

Cable & Wireless, Cayman Islands Ltd.

GIS: Obtaining Service Delivery Efficiency

Recent Implementations & Proposed
GIS Service Delivery Deployment

Presentation Objectives

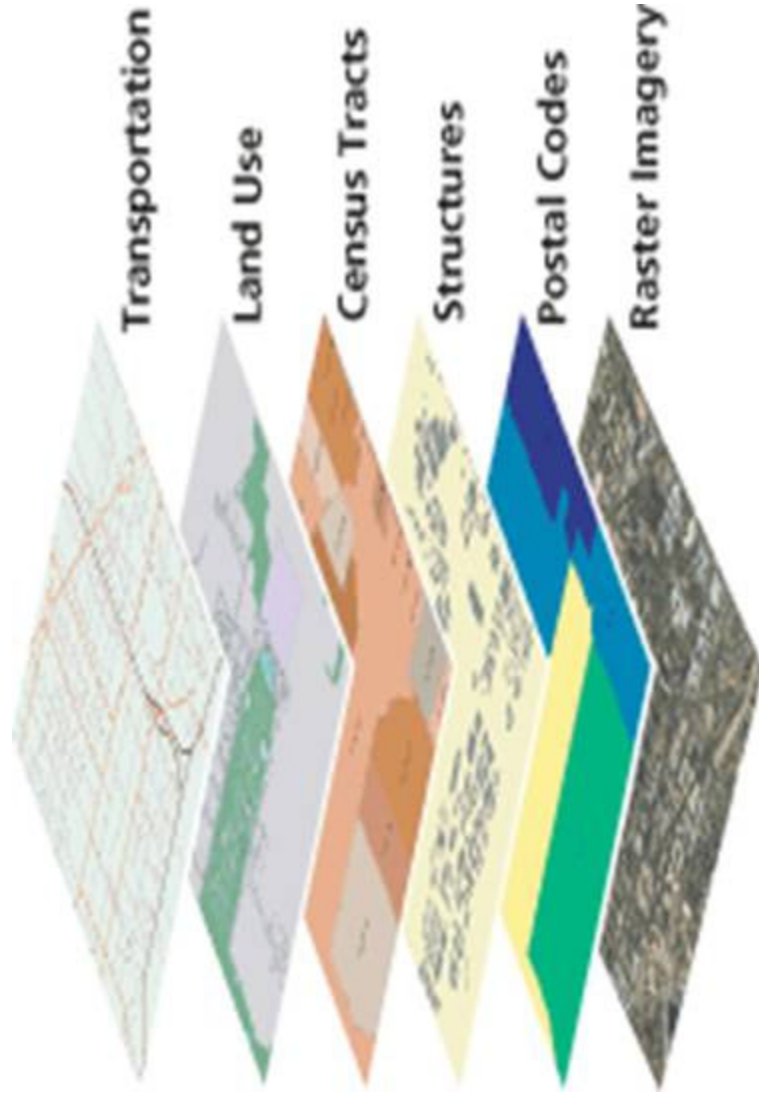
- Understanding what a Geographical Information System (GIS) is
- Understanding what GIS tools we are successfully deploying TODAY at C&W
- Comprehending the value of our GIS TODAY so as to “Obtain more efficient Service Delivery” to our customers in the near future

What is GIS?

- Geographic Information Systems (GIS) is a technology that manages, analyzes, and disseminates spatial knowledge with the help of:
 - Local Data
 - Computer Hardware
 - Computer Software
 - Personnel to collect, build and maintain the GIS

GIS integrates many types of spatial data

- For Example, Datasets can represent:



C&W GLS History & Successes

- **1997-1998:** Search for GLS Vendor/Application:
- **1999:** GPS and Data Conversion of Pilot Project by CADTEL (“Spotts Exchange”)
- **2000:** GPS all other exchanges of Grand Cayman
- **June-October 2001:** Grand Cayman Data Conversion
- **2002-2004:** Grand Cayman GLS Implementation
- **May 2004:** Little Cayman GPS data capture

