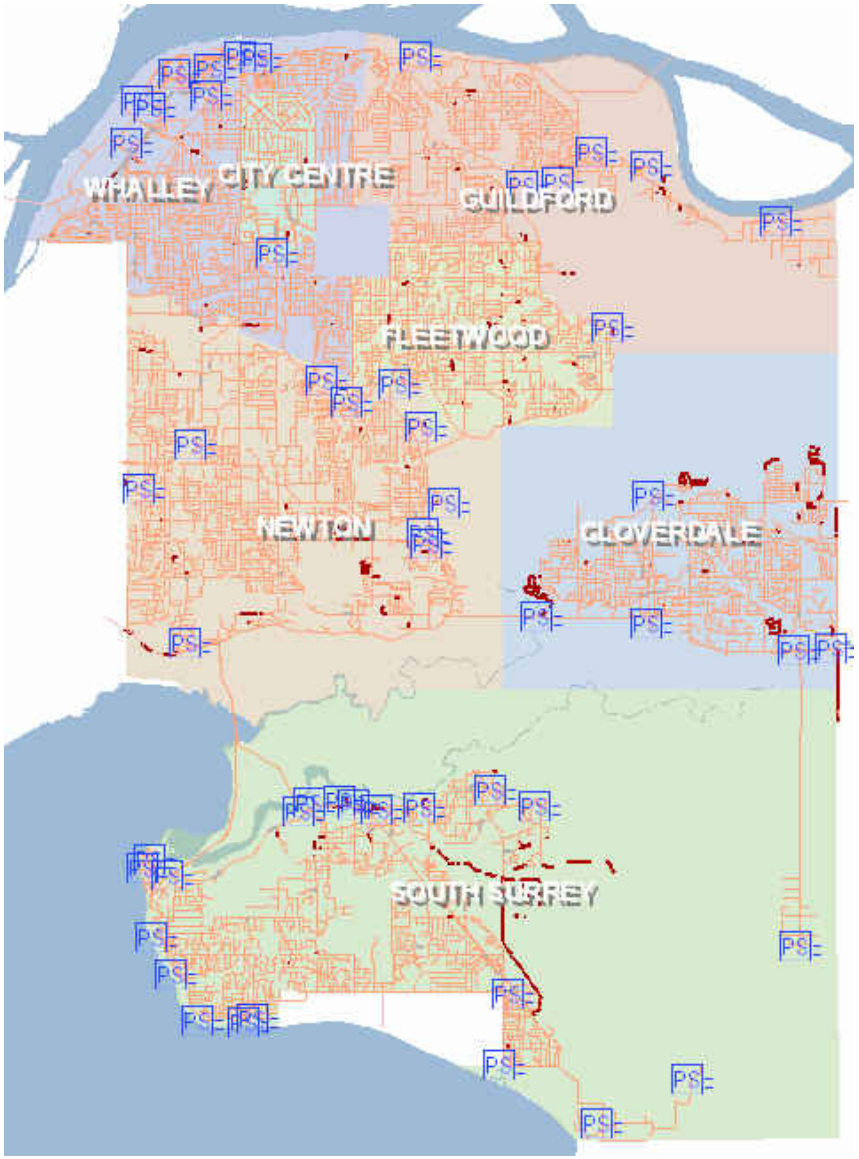
Service Requests in the Management Lifecycle

City of Surrey
April 2007

City of Surrey – Overview

- **Geographically, Surrey is one of the largest cities 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

