



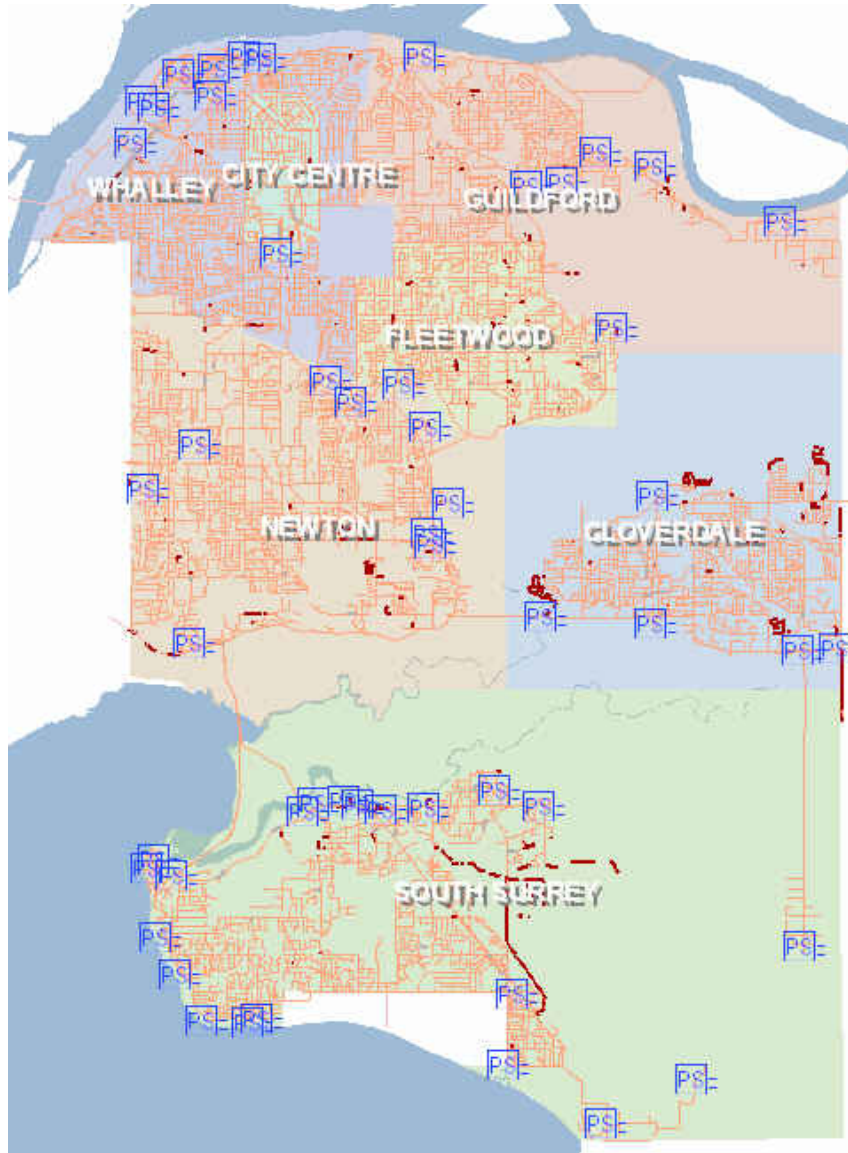
Service Requests in the Management Lifecycle

City of Surrey
April 2007

City of Surrey – Overview

- **Geographically, Surrey is one of the largest cities in Canada.**
- **Surrey covers an area of 317 square km.**
- **Surrey is also one of the fastest growing cities in Canada. With a current population of 410,000 Surrey is expected to be larger than Vancouver by the year 2025.**
- **Residential development & construction continues to grow at a rapid pace (60% increase between 1985 – 2005).**
- **City of Surrey maintains a staff to population ratio of 5:1,000 compared to the local government ratio average across Canada of 12:1,000**

City of Surrey – Sanitary Sewer Operations Overview



- Over 1,500 km of Sanitary Sewer mainlines, with more than 18,000 manholes, over 71,000 connections, and 40 Lift Stations.
- Diverse San Sewer System: Gravity, Vacuum, Force, and Low Pressure systems are maintained by the City.
- Approximately 10% of the mainline inventory is videoed every year via CCTV.
- 50% of the mainline inventory is flushed every year. Problem mains are flushed more frequently.

