Revision June 16/98		
Order Group(s):	C07A2B0009		
Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 63,010	\$ 1,847	\$ 61,254	97.1%

## Explanation for Variance:

Initiative project was cancelled. This sidewalk reconstruction work at Knight and Kingsway may be reinitiated through the Clark/Knight Corridor project. Extensive planning and consultation work is planned for this whole area.

Program or Project:	Ridgeway - West Extension		
Order Group(s):	C07A2H0009		
Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 931,500	\$ 663,390	\$ 268,110	28.8%

## Explanation for Variance:

Work is still ongoing, request to bring the unexpended balance forward into 2004 to complete the project. (Carry Forward to 2003-2005 Capital Plan)

Program or Project:	McLeery Trail		
Order Group(s):	C07A2H0011		
Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 147,000	\$ 74,380	\$ 72,620	49.4%

## Explanation for Variance:

Project was completed under budget mainly due to the use of a salvaged bridge in the project instead of contracting and constructing a new bridge (as planned and as per estimate in the budget). Request to carry forward the unexpended balance to fund other Greenway related projects. (Carry Forward to 2003-2005 Capital Plan)

Program or Project:	Marpole HOV Lanes		
Order Group(s):	C07A4A0002		
Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 50,840	\$ 248	\$ 50,592	99.5%

## Explanation for Variance:

Most of the work was substantially complete prior to 1999. The funding was anticipated for some traffic mitigation measures after the installation of the HOV lanes. After the implementation of these traffic lanes and a further review, these measures were no longer required. The surplus funding is no longer required and can be carried forward to help fund the 2002 Traffic and Safety related Georgia St. Reconstruction Project (CA3EA4A001).

Program or Project:	Ongoing Old Unappropriated		
Order Group(s):	C07A4AXX02		
Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 231,500	\$ 0	\$ 231,500	100%

## Explanation for Variance:

A few Traffic and Safety related projects were anticipated prior to 2000 but have since been cancelled. This order group can be closed out and the surplus can be carried forward to help fund the 2002 Traffic and Safety related Georgia St. Reconstruction Project (CA3EA4A001).

Program or Project:	Wheelchair Bus Stop Program		
Order Group(s):	C07A4C0002		
Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 56,049	\$ 1,230	\$ 54,819	97.8%

## Explanation for Variance:

Original funding was for the Wheelchair (Accessible) Bus Stop Program in the early 1990s when the first buses became accessible. The work to upgrade passenger areas at bus stops is done on an as needed ongoing basis. The unexpended balance is to be carried forward for the upgrade of bus stops throughout the City including locations for the Accessible Trolley Bus Project. TransLink indicates the replacement of the trolley bus fleet with accessible buses is planned to start in 2005. The additional work to upgrade bus stops for the accessible trolley buses is to start this year. (Carry Forward to 2003-2005 Capital Plan)

Program or Project:	Property Fund 1999 BCB		
Order Group(s):	C07A4E9799		
Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 0	(\$ 89,373)	\$ 89,373	

## Explanation for Variance:

The unexpended balance from this account is not required for any immediate property acquisitions.

Program or Project:	W/S Vine: 10 <sup>th</sup> to 11 <sup>th</sup>		
Order Group(s):	C07A5BB002		
Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 57,419	\$ 0	\$ 57,419	100%

## Explanation for Variance:

Developer is in the process of invoicing City for our share of the road paving and boulevard restoration which was done by the contractor and paid in full by developer. Project Manager requires a carry forward of \$35,000 to pay for this. The net unexpended balance of \$22,419 can be part of the closeout. (Carry Forward to 2003-2005 Capital Plan)

Program or Project:	Old Unappropriated		
Order Group(s):	C07A5HXX01		
Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 230,029	\$ 0	\$ 230,029	100%

## Explanation for Variance:

Old unappropriated funding for minor capital acquisitions is not presently required to fund any immediate minor capital properties.

Program or Project:	Oakridge/Langara -Sidewalks		
Order Group(s):	C07A5LA003		
Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 238,349	\$ 183,845	\$ 54,504	22.9%

## Explanation for Variance:

Sidewalk work was completed under budget. The budget was likely overestimated because of the overall complexity and scale of the work. There were fewer utility relocations required.

Program or Project:	Heather: 68 <sup>th</sup> to L/N 70 <sup>th</sup>		
Order Group(s):	C07A5LA006		
Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 118,966	\$ 50,657	\$ 68,309	57.4%

## Explanation for Variance:

Paving charges on Heather from 68<sup>th</sup> to 70<sup>th</sup> were less than expected. Anticipated and budgeted Sewer and Water work was not performed.