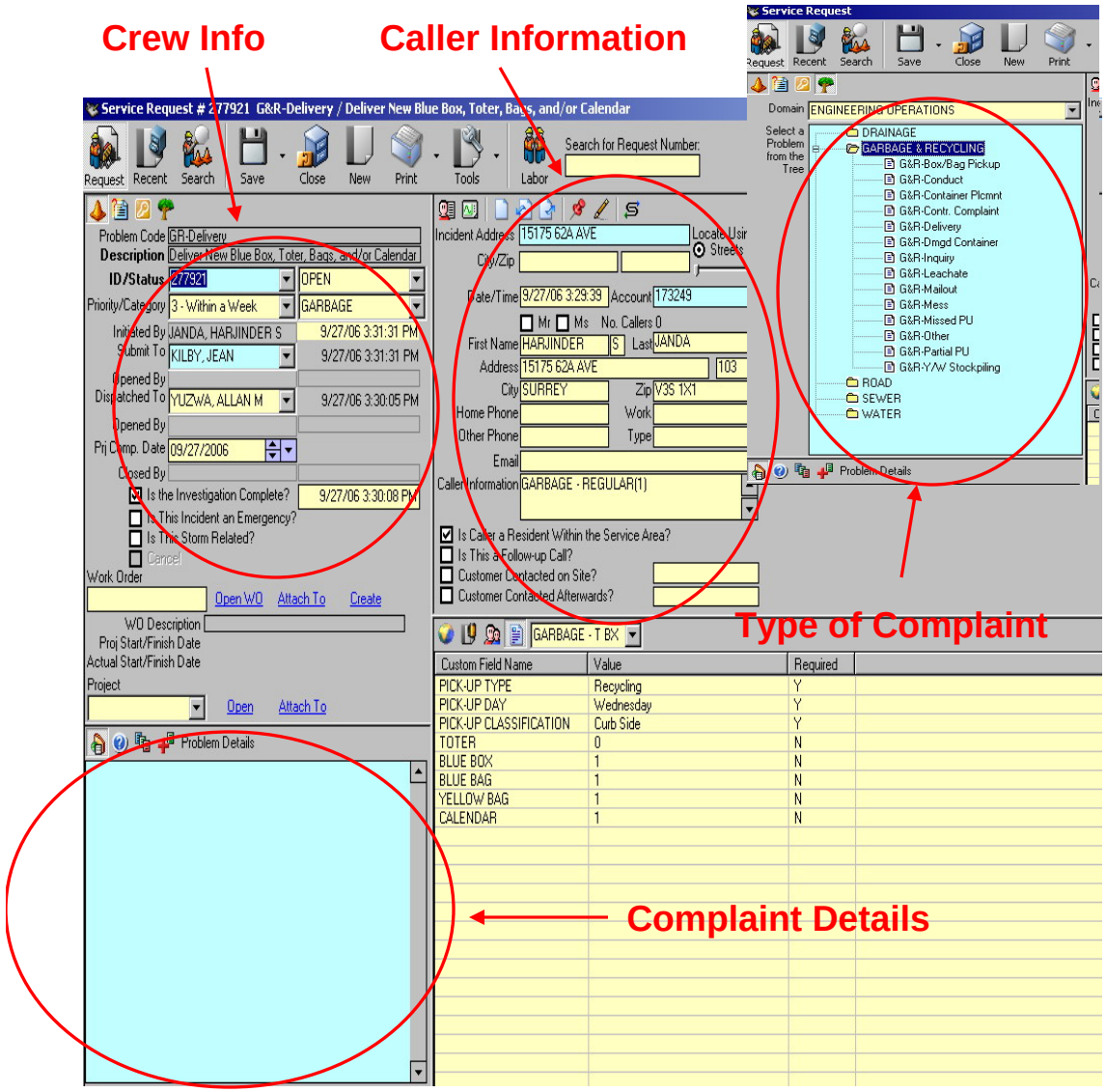
2. S/R form is forwarded to field operation staff