C&W History and Successes

continued:

- **January 2005:** SpatialNAVIGATOR installation and configuration, C&W Users Needs Analysis
- **March 2005:** SpatialNAVIGATOR Training & Implementation
- **April- October 2005 :** Ivan Restoration “As-Build Project” (primarily re-GPS’d poles and recorded attachment heights of aerial facilities restored)
- **March-September 2005:** SpatialNAVIGATOR Automatic Vehicle Locator (AVL) Pilot Project
- **December 5th-18th, 2005:** Cayman Brac GPS data capture
- **December 19th, 2005:** Cayman Brac SpatialNAVIGATOR Training
- **January-February 2006:** Little Cayman/Cayman Brac Data Conversion (in progress)

TODAY C&W's GIS

- Includes our CIS Data
- Cayman Government Land Information System (LIS)
- Our C&W Facility data in the form of:
 - Geographically referenced C&W facility lines and points against LIS data (roads, parcels etc.)
 - Attribute values to these facilities
 - Customer (CIS) pair information attached to Distribution Facilities (CAB's, DP's)

Overview of our C&W GIS Database Applications TODAY

- Primary components of Spatial E-SUITE deployed here at C&W TODAY are:
 - **SpatialBASE:** The GIS database that serves as the foundation for the E-Suite.
 - **SpatialENGINEER:** Is the primary application for our Network Planning (GIS) Department, serving to update or edit our data stored in SpatialBASE.
 - **SpatialNAVIGATOR:** Leverages our spatial data to benefit the entire organization

TODAY SpatialBASE

- Serves as our robust platform for GIS data storage
 1. Stores area, line or point data in the form of lat/long
 2. Stores related attribute data for area, lines, points

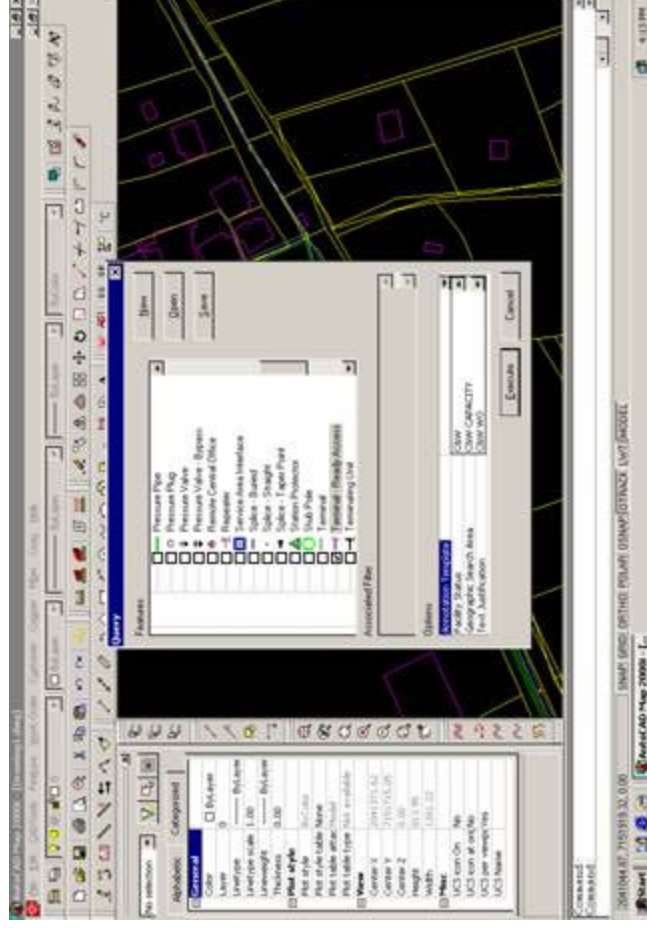
Example:

Copper Cable = polyline. That cable may be a Underground100 pair 24 gauge with a pair count of WEB_CAB4, 1-100, length of 233, ft., manufactured by Dreaca in 1994, installed with Work Order # LDC01095 and is proposed to be replaced with Work Order #LDC01228 scheduled for completion June 2006

- TODAY SpatialBASE contains the all the spatial data entered through conversion or as proposed work orders, edited and maintained during the years 2000 to the present

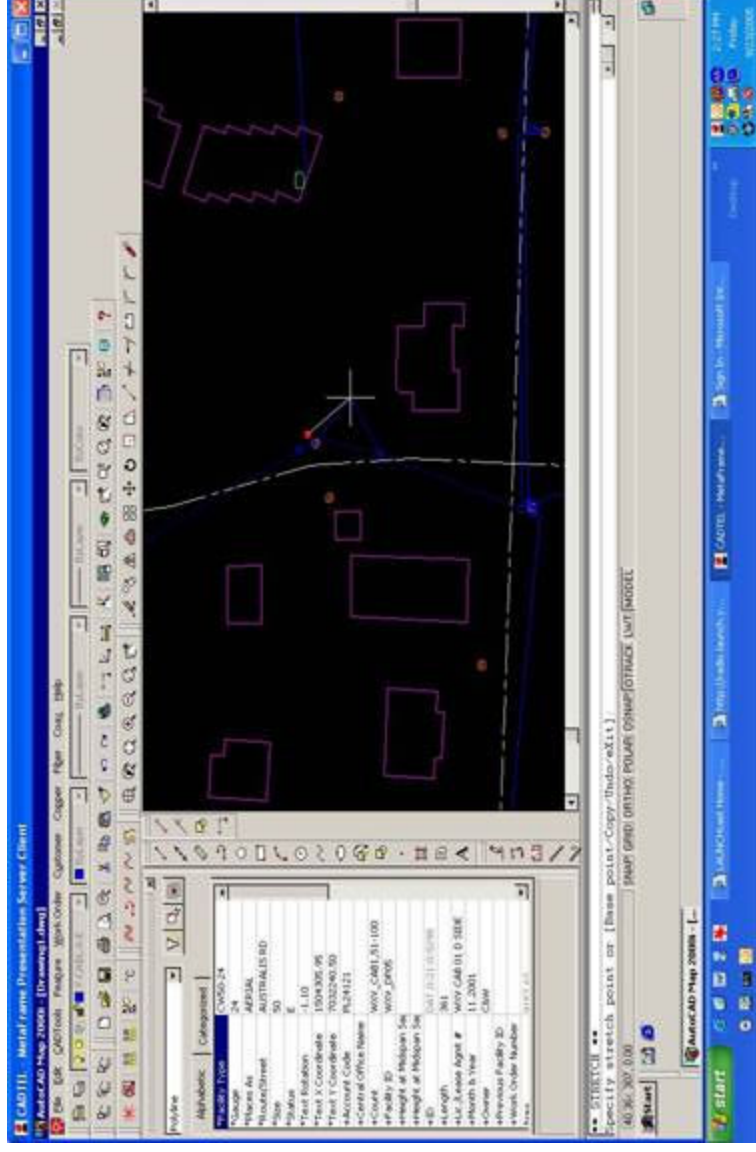
TODAY SpatialENGINEER

- Is the primary application for our Network Planning (GIS) Department, serving to update or edit our data stored in SpatialBASE.