City of Surrey – Service Request Management Overview

- **City receives an average of 2,600 Sewer related calls from residents each year:**
 - **75% are Non-complaint related (example: cut ICs, general inquiries, etc)**
 - **25% are complaints related (example: back-ups, odour)**
- **As a percentage of the number of households:**
 - **2.45% of customers call for general work requests or for information per year**
 - **0.68% of customers call with system operation complaints per year**

Surrey's Service Request System



Service Request Program

- **The City's Service Request application resides on our mapping system, thus provides us with the potential to streamline our customer feedback analysis**
- **Surrey's Service Request System Provides For:**
 1. **City of Surrey Service Request Processes**
 2. **Improved Customer Call Processing**
 3. **Mapping to the City's GIS**
 4. **Statistical Data "on the fly"**
 5. **Improved Reporting & Tracking system**
 6. **Analyzing Program Effectiveness**
 7. **Future Technologies Enabled**

1. Service Request Processes



1. Staff receives request/complaint from customer



2. S/R form is forwarded to field operation staff



3. Field operation staff investigate complaint/request. If work is required staff create a w.o. against the asset and perform repairs.



4. Investigation details and follow-up info are added to S/R by field operation staff on their desktop PC's



5. S/R closed by field staff



2. Improved Customer Call Processing

Crew Info

Caller Information

Type of Complaint

Complaint Details

Service Request # 277921 G&R-Delivery / Deliver New Blue Box, Toter, Bags, and/or Calendar

Problem Code: G&R-Delivery
 Description: Deliver New Blue Box, Toter, Bags, and/or Calendar
 ID/Status: 277921 / OPEN
 Priority/Category: 3 - Within a Week / GARBAGE
 Initiated By: JANDA, HARJINDER S / 9/27/06 3:31:31 PM
 Submit To: KILBY, JEAN / 9/27/06 3:31:31 PM
 Dispatched To: YUZWA, ALLAN M / 9/27/06 3:30:05 PM
 Closed By: /
 Proj Comp. Date: 09/27/2006
 Is the Investigation Complete? / 9/27/06 3:30:08 PM
 Is This Incident an Emergency? /
 Is This Storm Related? /
 Cancel /

Incident Address: 15175 62A AVE
 City/Zip: /
 Date/Time: 9/27/06 3:29:39
 Account: 173249
 Mr / Ms / No. Callers: 0
 First Name: HARJINDER S / Last: JANDA
 Address: 15175 62A AVE / 103
 City: SURREY / Zip: V3S 1X1
 Home Phone: / Work: /
 Other Phone: / Type: /
 Email: /
 Caller Information: GARBAGE - REGULAR(1)
 Is Caller a Resident Within the Service Area?
 Is This a Follow-up Call?
 Customer Contacted on Site?
 Customer Contacted Afterwards?

Domain: ENGINEERING OPERATIONS
 Select a Problem from the Tree:
 DRAINAGE
 GARBAGE & RECYCLING
 G&R-Box/Bag Pickup
 G&R-Conduct
 G&R-Container Picmnt
 G&R-Contr. Complaint
 G&R-Delivery
 G&R-Dmgd Container
 G&R-Inquiry
 G&R-Leachate
 G&R-Mailout
 G&R-Mess
 G&R-Missed PU
 G&R-Other
 G&R-Partial PU
 G&R-Y/W Stock-piling
 ROAD
 SEWER
 WATER