Program or Project:	Greenway: S/S 59 <sup>th</sup> Oak- Laurel		
Order Group(s):	C07A5LB002		
Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 128,700	(\$ 25,514)	\$ 154,214	119.8%

## Explanation for Variance:

There was a delay in the cost shared street work on 59<sup>th</sup> Ave. due to some ownership changes with the adjacent properties. This street reconstruction project is starting in the Spring of 2004 and is due to be completed by the end of Summer 2004. (Carry Forward to 2003-2005 Capital Plan)

Program or Project:	Burrard Bridge Bikeway Funding		
Order Group(s):	C07A6B0003		
Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 6,708,000	\$ 0	\$ 6,708,000	100.0%

## Explanation for Variance:

Originally, this project was initiated in 1991 to provide safety improvements to the intersection of Burrard St. and Pacific Boulevard. In 1994 this proposal expanded to include exploring some structural modifications to the Burrard Bridge to provide a "green link" for cyclists and pedestrians between Kitsilano and the Downtown Area. In the past number of years various options have been reviewed and developed. In November 2003 a workshop was conducted to inform Council on the progress of this project. Presently staff are evaluating and developing the options for the Burrard Bridge Bikeway project. As the options are developed and it progresses to the design stage the public and our stakeholders will be consulted. Staff will then present recommendations to Council. The budget of \$6,708,000 will be carried forward to 2004 to continue with the work on this project. (Carry Forward to 2003-2005 Capital Plan)

Program or Project:	Georgia, Causeway to Nicola Upgrades (2000 - 2002 Capital Plan)		
Order Group(s):	CA3EA4A001		
Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 1,225,000	\$ 3,172,138	(\$ 1,947,138)	- 159.0%

## Explanation for Variance:

This project involves the reconstruction of Georgia St. to provide a smooth transition from the Stanley Park Causeway onto Georgia St. This work also includes safety improvements, traffic control and traffic signal upgrades. During this time, the 2010 Winter Olympics were approved and the S-Curve and Georgia Street were perceived as the "Gateway" to the City. The Planning Department's vision changed significantly due to these events. Therefore, as the project progressed, the scope of the work increased substantially resulting in a significant deficit. We anticipate additional recoveries for this project in 2004 including \$250,000 from (2000 MRN Capital Agreement) commitment to the project, and there is also a current application to TransLink for 2004 Minor Capital funding of \$775,778. It is recommended that these funds be allocated to the 2003 accounts for this project to reduce the overall project deficit.

### **Communications Capital Account Closeout Summary**

To close and balance the accounts for the 2000 - 2002 Communications Capital Closeout, the following summary has been prepared. The accounts being closed represent projects for which, as a group, funding occurred over the period of the 2000 - 2002 Capital Plan, or were carried forward from previous plans.

The account summaries are based on the Capital Expenditure statement for the 2000 - 2002 Capital plan generated by the SAP system as of April 15, 2004. The account close-out details for each category of work are shown on the following page. Explanations are included for account groups which have variances of more than the established limit of 15% and \$50,000.

The net overall unexpended balance resulting from the closeout of the Communications 2000-2002 Capital Plan is \$547,631. The previous Capital Plan closeout was in 2002, and several projects were carried forward to the 2000-2002 Capital accounts at that time. It is anticipated that the Engineering Radio System Upgrade will be completed in the 2003-2005 Capital Plan, and therefore this project is being carried forward to the current plan. The surplus funds are recommended to be transferred forward to the 2003-2005 Communications Capital Plan as summarized in the attached table.

### Communications Capital Closeout Summary

#### 2000 - 2002 Basic Capital Budget Programs

Program or Project Description	Budget (\$)	Actual (\$)	Unexpended Balance (\$)	Variance (%)
2000 - 2002 Capital Programs				
Above Ground Terminals	120,000	36,844	83,156	69.3%
Underground Cable Replacement	404,795	406,754	(1,959)	-0.5%
Underground Cable Expansion	634,090	667,921	(33,831)	-5.3%
Communications - Other Charges	0	(72,288)	72,288	
<b>Subtotal</b>	<b>1,158,885</b>	<b>1,039,232</b>	<b>119,653</b>	<b>10.3%</b>
Projects from Previous Closeout Carried Forward				
Engineering Radio System Upgrade	184,091	39,662	144,429	78.5%
Unallocated from Pre-2000 Closeout	124,179	0	124,179	100.0%
Earthquake Preparedness	159,370	0	159,370	100.0%
<b>Subtotal</b>	<b>467,640</b>	<b>39,662</b>	<b>427,978</b>	<b>91.5%</b>
<b>TOTAL</b>	<b>1,626,525</b>	<b>1,078,894</b>	<b>547,631</b>	<b>33.7%</b>
<b>Surplus/(Deficit) to be carried forward to 2003 - 2005 Plan</b>	<b>547,631</b>	<b>0</b>	<b>547,631</b>	

#### Proposed Allocation of Funding (Deficit) to be carried forward to 2003 - 2005 Capital Plan:

#### 2000 - 2002 Basic Capital Budget Programs

Program or Project Description	Budget (\$)
Engineering Radio System Upgrade	160,400
Communications Unallocated	387,231
<b>TOTAL</b>	<b>547,631</b>

**Communications Capital Program Closeout Variance Explanations**

Program or Project:	Above Ground Terminals		
Order Group(s):	CA1EB1, CA1EB2, CA3EB1		
Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 120,000	\$ 36,844	\$ 83,156	69.3%

## Explanation for Variance:

There was pressure to complete other traffic signal work such as: the LED program, ICBC traffic signal improvements, the S- curve, the program to extend the communications plant program to all traffic signal controllers, and the organization of the communications network. Also, additional work was done for the Traffic Management Branch, which changed the priorities for work done by the branch. As a result, the work planned for above ground terminals was not completed.

Program or Project:	Communications Other Charges		
Order Group(s):			
Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 0	(\$ 72,288)	\$ 72,288	

## Explanation for Variance:

Variance in overhead accounts. The difference between the overhead costs and the overhead rate charged to the various capital projects is credited back to the capital accounts.