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

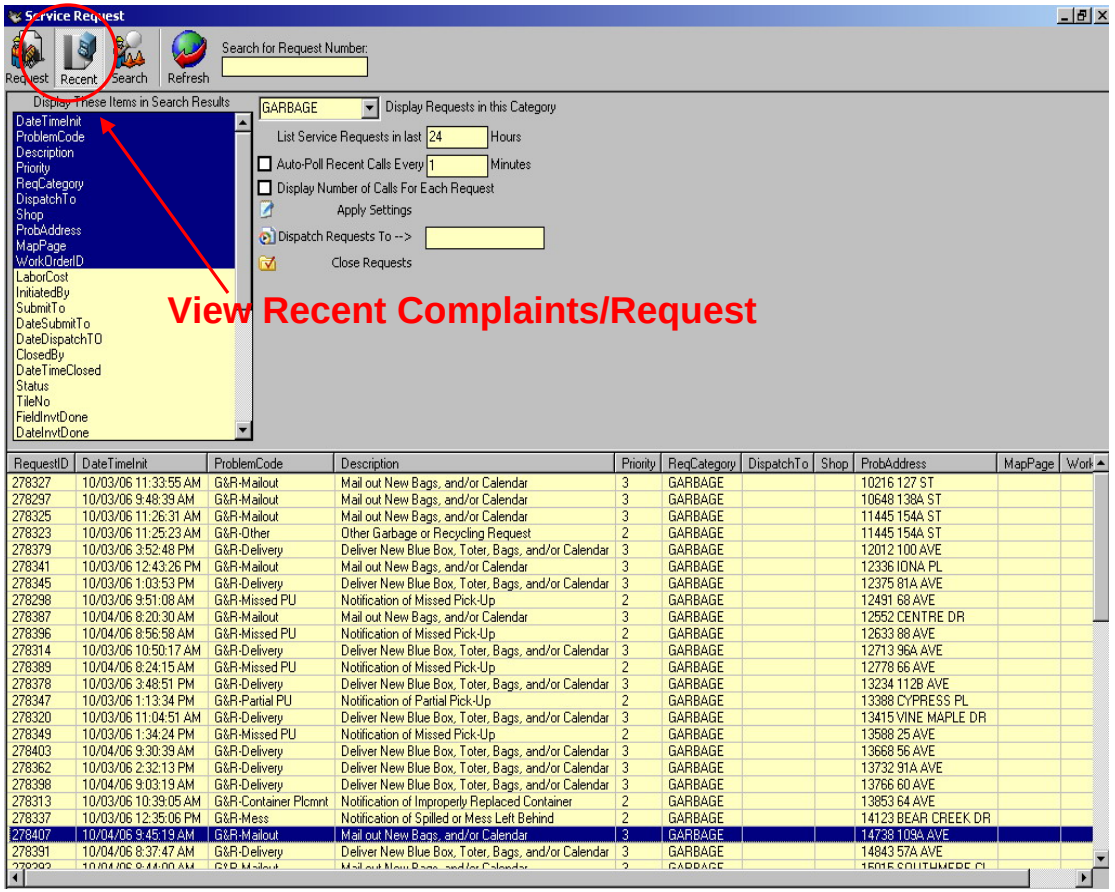
5. S/R closed by field staff

2. Improved Customer Call Processing

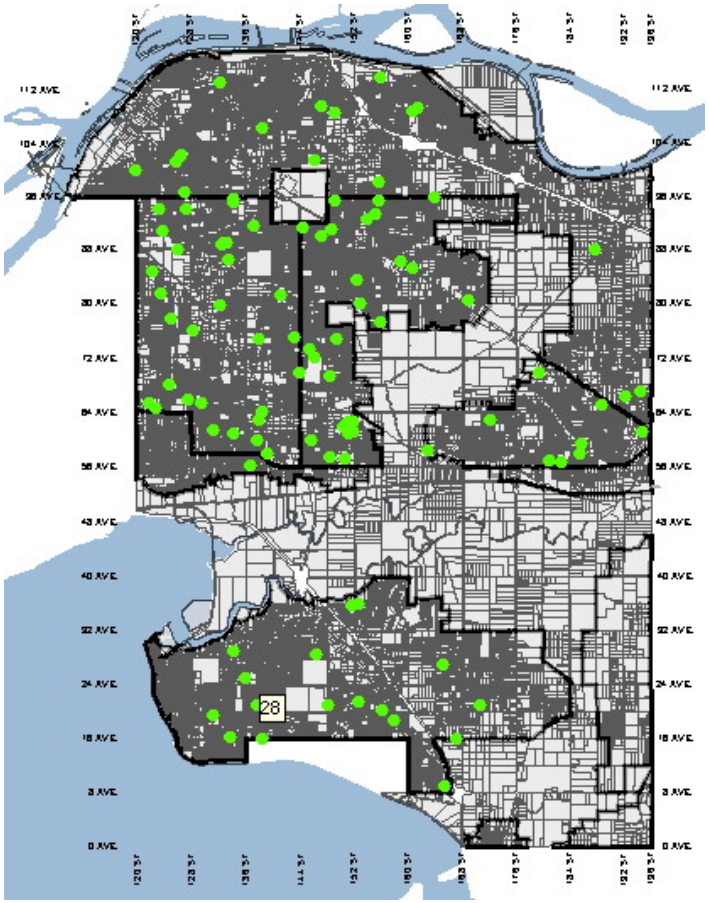


- Categorizes & prioritizes complaints & requests
- Assigns specific staff to deal with complaints and requests
- Records specific details regarding the caller's inquiry or complaint
- Application geographically locates all complaints or requests
- Asset information is available upon creation of the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