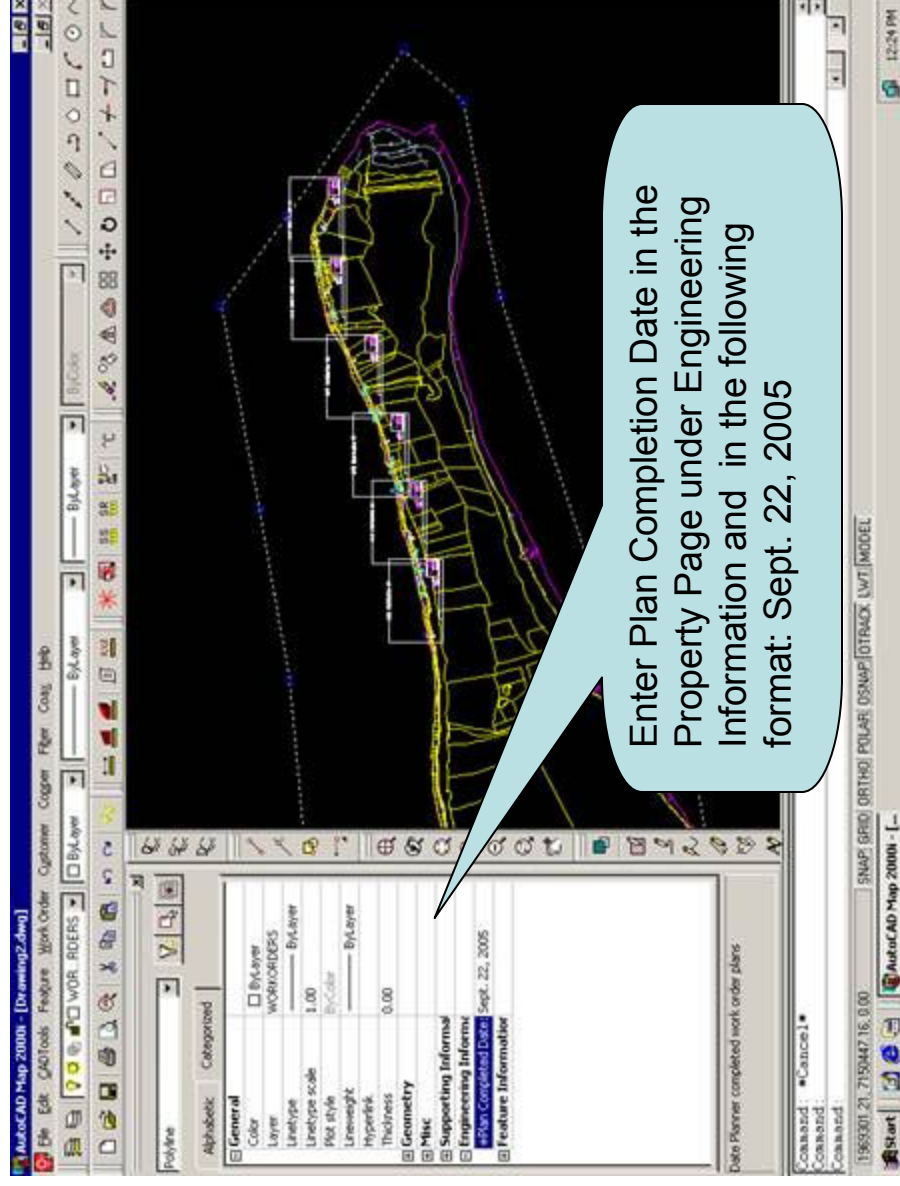
Desktop Planning

- Review proposed area of work order and pre-plan work order prior to feilding.