Program or Project:	Engineering Radio System Upgrade		
Order Group(s):	CA3EB4B01		
Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 184,091	\$ 39,662	\$ 144,429	78.46%

## Explanation for Variance:

This project has been deferred while the Engineering Department considers alternatives to upgrading the system. It is expected that this project will be undertaken during the 2003-2005 Capital Plan.

Program or Project:	Unallocated from C07 Closeout		
Order Group(s):	CA3EB4B99		
Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 124,179	\$ 0	\$ 124,179	100.00%

## Explanation for Variance:

Unallocated balance from prior plan.

Program or Project:	Earthquake Preparedness		
Order Group(s):	CA3EB4B98		
Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 159,370	\$ 0	\$ 159,370	100.00%

## Explanation for Variance:

The project was not necessary as the budget was intended to upgrade the Police & Fire radio system. The Police & Fire are now operating under E-Comm radio system.

### **Street Lighting Capital Account Closeout Summary**

To close and balance the accounts for the 2000 to 2002 Street Lighting Capital Closeout, the following summary has been prepared. The accounts being closed represent projects for which, as a group, funding occurred over the period of the 2000-2002 Capital Plan.

The account summaries are based on the Capital Expenditure statement for the 2000-2002 Capital plan generated by the SAP system as of April 15, 2004. The account close-out details for each category of work are shown on the following page. Explanations are included for account groups which have variances of more than the established limit of 15% and \$50,000.

The net overall unexpended balance resulting from the close-out of the Street Lighting 2000-2002 Capital Plan is \$149,444. The surplus funds are recommended to be transferred to the 2003 - 2005 Street Lighting Capital Plan as summarized in the attached table.

## Street Lighting Capital Closeout Summary

### 2000 - 2002 Basic Capital Budget Programs

Program or Project Description	Budget (\$)	Actual (\$)	Unexpended Balance (\$)	Variance (%)
Renovate and Replace Plant				
Sidewalk Reconstruction	267,000	275,936	(8,936)	-3.3%
Circuit Protection Fuses	327,400	472,933	(145,533)	-44.5%
Junction Boxes	0	529	(529)	
Trolley Route Splicing	124,000	80,792	43,208	34.8%
Anchored Poles replacem	1,181,600	1,223,399	(41,799)	-3.5%
Trolley Poles	250,000	303,221	(53,221)	-21.3%
Service panel replacement	502,000	532,640	(30,640)	-6.1%
Embedded Based Poles	547,000	381,183	165,817	30.3%
Luminaire Replacement	179,000	262,677	(83,677)	-46.7%
St lighting Design	220,000	144,271	75,729	34.4%
Plant Inspection	140,000	149,796	(9,796)	-7.0%
Plant Inventory	60,000	60,655	(655)	-1.1%
Infill Lighting	714,000	801,955	(87,955)	-12.3%
St Lighting - special projects	0	2,785	(2,785)	
<b>Subtotal</b>	<b>4,512,000</b>	<b>4,692,770</b>	<b>(180,770)</b>	<b>-4.0%</b>
Relocations Initiated by Utilities	0	1,248	(1,248)	
<b>Subtotal</b>	<b>0</b>	<b>1,248</b>	<b>(1,248)</b>	
Other Charges				
Discounts and Commissions on Debentures	0	48,045	(48,045)	
C07 - Unallocated Credits	88,421	0	88,421	100.0%
Other Charges	23,000	(18,274)	41,274	179.5%
<b>Subtotal</b>	<b>111,421</b>	<b>29,771</b>	<b>81,650</b>	<b>73.3%</b>
Local Improvements				
Local Improvement Projects	45,650	187	45,463	99.6%
Local Improvement Credits	204,350	0	204,350	100.0%
<b>Subtotal</b>	<b>250,000</b>	<b>187</b>	<b>249,813</b>	<b>99.9%</b>
<b>TOTAL</b>	<b>4,873,421</b>	<b>4,723,977</b>	<b>149,444</b>	<b>3.1%</b>
<b>Surplus/(Deficit) to be carried forward to 2003-2005 Plan</b>	<b>149,444</b>	<b>0</b>	<b>149,444</b>	

### Proposed Allocation of Funding (Deficit) to be carried forward to 2003 - 2005 Capital Plan:

#### 2000 - 2002 Basic Capital Budget Programs

Program or Project Description	Budget (\$)
Infill Lighting Program	149,444
<b>TOTAL</b>	<b>149,444</b>

**Street Lighting Capital Closeout Variance Explanations**

Program or Project:	Circuit Protection Fuses		
Order Group(s):	CA1EC1D1, CA2EC1A2		
Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 327,400	\$ 472,933	(\$ 145,533)	- 44.5%

## Explanation for Variance:

There were concerns that street lighting poles could become energized causing risk of electrocution to the public, therefore, the normal program was accelerated due to incidents that compromised the health and safety of occupants and employees of the City, the scope of work was expanded.

Program or Project:	Trolley Poles		
Order Group(s):	CA1EC1C3, CA2EC1A6, CA3EC1A6		
Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 250,000	\$ 303,221	(\$ 53,221)	- 21.3%

## Explanation for Variance:

There is an agreement between the City and BC Transit for replacing corroded trolley poles. Under it, the City pays the cost of removing and replacing its' plant on trolley poles as they are replaced. The number of poles replaced each year varies. Replacements are dependent upon the results of BC Transit's inspection program.