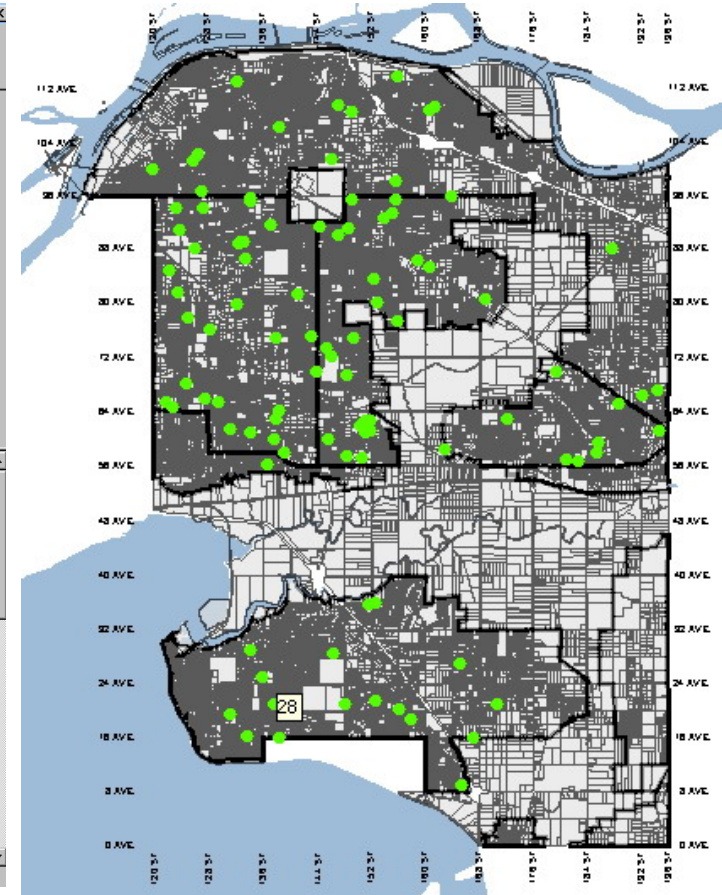
Custom Field Name	Value	Required
PICK-UP TYPE	Recycling	Y
PICK-UP DAY	Wednesday	Y
PICK-UP CLASSIFICATION	Curb Side	Y
TOTER	0	N
BLUE BOX	1	N
BLUE BAG	1	N
YELLOW BAG	1	N
CALENDAR	1	N

- Categorizes & prioritizes complaints & requests
- Assigns specific staff to deal with complaints and requests
- Records specific details regarding the caller's inquiry or complaint
- Application geographically locates all complaints or requests
- Asset information is available upon creation of the Service Request