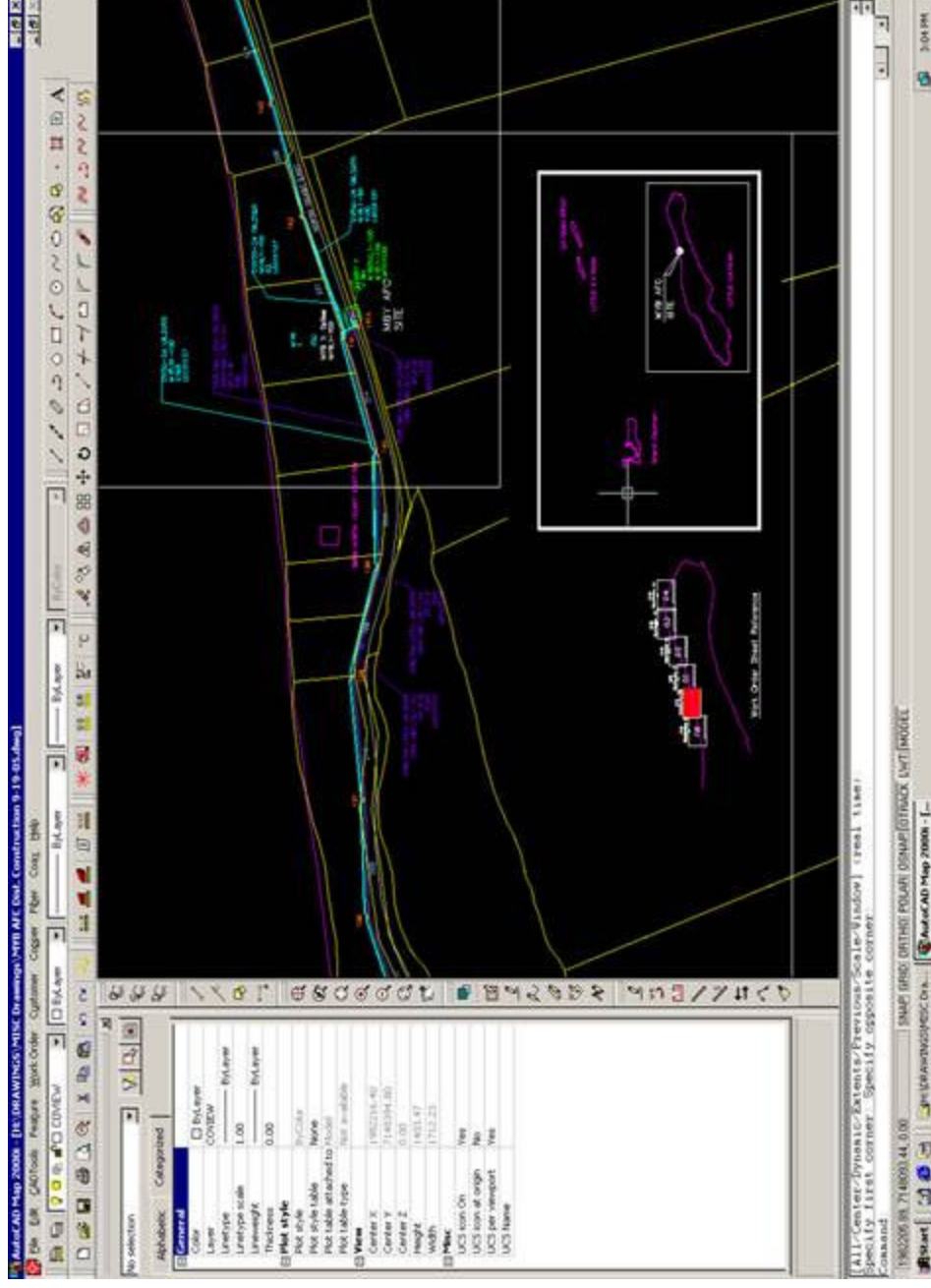


Data is Reflected Business wide

- After plans have been entered, a construction completion date is entered in the GIS and reflected in SpatialNAVIGATOR



From SpatialENGINEER



To SpatialNAVIGATOR

Cable & Wireless SpatialNAVIGATOR - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Search Favorites

Address <http://cayn407.cwintl.com/>

Maps: OSP

Search: Street by Name

Go

EX KENNEDY

Cable Detail

Material Type	UBFC25-24
Gauge	24
Size	25
Status	N
Account Code	PL24122
Central Office ID	GAA
Count	
Qty Length With Default	266
Month/Year Placed	05/2005
Route	MARQUAIL
Copper Count Backfed	
Facility ID	
Lease Agmt	
Owner	C&W
Previous Fac. ID	
Work Order #	LOC 01123
Bur Joint	
Cable Marking In	
Cable Marking Out	
Duct Num	
Innerduct Color	
Install Method	
Lease Date	
Mfg Date	