Program or Project:	Embedded Based Poles		
Order Group(s):	CA1EC1C2, CA2EC1A8, CA3EC1A8		
Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 547,000	\$ 381,182	\$ 165,817	30.3%

## Explanation for Variance:

Resources were directed to upgrading circuit protection fuses instead of this program. The work originally planned for in this category will be completed in the 2003-2005 Capital plan.

Program or Project:	Luminaire Replacement		
Order Group(s):	CA1EC1D2, CA2EC1A9, CA3EC1A9		
Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 179,000	\$ 262,677	(\$ 83,677)	- 46.7%

## Explanation for Variance:

The Plant is approaching the end of its useful life and fixture failures are increasing, which resulted in a higher than anticipated expenditure.

Program or Project:	Street Lighting Design		
Order Group(s):	CA1EC1C6, CA2EC1B1, CA3EC1B1		
Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 220,000	\$ 144,271	\$ 75,728	34.4%

## Explanation for Variance:

This program was under spent due to other priorities in the branch such as: work on circuit protection fuses and conversion of the old image based database to the City's GIS based system.

Program or Project:	C07 Credits - Unallocated		
Order Group(s):	CA3EC1H		
Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 88,421	\$ 0	\$ 88,421	100.0%

Explanation for Variance:  
Unallocated balance from prior plan.

Program or Project:	Local Improvements Credits		
Order Group(s):			
Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 204,350	\$ 0	\$ 204,350	100.0%

Explanation for Variance:  
Unspent Local Improvement credits carried forward from prior years.



## **Sewers Capital Account Closeout Summary**

To close and balance the accounts for the 2000-2002 Sewer Capital Plan, the following summary has been prepared. The accounts that are being closed represent projects for which, as a group, funding occurred over the period of the 2000-2002 Capital Plan.

The account summaries are based on the SAP Capital Budget Statement report generated on April 1, 2004. All 2000-2002 account numbers were closed prior to the generation of this report. The account close-out details for each category of work are shown on the following page. Explanations are provided for programs where the variances are greater than \$50,000 and 15% of the budget.

Sewer capital work can be divided into two major components: (1) programs that are funded by the Basic Capital Budget (mainly from debt financing and a small percentage from government grants and cost share with developers), and (2) programs that are funded by cost recovery from public sewer connections.

The net overall balance resulting from the 2000-2002 Close-outs for the Basic Capital Program is a surplus of \$764,447. It is recommended that this surplus be transferred to the 2003-2005 Capital Plan as outlined in the attached table.

Cost recovery programs are at an overall balance position at the end of the 2000-2002 Capital Plan. The deficit in the Sewer Refund Account (\$156,935) is attributable to refunds for B Permits (\$78,468) and C Permits (\$78,567). The balances of the B Permit and C Permit account carry forwards have been adjusted for these refunds. Under-expended balance of \$126,498 represents mostly deferred revenues for work to be carried out in the 2003-2005 Capital Plan. It is therefore recommended that this balance be transferred to the 2003-2005 Capital Plan.

## Sewers Capital Closeout Summary

### 2000 - 2002 Basic Capital Budget Programs

Program or Project Description	Budget (\$)	Actual (\$)	Unexpended Balance (\$)	Variance (%)
1) System Replacement				
a) Main Sewer Reconstruction				
Fraser River Basin	3,930,000	3,796,497	133,503	3.4%
West Point Grey Basin	7,200,000	7,405,014	(205,014)	-2.8%
Balaclava Basin	6,796,000	7,178,321	(382,321)	-5.6%
Kitsilano/S.Granville Basin	3,600,000	2,029,269	1,570,731	43.6%
Cambie/Heather Basin	4,900,000	4,991,198	(91,198)	-1.9%
Terminal Ave Basin	4,706,000	5,828,200	(1,122,200)	-23.8%
Downtown Peninsula	1,450,000	1,934,914	(484,914)	-33.4%
Grandview-Woodland Basin	4,100,000	5,648,467	(1,548,467)	-37.8%
Hastings-Sunrise Basin	3,000,000	2,392,551	607,449	20.2%
China Creek Trunk	8,850,000	6,790,738	2,059,262	23.3%
Still Creek Basin	700,000	655,492	44,508	6.4%
Deficit forward from 97-99 Capital Plan	(308,984)	(308,984)	0	0.0%
LGG	1,685,000	1,673,729	11,271	0.7%
<i>Total Main Sewer Reconstruction:</i>	<i>50,608,016</i>	<i>50,015,406</i>	<i>592,610</i>	<i>1.2%</i>
b) Connection & Manhole Reconstruction	2,377,374	2,386,028	(8,654)	-0.4%
c) Local Repairs, Catch Basins & Spurs	932,013	932,825	(812)	-0.1%
d) CB & Spur on the MRN	275,000	303,308	(28,308)	-10.3%
e) Upgrading & Replacement of Pump Stations	280,553	207,476	73,077	26.0%
<b>Subtotal</b>	<b>54,472,956</b>	<b>53,845,043</b>	<b>627,913</b>	<b>1.2%</b>
2) System Management				
a) Television Inspection	421,782	409,807	11,975	2.8%
b) Investigation for Design	262,022	275,671	(13,649)	-5.2%
c) System Management - Misc	53,067	53,067	0	0.0%
<b>Subtotal</b>	<b>736,871</b>	<b>738,545</b>	<b>(1,674)</b>	<b>-0.2%</b>
3) Pollution Abatement				
a) Sewer Separation on Private Property Incl. Permits with no fees	862,817	878,441	(15,624)	-1.8%
b) Liquid Waste Management Plan	200,000	46,300	153,700	76.9%
<b>Subtotal</b>	<b>1,062,817</b>	<b>924,741</b>	<b>138,076</b>	<b>13.0%</b>
4) System Expansion				
a) BC Place/Pacific Place Sewers	873,744	661,199	212,545	24.3%
<b>Subtotal</b>	<b>873,744</b>	<b>661,199</b>	<b>212,545</b>	<b>24.3%</b>
5) Sewers Capital Eng Charges & Clearing				
Discount on Debentures	0	36,872	(36,872)	
1999 Carryforward (discount on debentures)	(173,653)	(173,653)	0	
Overhead variance / CUPE Salary / MAP	0	25,378	(25,378)	
Clearing CC Direct Charges /Retro Pay	0	(36,045)	36,045	
<b>Subtotal</b>	<b>(173,653)</b>	<b>(147,448)</b>	<b>(26,205)</b>	<b>15.1%</b>
Net Under-recovery from outside funding sources	0	186,208	(186,208)	
<b>Subtotal</b>	<b>0</b>	<b>186,208</b>	<b>(186,208)</b>	
<b>TOTAL</b>	<b>56,972,735</b>	<b>56,208,288</b>	<b>764,447</b>	<b>1.3%</b>
<b>Surplus/(Deficit) to be carried forward to 2003-2005 Plan</b>	<b>764,447</b>	<b>0</b>	<b>764,447</b>	