2. Continued...

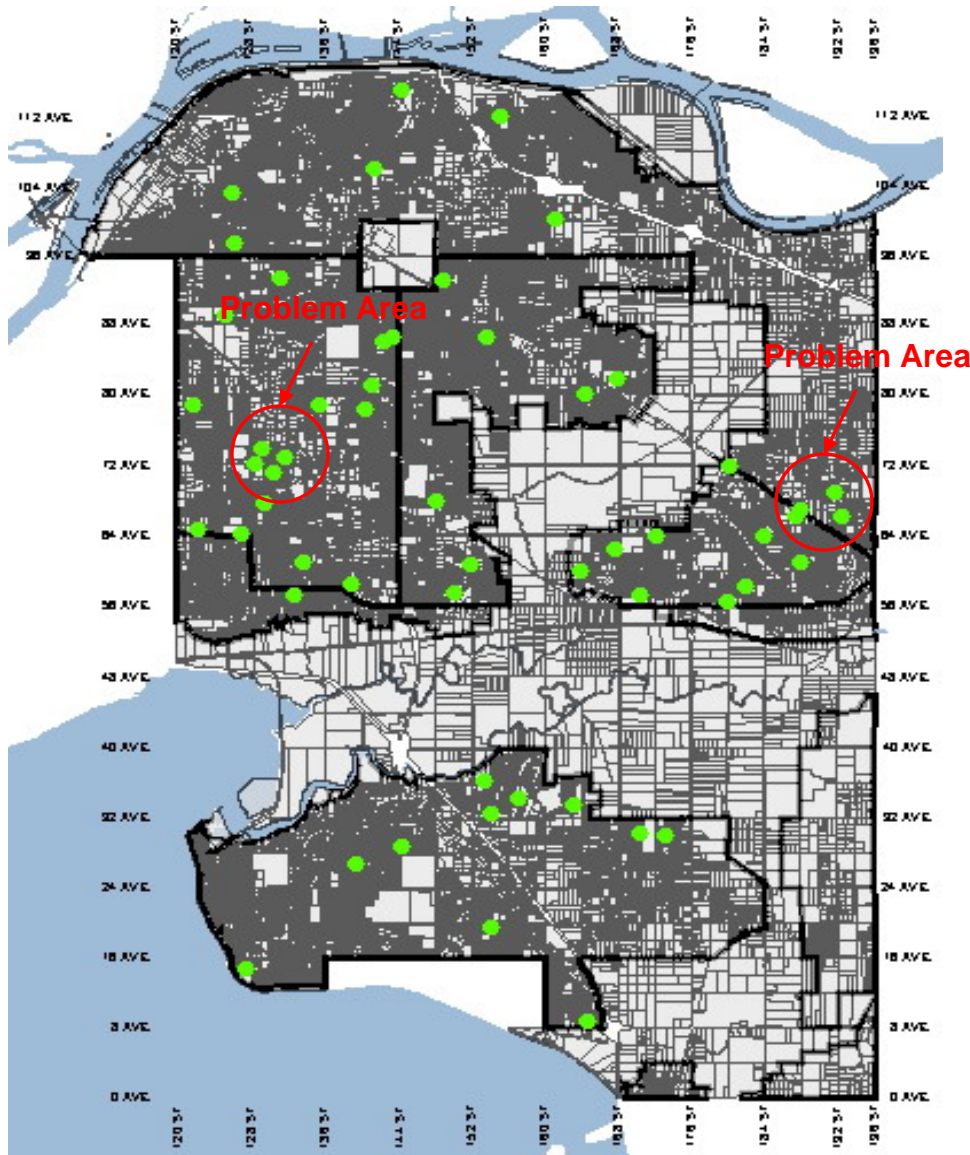
View Recent Complaints/Request

RequestID	DateTimeIntr	ProblemCode	Description	Priority	ReqCategory	DispatchTo	Shop	ProbAddress	MapPage	Work
278327	10/03/06 11:33:55 AM	G&R-Malout	Mail out New Bags, and/or Calendar	3	GARBAGE			10216 127 ST		
278297	10/03/06 9:48:39 AM	G&R-Malout	Mail out New Bags, and/or Calendar	3	GARBAGE			10640 138A ST		
278325	10/03/06 11:26:31 AM	G&R-Malout	Mail out New Bags, and/or Calendar	3	GARBAGE			11445 154A ST		
278323	10/03/06 11:25:23 AM	G&R-Other	Other Garbage or Recycling Request	2	GARBAGE			11445 154A ST		
278379	10/03/06 3:52:48 PM	G&R-Delivery	Deliver New Blue Box, Toter, Bags, and/or Calendar	3	GARBAGE			12012 100 AVE		
278341	10/03/06 12:43:26 PM	G&R-Malout	Mail out New Bags, and/or Calendar	3	GARBAGE			12336 IDNA PL		
278345	10/03/06 1:03:53 PM	G&R-Delivery	Deliver New Blue Box, Toter, Bags, and/or Calendar	3	GARBAGE			12375 81A AVE		
278298	10/03/06 9:51:08 AM	G&R-Missed PU	Notification of Missed Pick-Up	2	GARBAGE			12491 68 AVE		
278387	10/04/06 8:20:30 AM	G&R-Malout	Mail out New Bags, and/or Calendar	3	GARBAGE			12552 CENTRE DR		
278396	10/04/06 8:56:58 AM	G&R-Missed PU	Notification of Missed Pick-Up	2	GARBAGE			12633 88 AVE		
278314	10/03/06 10:50:17 AM	G&R-Delivery	Deliver New Blue Box, Toter, Bags, and/or Calendar	3	GARBAGE			12713 96A AVE		
278389	10/04/06 8:24:15 AM	G&R-Missed PU	Notification of Missed Pick-Up	2	GARBAGE			12778 66 AVE		