2. Continued…

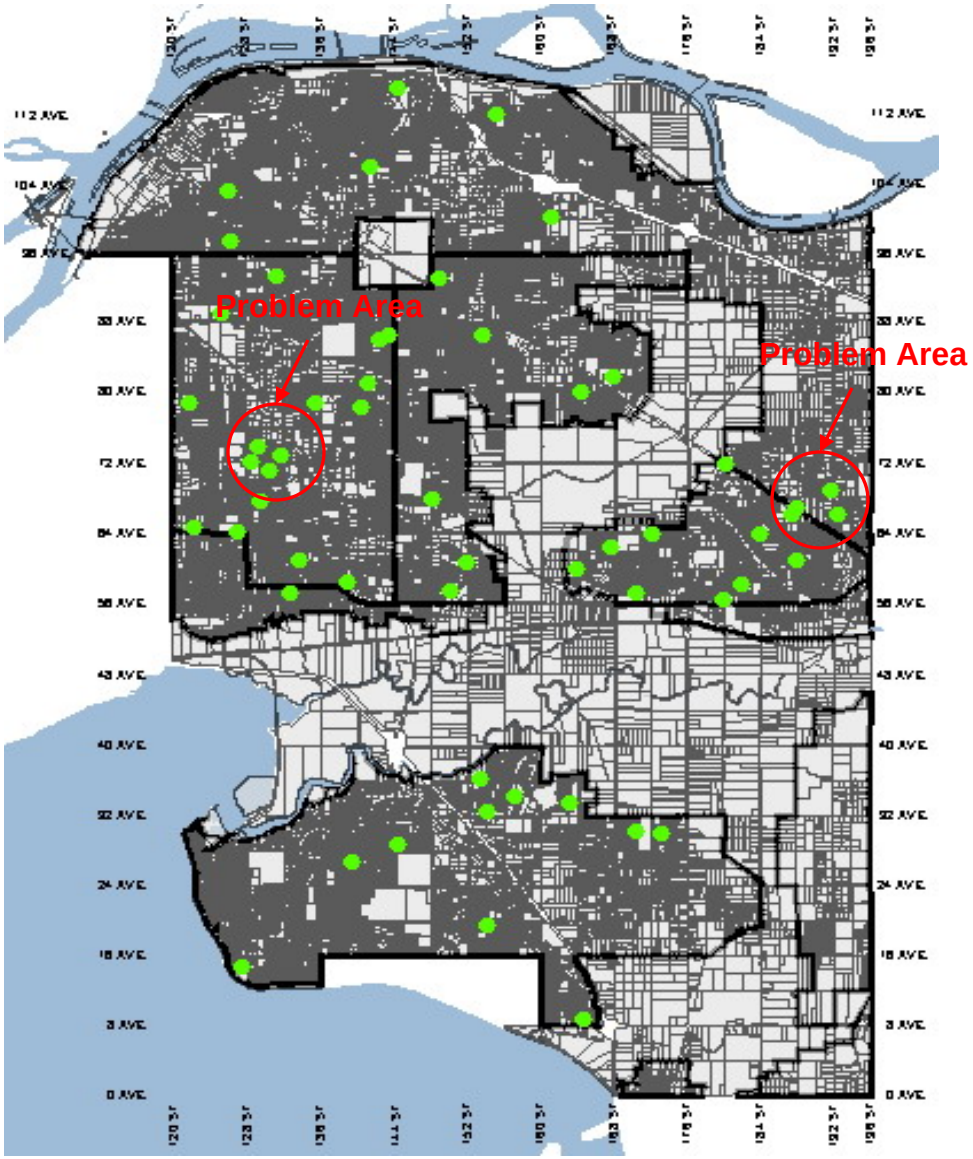


RequestID	DateTimeInit	ProblemCode	Description	Priority	ReqCategory	DispatchTo	Shop	ProbAddress	MapPage	Work
278327	10/03/06 11:33:55 AM	G&R-Mailout	Mail out New Bags, and/or Calendar	3	GARBAGE			10216 127 ST		
278297	10/03/06 9:48:39 AM	G&R-Mailout	Mail out New Bags, and/or Calendar	3	GARBAGE			10648 138A ST		
278325	10/03/06 11:26:31 AM	G&R-Mailout	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-Mailout	Mail out New Bags, and/or Calendar	3	GARBAGE			12336 IONA 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-Mailout	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-Mailout	Mail out New Bags, and/or Calendar	3	GARBAGE			14738 109A 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		



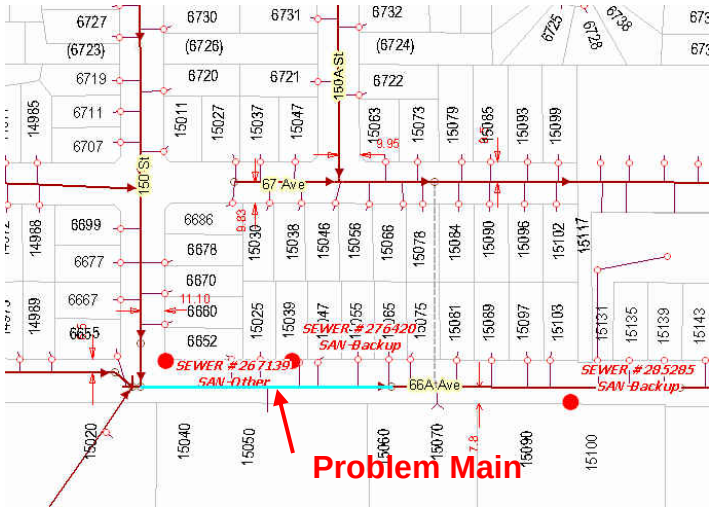
- **Immediate ability to review recent calls to check for other complaints in the area**
- **Immediate ability to search and geographically review previous complaints or requests by name or address**
- **Immediate ability to visually represent complaint types on a map (recent or by search on a particular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