## 2000 - 2002 Cost Recovery Programs

<b>Program or Project Description</b>	<b>Budget (\$)</b>	<b>Actual (\$)</b>	<b>Unexpended Balance (\$)</b>	<b>Variance (%)</b>
a) Residential B Permits	(11,431)	(25,894)	14,463	
b) Commercial C Permits	(586,771)	(759,772)	173,001	
c) E permit Re-use	0	(1,609)	1,609	
d) At cost D Permits	(6,219)	0	(6,219)	
e) Inspection Cost Recovery	0	(3,439)	3,439	
f) Pipe Bursting	0	24,374	(24,374)	
g) TV Inspection for Anchor Rods	120,473	(1,041)	121,514	
h) Sewer Connection Refund	(86,898)	70,037	(156,935)	
<b>TOTAL</b>	<b>(570,846)</b>	<b>(697,344)</b>	<b>126,498</b>	<b>-22.2%</b>
<b>Surplus/(Deficit) to be carried forward to 2003-2005 Plan</b>				
	<b>126,498</b>	<b>0</b>	<b>126,498</b>	

**Proposed Allocation of Funding (Deficit) to be carried forward to 2003 - 2005 Capital Plan:**

## 2000 - 2002 Basic Capital Budget Programs

<b>Program or Project Description</b>	<b>Budget (\$)</b>
Kitsilano/S.Granville Basin	325,125
Upgrading & Replacement of Pump Stations	73,077
Liquid Waste Management Plan	153,700
BC Place/Pacific Place Sewers	212,545
<b>TOTAL</b>	<b>764,447</b>

## 2000 - 2002 Cost Recovery Programs

<b>Program or Project Description</b>	<b>Budget (\$)</b>
Residential B Permits	(64,004)
Commercial C Permits	94,533
E permit Re-use	1,609
At cost D Permits	(6,219)
Inspection Cost Recovery	3,439
Pipe Bursting	(24,374)
TV Inspection for Anchor Rods	121,514
<b>TOTAL</b>	<b>126,498</b>

### Sewers Capital Closeout Variance Explanations

Program or Project: Kitsilano/S. Granville Basin

Order Group(s):

Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 3,600,000	\$ 2,029,269	\$ 1,570,731	43.6%

Explanation for Variance:

Sewer replacement work in the Kitsilano/S. Granville Basin was curtailed in 2001 and 2002 in order to address more urgent sewer replacement needs in the Terminal, Downtown, and Grandview-Woodland basins. Replacement work for this area was resumed in 2003 in accordance with the revised work plans.

Program or Project: Terminal Avenue Basin

Order Group(s):

Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 4,706,000	\$ 5,828,200	(\$ 1,112,200)	- 23.6%

Explanation for Variance:

The Terminal Avenue Basin contains one of the oldest industrial areas of Vancouver. Many of the original sewers have been replaced in the last 25 years except for the areas south of the industrial area which still has the original 1910-1920 sewers. Replacement work for this latter area was accelerated to coincide with the major redevelopments occurred in 2000 through 2002 which resulted in an over-expenditure of \$1,122,200 in this account. Most of the sewer upgrading work has now been completed and a much smaller budget was allocated this basin in the 2003-2005 Capital Plan.