278378	10/03/06 3:48:51 PM	G&R-Delivery	Deliver New Blue Box, Toter, Bags, and/or Calendar	3	GARBAGE			13234 112B AVE		
278347	10/03/06 1:13:34 PM	G&R-Partial PU	Notification of Partial Pick-Up	2	GARBAGE			13388 CYPRESS PL		
278320	10/03/06 11:04:51 AM	G&R-Delivery	Deliver New Blue Box, Toter, Bags, and/or Calendar	3	GARBAGE			13415 VINE MAPLE DR		
278349	10/03/06 1:34:24 PM	G&R-Missed PU	Notification of Missed Pick-Up	2	GARBAGE			13588 25 AVE		
278403	10/04/06 9:30:39 AM	G&R-Delivery	Deliver New Blue Box, Toter, Bags, and/or Calendar	3	GARBAGE			13668 56 AVE		
278362	10/03/06 2:32:13 PM	G&R-Delivery	Deliver New Blue Box, Toter, Bags, and/or Calendar	3	GARBAGE			13732 91A AVE		
278398	10/04/06 9:03:19 AM	G&R-Delivery	Deliver New Blue Box, Toter, Bags, and/or Calendar	3	GARBAGE			13766 60 AVE		
278313	10/03/06 10:39:05 AM	G&R-Container Plcmnt	Notification of Improperly Replaced Container	2	GARBAGE			13853 64 AVE		
278337	10/03/06 12:35:06 PM	G&R-Mess	Notification of Spilled or Mess Left Behind	2	GARBAGE			14123 BEAR CREEK DR		
278407	10/04/06 9:45:19 AM	G&R-Malout	Mail out New Bags, and/or Calendar	3	GARBAGE			14738 103A AVE		
278391	10/04/06 8:37:47 AM	G&R-Delivery	Deliver New Blue Box, Toter, Bags, and/or Calendar	3	GARBAGE			14843 57A AVE		
278292	10/04/06 9:44:00 AM	G&R-Malout	Mail out New Bags, and/or Calendar	3	GARBAGE			16165 COLUMBIANE PL		