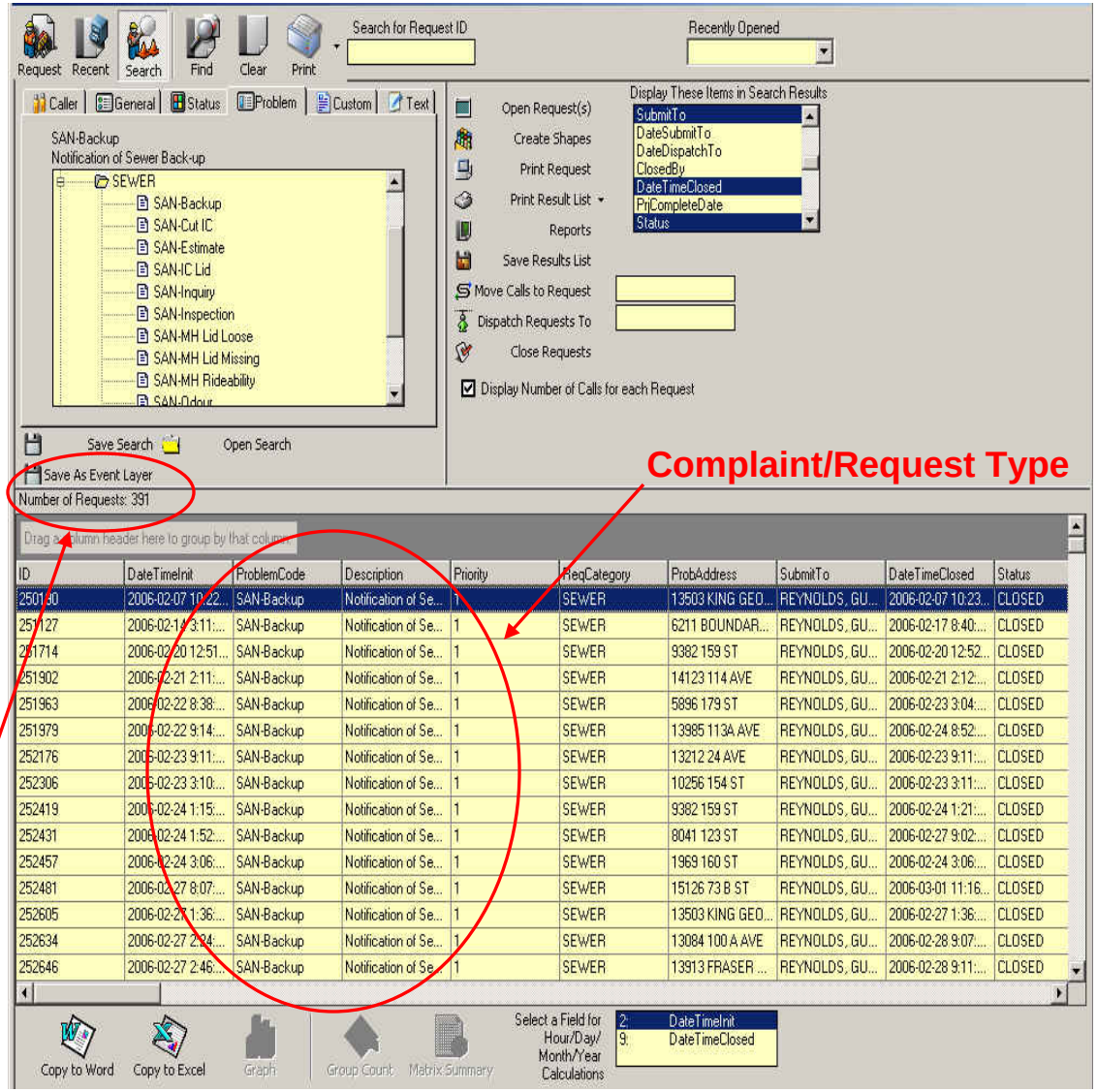
Save List Print List

Asset | Work History

Attribute	Value
OBJECTID	18454
MAIN_TYPE	Gravity
MAIN_TYPE2	Gravity
GRAVITY_CLASSIFICA	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	