Copper Cable Detail

Copper Cable Route/StreetWEST BAY Facility ID Count Capacity Used in (%) F_SIZE 100F_TYPUBFC100-24 "Proposed"

Copper Cable : Copper Cable Route/StreetWEST 1 'Copper Cable' selected

1 : 2,191 1,352 x 1,120 (ft)

Trusted sites

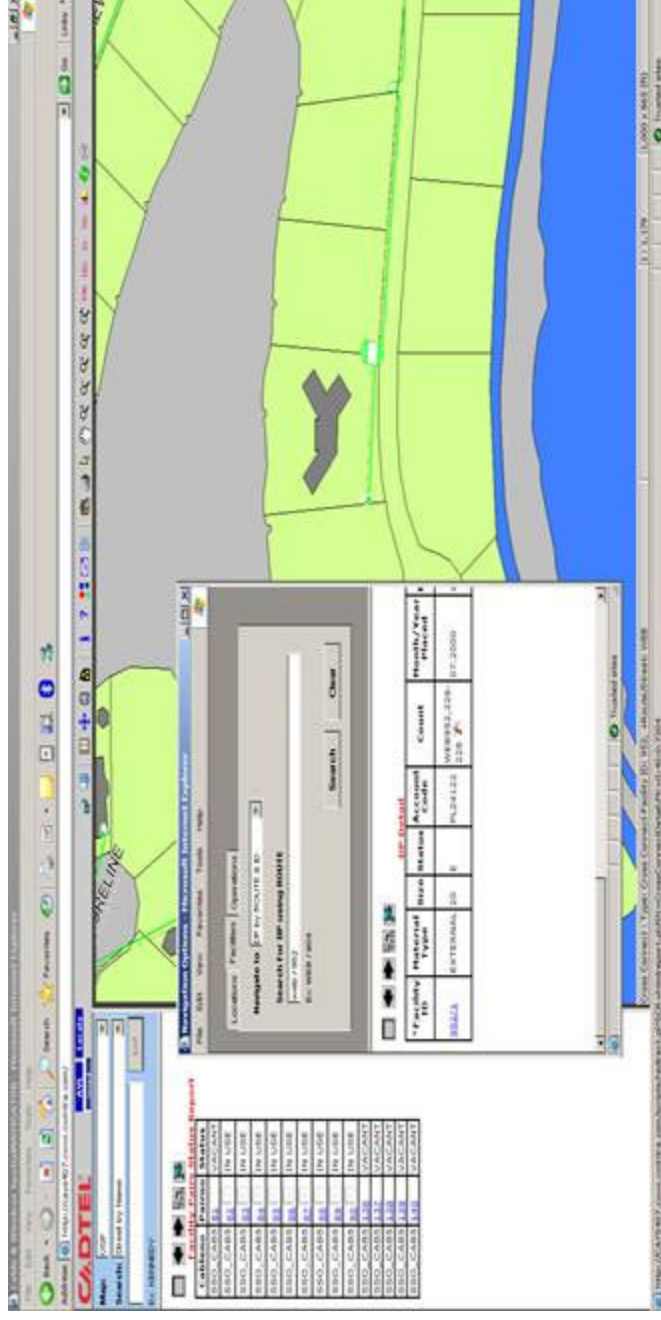
<http://cayn407.cwintl.com/scripts/redirect.pl?SCOR=htmlreport.pl?IDN=CopperCableDetail/PK=40721027852>

TODAY SpatialENGINEER

- Reflects the data a Planner or GIS staff enters via “pre-posting” (or) as-builds ...against our CIS database:
 - On the fly (through “queries”), SpatialENGINEER transfers SpatialBASE data from lat/long into our datum/coordinate system using AutoCAD Map
 - With the data before the Planners/Engineers/GIS staff, we are able to perform “desk-top planning”, surveys or analytical reports
 - Perform engineering functions such as “pair-trace” and “loop make-ups” can also be performed at the desk-top level
 - All the while GIS is accessed (read-only) by Customer Service, Sales etc. (As we will discuss ...via SpatialNAVIGATOR ... connected staff reads SpatialBASE realtime)