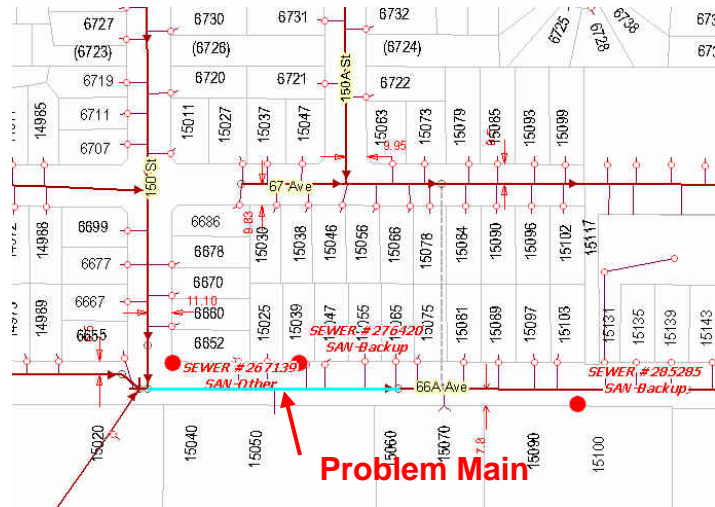
- Immediate ability to review recent calls to check for other complaints in the area
- Immediate ability to search and geographically review previous complaints or requests by name or address
- Immediate ability to visually represent complaint types on a map (recent or by search on a particular date or area)

3. Mapping to Geographical Information System (GIS)



- **Surrey's Service Request Management System is linked to the GIS system**
- **No external data extractions or manual plotting is required**
- **Ability to plot complaints on an itemized basis using as many layers as desired**
- **Ability to quickly determine problem areas on maps resulting in quick analysis & resolution of problems**
- **Monitor progress of problem areas (daily, monthly or annually)**

3. Continued...



Review Service Request History

- The Service Request instantly displays the location on a map
- Corresponding asset information, and Service Request history can be displayed
- A work order history of problems can be reviewed **BEFORE** leaving the office to investigate