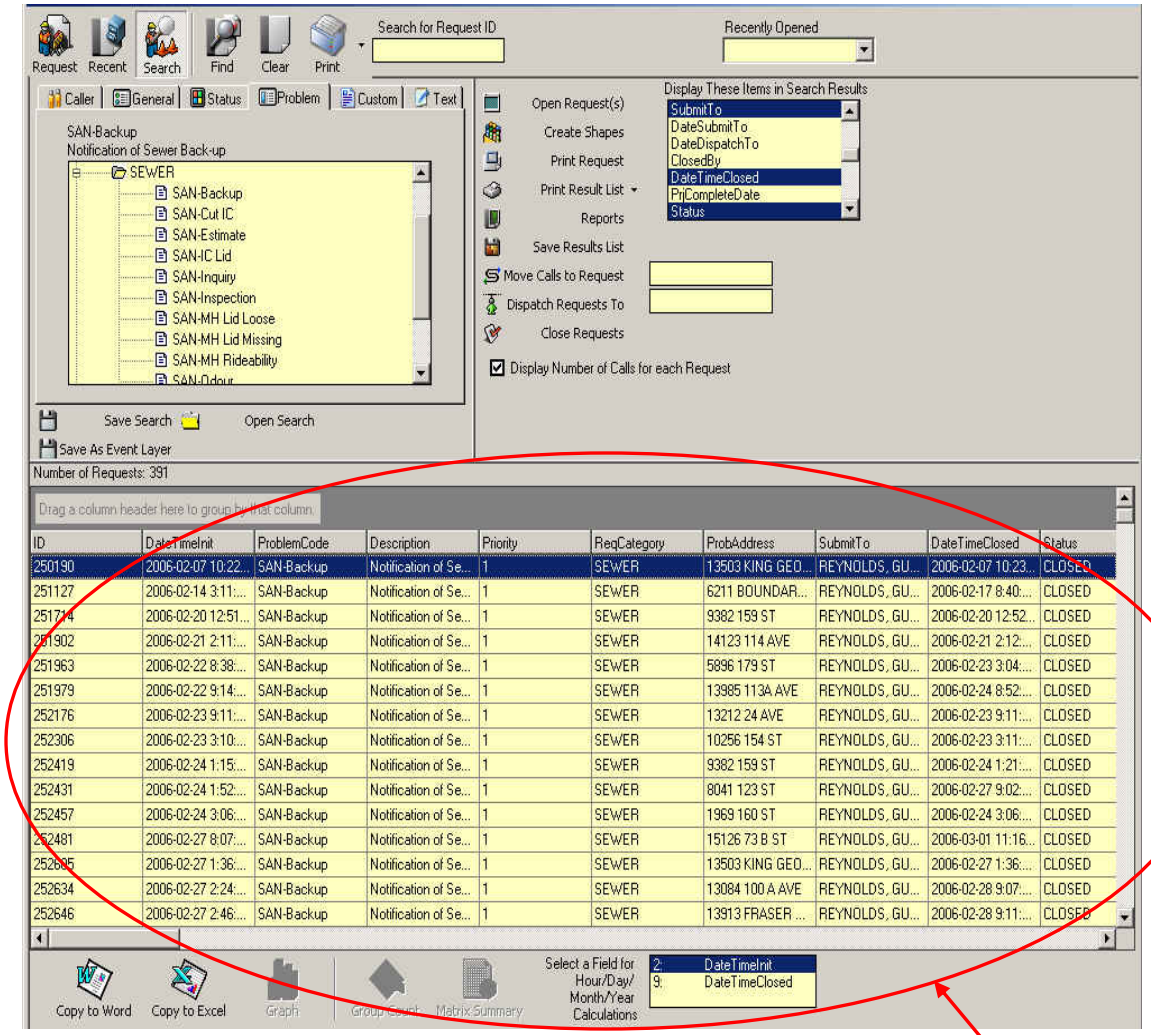
4. Statistical Data

- 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

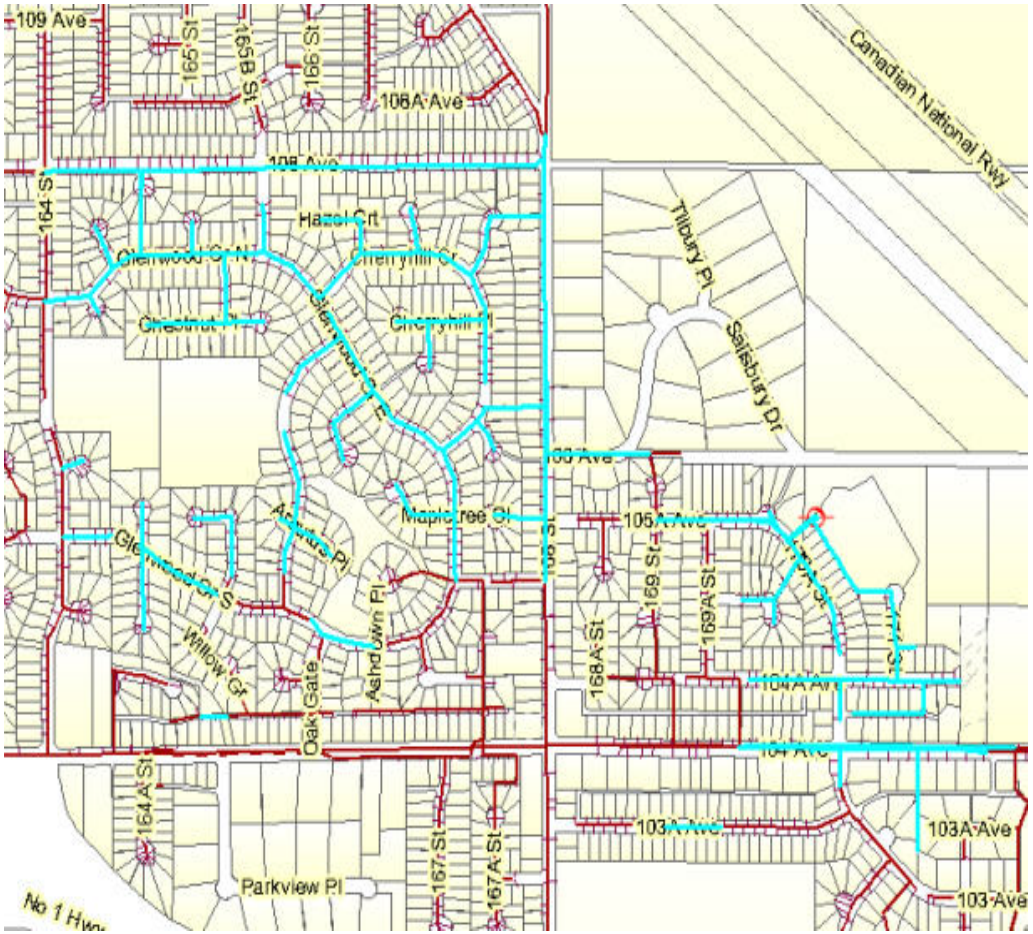
5. Improved Tracking & Reporting System



- **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)**