SpatialNAVIGATOR

- Different than SpatialENGINEER in that:
 - TODAY it leverages our spatial data to benefit the entire organization
- 1. CIS Data
- 2. GIS Data



TODAY SpatialNAVIGATOR

- Links, through geo-codes and thematic mapping our CIS and GIS databases
- Allows for customize reporting.
Examples:
 - Outstanding Work Order Status (construction/completion date etc.)
 - ADSL customers can be distinguished from non-ADSL by any type of boundary or custom buffer
 - Finance can determine by boundary (Exchange, CAB etc.) customers with unpaid bills, cost of a work order
 - Ivan Insurance Claims
- Web-deployed
- Is read-only

Customer Details and Performance		Part: Main: Cost Per Month	
UBPG 100-34	PLM 122	100	
UBPG 100-34	PLM 122	20	
UBPG 100-34	PLM 122	800	
UBPG 100-34	PLM 122	222	
UBPG 100-34	PLM 122	1,100	
UBPG 100-34	PLM 122	14	
UBPG 100-34	PLM 122	24	
UBPG 100-34	PLM 122	231	
UBPG 100-34	PLM 122	200	
UBPG 100-34	PLM 122	74	
UBPG 100-34	PLM 122	800	
UBPG 100-34	PLM 122	107	
UBPG 100-34	PLM 122	200	
UBPG 100-34	PLM 122	602	
UBPG 100-34	PLM 122	200	
UBPG 100-34	PLM 122	372	
UBPG 100-34	PLM 122	302	
UBPG 100-34	PLM 122	1,200	
UBPG 100-34	PLM 122	62	
UBPG 100-34	PLM 122	307	
UBPG 100-34	PLM 122	140	
UBPG 100-34	PLM 122	370	
UBPG 100-34	PLM 122	400	
UBPG 100-34	PLM 122	2,010	
UBPG 100-34	PLM 122	804	
UBPG 100-34	PLM 122	904	
UBPG 100-34	PLM 122	600	
UBPG 100-34	PLM 122	2,700	
UBPG 100-34	PLM 122	84,770	310,100.20
UBPG 10-34	PLM 122	00	
UBPG 10-34	PLM 122	104	
UBPG 10-34	PLM 122	23	
UBPG 10-34	PLM 122	41	74 340.24
UBPG 12-34	PLM 122	60	
UBPG 12-34	PLM 122	60	15.2 31,000.20
UBPG 160-34	PLM 122	302	82 9420.80
UBPG 20-34	PLM 122	20	
UBPG 20-34	PLM 122	20	
UBPG 20-34	PLM 122	80	
UBPG 20-34	PLM 122	40	
UBPG 20-34	PLM 122	34	
UBPG 20-34	PLM 122	800	
UBPG 20-34	PLM 122	1,021	346.3 3207.60
UBPG 24-34	PLM 122	10	
UBPG 28-34	PLM 122	30	
UBPG 28-34	PLM 122	124	
UBPG 28-34	PLM 122	500	
UBPG 28-34	PLM 122	100	

TODAY SpatialNAVIGATOR

- Gives the leverage of our most valuable data, in the form of one easy interface for:
 - Customer Service Productivity
 - Broadband Analysis
 - Finance Analysis
 - Dispatching: Residential and Business Delivery
 - Mobile Network Analysis

TODAY SpatialNAVIGATOR

- Is the primary tool of our Customer Service, Dispatching and Planning staff to:
 - Locate/Search “on the fly”, parcels, addresses, streets, customers', Cabinets, DP's, CUC pole numbers, exchange boundary's etc.
 - Route a customer applying for service where possible
 - Display to the Customer visually, and often confirm, location of service request
 - Report discrepancies in our CIS or GIS