Review Work History

Asset Attributes

Attribute	Value
OBJECTID	18454
MAIN_TYPE	Gravity
MAIN_TYPE2	Gravity
GRAVITY_CLASSIFICATION	Interceptor
FACILITYID	1000083486
LEGACYID	23082
MAIN_SIZE	900
MAIN_SIZE_2	
CALC_LENGTH	120.3304525
MATERIAL	CO
RELINED_MATERIAL	
UP_ELEVATION	12.25
DOWN_ELEVATION	12.04
SLOPE	0.17
STATUS	In Service
OPERATING_STATUS	Open
DRAWING_NO	S-063-001
PROJECT_NO	3029
YR	1973
OWNER	Surrey
UP_NODE	1499606663
DOWN_NODE	1505606647
ASBUILT_LENGTH	124.61
LOCATION	
COMMENTS	SEE S-063-063
GIS_ENTRY_STAGE	
WARRANTYDATE	
CONDITION	
CONDITIONDATE	
YTD_COST	
LIFECYCLE_COST	
CCTV_DATE	
FLUSH_DATE	
GROUT_DATE	
SMOKE_DATE	
ROOT_DATE	
GREASE_DATE	

4. Statistical Data

- Detailed complaint & request data available on-demand
- No external data extractions are required
- Flexible query capabilities
- Data can be sorted in a number of ways (typically):
 - Year
 - Month
 - Day
 - Type of complaint/requests
 - Assigned Employee
 - Status (open or closed)
- Quickly determines service quality and pinpoints problem areas.

No. of Sanitary Backups for 2006

Search for Request ID: _____ Recently Opened: _____

Request: Recent Search Find Clear Print

Caller General Status Problem Custom Text

SAN-Backup
Notification of Sewer Back-up

- SEWER
 - SAN-Backup
 - SAN-Cut IC
 - SAN-Estimate
 - SAN-IC Lid
 - SAN-Inquiry
 - SAN-Inspection
 - SAN-MH Lid Loose
 - SAN-MH Lid Missing
 - SAN-MH Rideability
 - SAN-Odour

Open Request(s)
Create Shapes
Print Request
Print Result List
Reports
Save Results List
Move Calls to Request
Dispatch Requests To
Close Requests

Display These Items in Search Results

- SubmitTo
- DateSubmitTo
- DateDispatchTo
- ClosedBy
- DateTimeClosed
- PyCompleteDate
- Status

Save Search Open Search

Save As Event Layer
Number of Requests: 391

Complaint/Request Type

ID	DateTimeInit	ProblemCode	Description	Priority	ReqCategory	ProbAddress	SubmitTo	DateTimeClosed	Status
250130	2006-02-07 10:22:...	SAN-Backup	Notification of Se...	1	SEWER	13503 KING GEO...	REYNOLDS, GU...	2006-02-07 10:23:...	CLOSED
251127	2006-02-17 3:11:...	SAN-Backup	Notification of Se...	1	SEWER	6211 BOUNDAR...	REYNOLDS, GU...	2006-02-17 8:40:...	CLOSED
251714	2006-02-20 12:51:...	SAN-Backup	Notification of Se...	1	SEWER	9382 159 ST	REYNOLDS, GU...	2006-02-20 12:52:...	CLOSED
251902	2006-02-21 2:11:...	SAN-Backup	Notification of Se...	1	SEWER	14123 114 AVE	REYNOLDS, GU...	2006-02-21 2:12:...	CLOSED
251963	2006-02-22 8:38:...	SAN-Backup	Notification of Se...	1	SEWER	5896 179 ST	REYNOLDS, GU...	2006-02-23 3:04:...	CLOSED
251979	2006-02-22 9:14:...	SAN-Backup	Notification of Se...	1	SEWER	13985 113A AVE	REYNOLDS, GU...	2006-02-24 8:52:...	CLOSED
252176	2006-02-23 9:11:...	SAN-Backup	Notification of Se...	1	SEWER	13212 24 AVE	REYNOLDS, GU...	2006-02-23 9:11:...	CLOSED
252306	2006-02-23 3:10:...	SAN-Backup	Notification of Se...	1	SEWER	10256 154 ST	REYNOLDS, GU...	2006-02-23 3:11:...	CLOSED
252419	2006-02-24 1:15:...	SAN-Backup	Notification of Se...	1	SEWER	9382 159 ST	REYNOLDS, GU...	2006-02-24 1:21:...	CLOSED
252431	2006-02-24 1:52:...	SAN-Backup	Notification of Se...	1	SEWER	8041 123 ST	REYNOLDS, GU...	2006-02-27 9:02:...	CLOSED
252457	2006-02-24 3:06:...	SAN-Backup	Notification of Se...	1	SEWER	1969 160 ST	REYNOLDS, GU...	2006-02-24 3:06:...	CLOSED
252481	2006-02-27 8:07:...	SAN-Backup	Notification of Se...	1	SEWER	15126 73 B ST	REYNOLDS, GU...	2006-03-01 11:16:...	CLOSED
252605	2006-02-27 1:36:...	SAN-Backup	Notification of Se...	1	SEWER	13503 KING GEO...	REYNOLDS, GU...	2006-02-27 1:36:...	CLOSED
252634	2006-02-27 2:24:...	SAN-Backup	Notification of Se...	1	SEWER	13084 100 A AVE	REYNOLDS, GU...	2006-02-28 9:07:...	CLOSED
252646	2006-02-27 2:46:...	SAN-Backup	Notification of Se...	1	SEWER	13913 FRASER ...	REYNOLDS, GU...	2006-02-28 9:11:...	CLOSED