Program or Project: Downtown Peninsula Basin

Order Group(s):

Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 1,450,000	\$ 1,934,914	(\$ 484,914)	- 33.4%

Explanation for Variance:

The budget for this program was overspent due to the need to advance a sewer construction project to coincide with the Lions Gate Bridge closures. Most of the replacement work has now been done and only a moderate budget was allocated to this basin in the 2003-2005 Capital Plan.

Program or Project: Grandview-Woodland Basin

Order Group(s):

Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 4,100,000	\$ 5,648,467	(\$ 1,548,467)	- 37.8%

Explanation for Variance:

The budget for this program was overspent due to the need to advance a sewer construction project to coincide with the Skytrain construction.

Program or Project: Hastings-Sunrise Basin  
 Order Group(s):  
 Budget (\$): Actual (\$): Unexpended Balance (\$): Variance (%):  
 \$ 3,000,000 \$ 2,392,551 \$ 607,449 20.2%

## Explanation for Variance:

Sewer replacement work in the Hastings-Sunrise Basin was curtailed in 2002 in order to address more urgent sewer replacement needs in the Terminal, Downtown, and Grandview-Woodland basins. As a result, some of the replacement work was deferred and replacement work for this area was resumed in 2003 in accordance with the revised work plans.

Program or Project: China Creek Basin  
 Order Group(s):  
 Budget (\$): Actual (\$): Unexpended Balance (\$): Variance (%):  
 \$ 8,850,000 \$ 6,790,738 \$ 2,059,262 23.3%

## Explanation for Variance:

Sewer replacement work in the China Creek Basin was curtailed in 2002 in order to address more urgent sewer replacement needs in the Terminal, Downtown, and Grandview-Woodland basins. As a result, some of the replacement work was deferred and replacement work for this area was resumed in 2003 in accordance with the revised work plans.

Program or Project: Upgrade and Replacement of Pump Stations  
 Order Group(s):  
 Budget (\$): Actual (\$): Unexpended Balance (\$): Variance (%):  
 \$ 280,553 \$ 207,476 \$ 73,077 26.0%

## Explanation for Variance:

There are 26 sewage pump stations and force mains, of various ages, within the City's sewer network. In the course of normal operations, the partial or complete replacement of pumps and equipment is required as they wear out. Increasing development and sewage flows can also necessitate replacement. Less frequently, an entire station structure or force main needs to be reconstructed at a much greater cost. No major reconstruction was planned for the 2000-2002 Capital Plan and that the provision of \$280,553 for pumps and equipment replacements was not fully expended due to deferment of some minor replacements. It is recommended that the under-expended budget of \$73,077 be carried forward to the 2003-2005 Capital Plan.

Program or Project: Liquid Waste Management Plan  
 Order Group(s):  
 Budget (\$): Actual (\$): Unexpended Balance (\$): Variance (%):  
 \$ 200,000 \$ 46,300 \$ 153,700 76.9%

## Explanation for Variance:

This Budget is for the continued development of the City sewer strategy, to provide support to the ongoing LWMP projects, and to respond to regulatory compliance issues. During the 2000-2002 Capital Plan, less activities than anticipated were required and as a result there is an unspent balance of \$153,700 in this program. It is recommended that this unspent budget be carried forward to the 2003-2005 Capital Plan to cover various remaining research and planning activities, and to meet with any regulatory compliance issues as required.

Program or Project:	BC Place/Pacific Place Sewers		
Order Group(s):			
Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 873,744	\$ 661,199	\$ 212,545	24.3%

Explanation for Variance:

This Budget is for sewers system expansion in the Pacific Place area. Under the cost sharing agreement between the B.C. Place Corporation and the City, the developer is required to cost share 73.5% of the new sewer infrastructure with the City paying for the balance of 26.5%. When Concord Pacific purchased the site from the Province in 1988, nine development phases were proposed for the Concord Pacific Lands. Originally it was anticipated that site servicing for the nine phases would be completed at the end of the 1993 period. However, design, approval and construction for these phases have progressed at a slower rate. At the end of 2002, of the nine phases of development, seven phases have been completed (including site servicing). One major construction (Abbott Street storm outfall) estimated at \$780,000 (cost share: 73.5% Concord/26.5% City) originally scheduled to be carried out by Concord Pacific during the 2000-2002 Capital Plan was delayed and it is therefore recommended that the budget balance of \$212,545 be carried forward to the 2003-2005 to meet the City's contractual obligations.

### **Waterworks Capital Account Closeout Summary**

To close and balance the accounts for the 2000-2002 Waterworks Capital Plan, the following summary has been prepared. The accounts that are being closed represent projects for which, as a group, funding occurred over the period of the 2000-2002 Capital Plan.

The account summaries are based on the SAP Capital Budget Statement report generated on April 15, 2004. All 2000-2002 account numbers were closed prior to the generation of this report. The account close-out details for each category of work are shown on the following page. Explanations are provided for programs where the variances are greater than \$50,000 and 15% of the budget.

The net overall balance resulting from the 2000-2002 Close-outs is a deficit of \$599,099, approximately 1% of total budgeted funding. It is recommended that this deficit be transferred to the 2003 Transmission Capacity Budget, as work in this program has been delayed due to deferral of a GVRD pipeline project that it was to coordinate with, and since the funding for the project was transferred from the 2000 - 2002 program accounts in 2003.