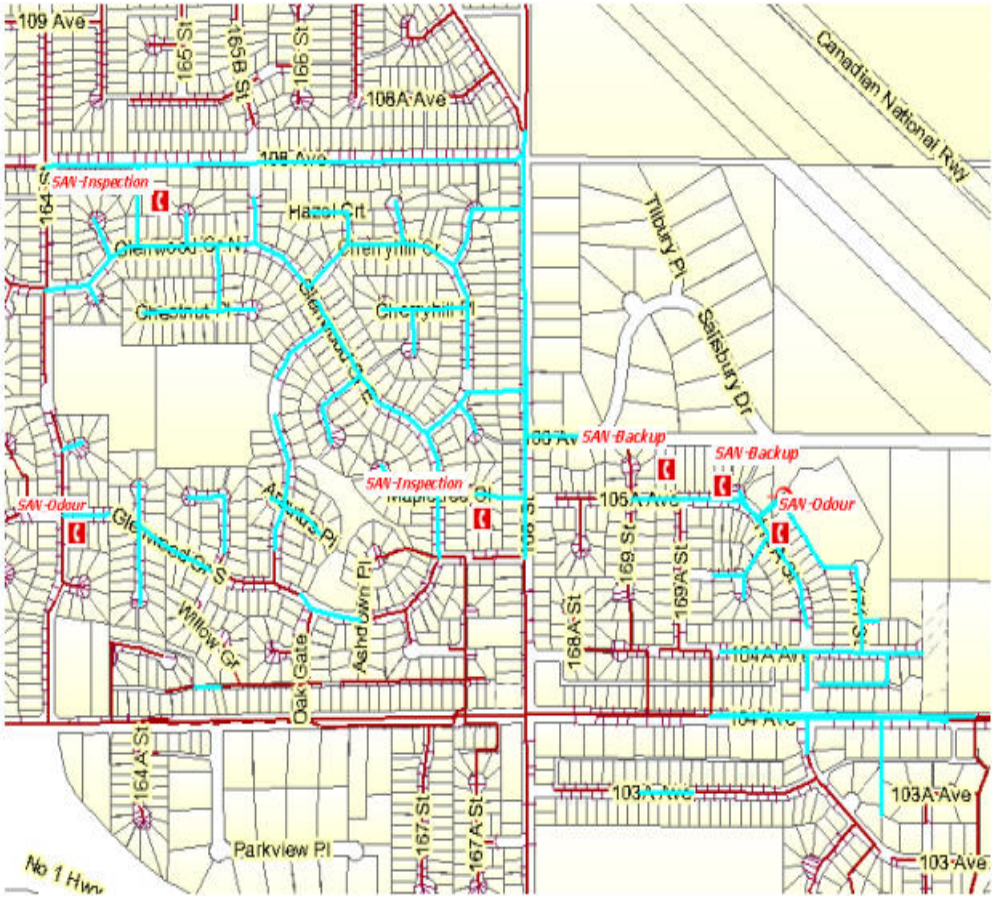
Service Request Tracking

6. Analyzing Program Effectiveness



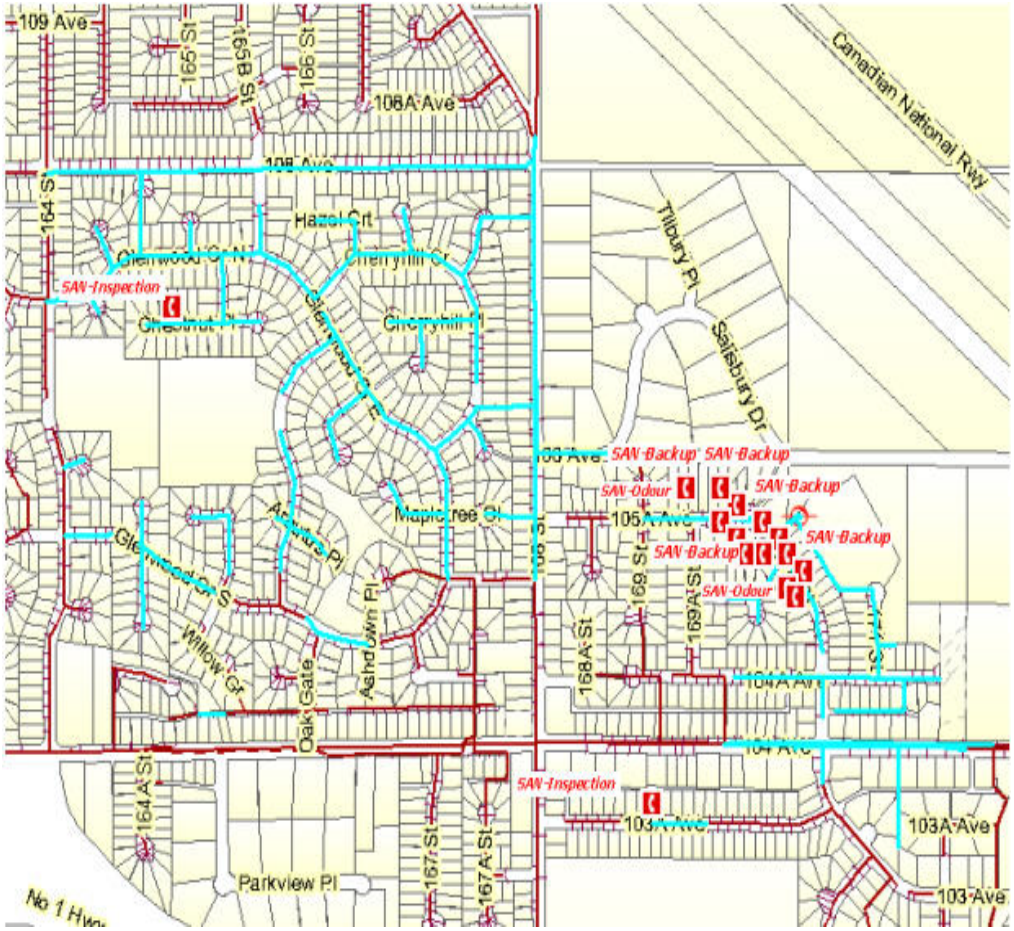
- **Program work is displayed from the Work Order tracking portion of our application (eg 2004 Flushing Program)**

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 on top of the Program work for analysis**

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) availabe in field for problem resolution
- Pilot program for linking live is currently being launched

Questions?