Copy to Word Copy to Excel Graph Group Count Matrix/Summary

Select a Field for Hour/Day/Month/Year Calculations

- 2. DateTimeInit
- 9. DateTimeClosed

5. Improved Tracking & Reporting System

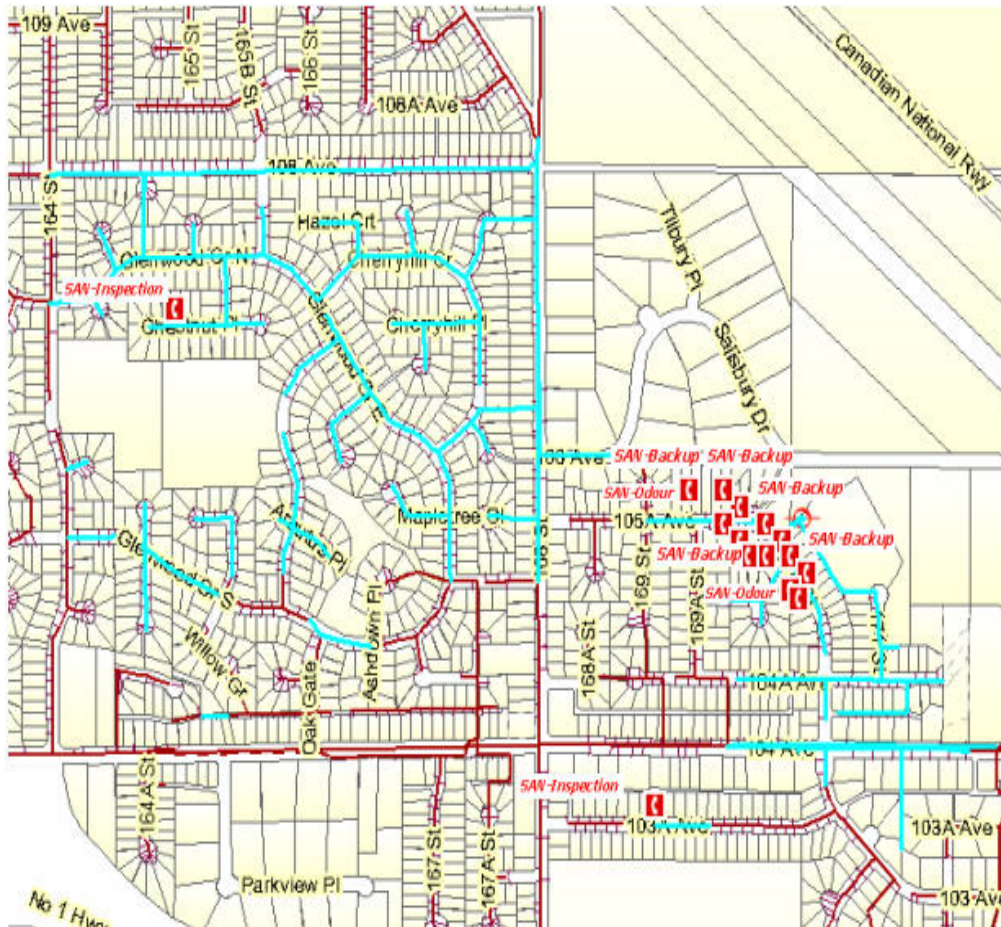
Number of Requests: 391

ID	DateTimeInIt	ProblemCode	Description	Priority	ReqCategory	ProbAddress	SubmitTo	DateTimeClosed	Status
250190	2006-02-07 10:22...	SAN-Backup	Notification of Se...	1	SEWER	13503 KING GEO...	REYNOLDS, GU...	2006-02-07 10:23...	CLOSED
251127	2006-02-14 3:11...	SAN-Backup	Notification of Se...	1	SEWER	6211 BOUNDAR...	REYNOLDS, GU...	2006-02-17 8:40...	CLOSED
251774	2006-02-20 12:51...	SAN-Backup	Notification of Se...	1	SEWER	9382 159 ST	REYNOLDS, GU...	2006-02-20 12:52...	CLOSED
251902	2006-02-21 2:11...	SAN-Backup	Notification of Se...	1	SEWER	14123 114 AVE	REYNOLDS, GU...	2006-02-21 2:12...	CLOSED
251963	2006-02-22 8:38...	SAN-Backup	Notification of Se...	1	SEWER	5896 179 ST	REYNOLDS, GU...	2006-02-23 3:04...	CLOSED
251979	2006-02-22 9:14...	SAN-Backup	Notification of Se...	1	SEWER	13985 113A AVE	REYNOLDS, GU...	2006-02-24 8:52...	CLOSED
252176	2006-02-23 9:11...	SAN-Backup	Notification of Se...	1	SEWER	13212 24 AVE	REYNOLDS, GU...	2006-02-23 9:11...	CLOSED
252306	2006-02-23 3:10...	SAN-Backup	Notification of Se...	1	SEWER	10256 154 ST	REYNOLDS, GU...	2006-02-23 3:11...	CLOSED
252419	2006-02-24 1:15...	SAN-Backup	Notification of Se...	1	SEWER	9382 159 ST	REYNOLDS, GU...	2006-02-24 1:21...	CLOSED
252431	2006-02-24 1:52...	SAN-Backup	Notification of Se...	1	SEWER	8041 123 ST	REYNOLDS, GU...	2006-02-27 9:02...	CLOSED
252457	2006-02-24 3:06...	SAN-Backup	Notification of Se...	1	SEWER	1969 160 ST	REYNOLDS, GU...	2006-02-24 3:06...	CLOSED
252481	2006-02-27 8:07...	SAN-Backup	Notification of Se...	1	SEWER	15126 73 B ST	REYNOLDS, GU...	2006-03-01 11:16...	CLOSED
252605	2006-02-27 1:36...	SAN-Backup	Notification of Se...	1	SEWER	13503 KING GEO...	REYNOLDS, GU...	2006-02-27 1:36...	CLOSED
252634	2006-02-27 2:24...	SAN-Backup	Notification of Se...	1	SEWER	13084 100 A AVE	REYNOLDS, GU...	2006-02-28 9:07...	CLOSED
252646	2006-02-27 2:46...	SAN-Backup	Notification of Se...	1	SEWER	13913 FRASER...	REYNOLDS, GU...	2006-02-28 9:11...	CLOSED

- Ability to track status of S/R's (open vs. closed S/R's)
- Service Request comments are directly entered to service request by field operation staff
- Itemized service request reports available per complaint/request type
- Administration done electronically (we've reduced the need to generate paper)

Service Request Tracking

6. Analyzing Program Effectiveness



- Program work is displayed from the Work Order tracking portion of our application (eg 2004 Flushing Program)
- Service Requests from 2005 are displayed with the Program work for analysis
- Service Requests from 2006 are then displayed with the Program work for additional analysis of the 2 year flushing program
- We can see by the cluster, that additional inspection and analysis is required in one particular location

7. Next Steps:

Process



Call taker receives call



Call taker enters all info into system



S/R is retrieved by field operation staff from mobile computer (in vehicle)



Field operation staff investigate complaint/request



Investigation details are entered into the system by the field operation staff (mobile computer)



S/R closed by staff in field

Benefits

- Enhance service request process by linking live to City fleet
- Eliminates duplication of time spent to record and complete service requests
- Decreases time spent in office and increases time in field
- Data (maps & complaint history) available in field for problem resolution
- Pilot program for linking live is currently being launched

Questions?