## Waterworks Capital Closeout Summary

### 2000 - 2002 Basic Capital Budget Programs

Program or Project Description	Budget (\$)	Actual (\$)	Unexpended Balance (\$)	Variance (%)
Infrastructure Replacement				
Distribution Main Replacement	22,465,000	22,004,577	460,423	2.0%
Transmission Main Replacement	1,100,000	490,024	609,976	55.5%
Replacement of Meters and Services	6,000,000	5,758,649	241,351	4.0%
Fire Hydrant Program	547,000	514,246	32,754	6.0%
<b>Subtotal</b>	<b>30,112,000</b>	<b>28,767,497</b>	<b>1,344,503</b>	<b>4.5%</b>
Addressing Growth				
Transmission Capacity Program	4,200,000	2,794,186	1,405,814	33.5%
Fire Upgrading For New Developments	1,000,000	0	1,000,000	100.0%
Conservation Capital Projects	207,000	20,942	186,058	89.9%
New Meters and Services	1,850,000	2,245,187	(395,187)	-21.4%
Minor Improvements to the System	600,000	241,795	358,206	59.7%
<b>Subtotal</b>	<b>7,857,000</b>	<b>5,302,110</b>	<b>2,554,890</b>	<b>32.5%</b>
Emergency Planning				
Dedicated Fire Protection System	11,500,000	14,034,320	(2,534,320)	-22.0%
<b>Subtotal</b>	<b>11,500,000</b>	<b>14,034,320</b>	<b>(2,534,320)</b>	<b>-22.0%</b>
Other Works				
Telemetry System	400,000	216,873	183,127	45.8%
Engineering and Site Investigation	300,000	253,320	46,680	15.6%
Waterworks Operations Building	697,000	676,822	20,178	2.9%
MAP Project	155,375	159,008	(3,633)	-2.3%
<b>Subtotal</b>	<b>1,552,375</b>	<b>1,306,024</b>	<b>246,351</b>	<b>15.9%</b>
Water Quality Projects				
Miscellaneous Water Quality Projects	500,000	712,328	(212,328)	-42.5%
<b>Subtotal</b>	<b>500,000</b>	<b>712,328</b>	<b>(212,328)</b>	<b>-42.5%</b>
Other Charges				
Discount and Commission on Debentures	0	585,921	(585,921)	
Capital Overhead Variance and Other Charges	0	1,372,186	(1,372,186)	
<b>Subtotal</b>	<b>0</b>	<b>1,958,106</b>	<b>(1,958,106)</b>	
<b>TOTAL</b>	<b>51,521,375</b>	<b>52,080,384</b>	<b>(559,009)</b>	<b>-1.1%</b>
<b>Surplus/(Deficit) to be carried forward to 2003-2005 Plan</b>	<b>(559,009)</b>	<b>0</b>	<b>(559,009)</b>	

### Proposed Allocation of Funding (Deficit) to be carried forward to 2003 - 2005 Capital Plan:

#### 2000 - 2002 Basic Capital Budget Programs

Program or Project Description	Budget (\$)
2003 Transmission Capacity Program	(559,009)
<b>TOTAL</b>	<b>(559,009)</b>



**Waterworks Capital Closeout Variance Explanations**

Program or Project: Transmission Main Replacement

Order Group(s):

Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 1,100,000	\$ 490,024	\$ 609,976	55.5%

Explanation for Variance:

This program funds the replacement of aging large (400mm diameter and larger) transmission water mains. Transmission main work on East 12th Avenue that was originally planned to take place during 2000-2002 was deferred to future years, to better coordinate with other City construction projects.

Program or Project: Transmission Capacity Program

Order Group(s):

Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 4,200,000	\$ 2,794,186	\$ 1,405,814	33.5%

Explanation for Variance:

This program funds new and upgraded replacement large (400mm diameter and larger) transmission water mains that are required due to growing water demand. In the 2000-2002 Capital Plan this program funded the Westside Supply Project, to increase the reliability of water service to residents in higher elevation areas of the City's West Side. During the design phase of this project, opportunities were identified to re-route the pipeline, which resulted in significant savings.

Program or Project: Fire Upgrading for New Developments

Order Group(s):

Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 1,000,000	\$ 0	\$ 1,000,000	100.0%

Explanation for Variance:

For new developments, the City's practice is to seek cost-sharing for any water system upgrading work the development requires. The Fire Upgrading for Development program is intended to fund the City's share of the cost. This program is driven by development and it is difficult to predict the amount of activity the program will fund. As the City water system was adequately equipped to supply the design fire flow for new developments in 2000-2002, no expenditures occurred in this program.

Program or Project: Conservation Capital Projects

Order Group(s):

Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 207,000	\$ 20,942	\$ 186,058	89.9%

Explanation for Variance:

This program funds capital improvements that reduce drinking water consumption, focusing on projects that result in a net payback due to a reduction in GVRD bulk water purchases. Conservation projects under development in this plan were aimed to reduce water consumption at several Parks Board owned water features, but were delayed due to a change in project priorities and staff vacancies. Unfinished work will be completed in the 2003-2005 Capital Plan.

Program or Project: New Meters and Services  
 Order Group(s):  
 Budget (\$): Actual (\$): Unexpended Balance (\$): Variance (%):  
 \$ 1,850,000 \$ 2,245,187 (\$ 395,187) - 21.4%

## Explanation for Variance:

This program funds the cost of the water meter for new customer connections. All other costs for the new connections are recovered by the fee charged to the owner. Larger than expected inflationary increases in the construction costs of installing new service pipes created a funding shortfall not recoverable by the flat rate connection fees. The connection rates have since been adjusted to recover the full cost of connection installation work.

Program or Project: Minor Improvements to the System  
 Order Group(s):  
 Budget (\$): Actual (\$): Unexpended Balance (\$): Variance (%):  
 \$ 600,000 \$ 241,795 \$ 358,206 59.7%

## Explanation for Variance:

This program provides funding for minor works not associated with other capital programs. Examples include valve chambers, short watermain extensions and water quality monitoring stations. The Broadway watermain epoxy lining project in 2002 was planned to be cost shared between this program and Miscellaneous Water Quality Projects. This resulted in a surplus in this program and a corresponding deficit in the Water Quality Projects program (see below).

Program or Project: Dedicated Fire Protection System  
 Order Group(s):  
 Budget (\$): Actual (\$): Unexpended Balance (\$): Variance (%):  
 \$ 11,500,000 \$ 14,034,320 (\$ 2,534,320) - 22.0%

## Explanation for Variance:

The Dedicated Fire Protection System (DFPS) is designed to provide emergency water for fire fighting for an earthquake that would render the City's drinking water distribution system inoperable, as well as provide additional flow for properties whose demand exceeds the existing system's ability to supply. The 2000-2002 DFPS Capital Budget funded the False Creek crossing, Cypress Street and 11th Avenue pipeline extensions. Unexpected poor soil conditions on Cypress Street resulted in significantly higher than expected expenditures against this program. Increased expenditures were in the form of the extra trucking, excavation, backfill and road restoration costs. The construction of the DFPS spans multiple Capital Plans beginning in 1993 and is scheduled to complete by 2004. The deficit of \$2.5 million will be covered by surpluses from the other Waterworks capital programs.

Program or Project: Telemetry System  
 Order Group(s):  
 Budget (\$): Actual (\$): Unexpended Balance (\$): Variance (%):  
 \$ 400,000 \$ 216,873 \$ 183,127 45.8%

## Explanation for Variance:

The City operates a telemetry system that monitors operational information from approximately 40 sites throughout the water system. The information that is collected and stored by the telemetry system is essential for monitoring water demands, system breaks, and system performance as it alerts staff to problem areas. Staff turn over and vacancies have caused delays in this program. Unfinished work, including the upgrading of radio communication stations, software upgrades and the installation of new pressure monitoring sites, will be completed as part of the 2003-2005 Capital Plan.

Program or Project: Miscellaneous Water Quality Projects

Order Group(s):

Budget (\$):	Actual (\$):	Unexpended Balance (\$):	Variance (%):
\$ 500,000	\$ 712,328	(\$ 212,328)	- 42.5%

Explanation for Variance:

This program funds improvements to ensure adequate protection of water quality throughout the distribution system. Such projects are typically goal-oriented towards improving chlorine residuals, and can range from system modifications that eliminate stagnant low flow pipes to the installation of small-scale disinfection stations in areas that cannot be corrected through other means. The variance in this program was caused by the Broadway watermain epoxy lining project which was planned to be cost shared with the Minor Improvements to the System program.

**Sewer and Water Combined Connections Capital Account Closeout Summary**

<b>Program or Project Description</b>	<b>Revenues (\$)</b>	<b>Expenditures (\$)</b>	<b>Unexpended Balance (\$)</b>	<b>Variance (%)</b>
2001 Combined Connections	6,075,459	6,422,744	(347,285)	-5.7%
2002 Combined Connections	7,505,044	7,566,896	(61,852)	-0.8%
<b>TOTAL</b>	<b>13,580,503</b>	<b>13,989,640</b>	<b>(409,137)</b>	<b>-3.0%</b>
<b>Surplus/(Deficit) to be carried forward to 2003-2005 Plan</b>				
	<b>(409,137)</b>	<b>0</b>	<b>(409,137)</b>	

**Proposed Allocation of Funding (Deficit) to be carried forward to 2003 - 2005 Capital Plan:**

## 2000 - 2002 Cost Recovery Programs

<b>Program or Project Description</b>	<b>Revenues (\$)</b>
2004 Water and Sewer Combined Connections	(409,137)
<b>TOTAL</b>	<b>(409,137)</b>

**Sewer and Water Combined Connections (Cost Recovery Program) Capital Closeout Variance Explanations**

Program or Project:	Sewer and Water Combined Connections		
Order Group(s):	CA2EG/CA3EG		
Revenues (\$):	Expenditures (\$):	Unexpended Balance (\$):	Variance (%):
\$ 13,580,503	\$ 13,989,640	\$ (409,137)	-3.0%

## Explanation for Variance:

The difficulties in achieving full cost recovery in the public sewer connection program were reviewed in a November 20, 2001 Council Report at which time a 4% connection rate increase over and above general inflation was approved. Other cost saving measures to improve the financial position of this program were also implemented. With the revised rates and staff's continuing efforts, significant progress was achieved in 2003 towards balancing this program. It is now expected that the deficit will be completely eliminated by the end of 2004. It is therefore recommended that the deficit of \$409,137 be carried forward to the 2003-05 Capital Plan.