

EGUG 2011

How GIS Supports Utilities Joint Use Activities

October 11, 2011

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Principle

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Presentation Objective

- Joint Use / Joint Ownership Overview
- Review Joint Use Drivers
- JU Pole Database Requirements
- GIS to Manage JU Information
- GIS to Aid in JU Practices
- GIS to Aid in Tracking and Cost Recovery

Joint Use History



➡ Telecom Act of 1996

- Utilities must provide access to poles
- FCC Regulated
- State Regulated

➡ New FCC Rulemaking

- Aggressive Timeline Req'm'ts
- Documentation
- Attachment Rates

Joint Use Industry Drivers



➡ Demand for Space on Poles

- Broadband Deployment
- Wireless Attachments
- Fiber Invasions
- SmartGrid

Joint Use Industry Drivers



➡ Regulation

- Telecommunications Act
- New FCC Rulings
- State vs. FCC Regulated
- Code compliance
- 2-Pole (double-wood) conditions

Joint Use Industry Drivers



➡ JU Management

- Lost revenue
- System integrity & safety issues
- Surprise situations in the field
- Unmanaged liability
- Lawsuits
- The pleasure of subsidizing attaching companies

JU Attachment Activities

Pole Owned by Initiator

- ➡ Sell / Place & Sell Pole
- ➡ Place Pole
- ➡ Replace or Relocate Pole
- ➡ Remove Pole
- ➡ Offer Joint Use
- ➡ Request Discontinue JU
- ➡ Request Rearrangement
- ➡ Code Violation
- ➡ Resolve 2-Pole Condition
- ➡ Records Corrections

Pole Owned by Respondent

- ➡ Request Pole Purchase
- ➡ Replace Foreign Pole
- ➡ Establish Joint Use
- ➡ Establish JU on New Pole
- ➡ Add/Replace Contact or O/L
- ➡ Service Notification
- ➡ Discontinue Joint Use
- ➡ Notify Bad Pole Condition
- ➡ Notify 2-Pole Condition
- ➡ Records Corrections

Joint Use Data Requirements



- Pole Information
- Attachers Information
- Inspection Data
- Code Violations
- 2-Pole Conditions
- Authorizations & Billings
- Spatial Reference

Pole Information

Attributes

Pole Id	8506
Pole Number	445A2-1
Owner	OE
Height	55
Class	3
Material	W
Street Name	E ADAMS ST

➡ Pole Number

➡ Owner

➡ Height

➡ Class

➡ Material

➡ Address

➡ Year Installed

➡ Spatial Location

Attachers Information

Attributes

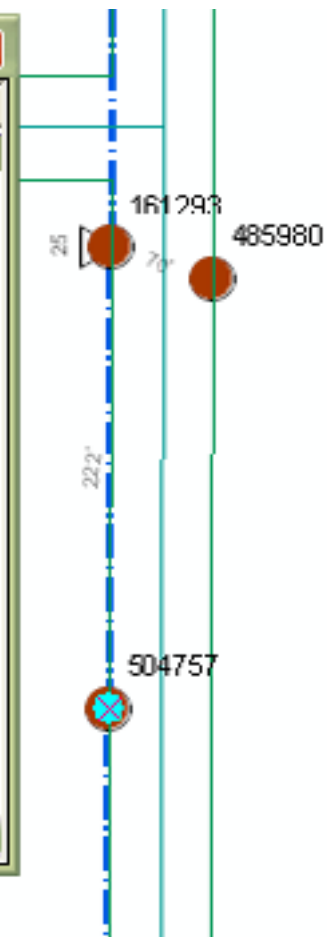
Other Poles

- MIGRATION
 - PoleInspection
 - SupportStructureAnno
 - ELECTRIC.Assembly
 - Pole Attachment
 - 75045
 - 75043
 - 75044

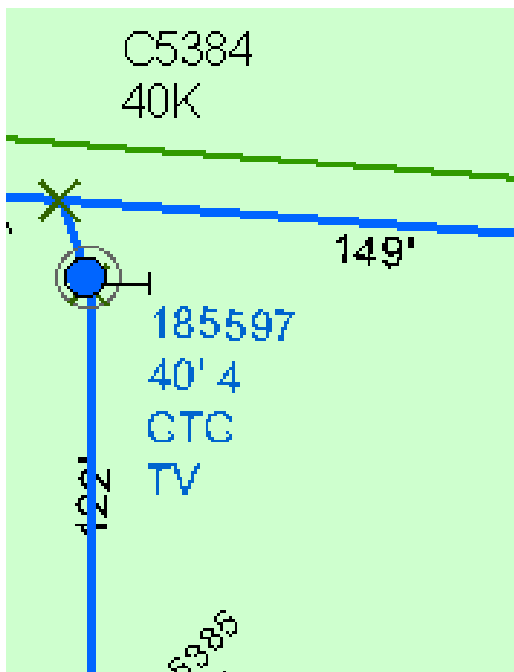
1 features

Misc Non Network Feature

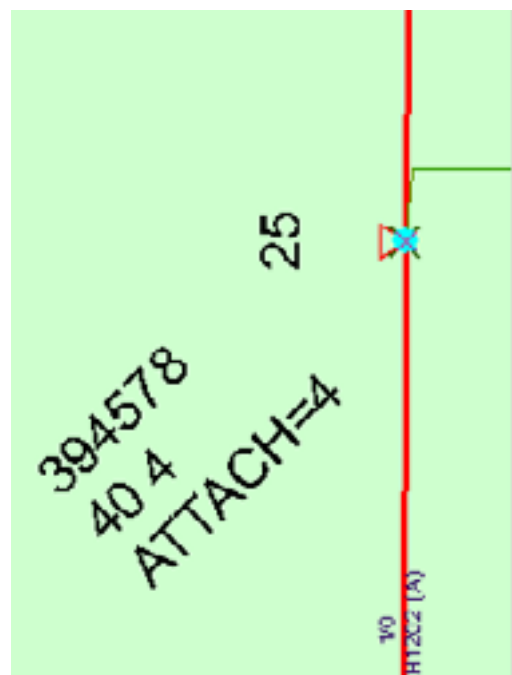
Property	Value
OBJECTID	75043
Owner	C & A Cablevision Company
Attachment Type	Cable
Attachment Height	31
ATTACHMENTDIAMETER	10
ATTACHMENTREQUESTDATE	3/15/1972
AttachmentRequestMethod	Direct
Attachment Date	5/14/1972
Classification	ThirdParty
Billable	Yes
Project Number	72-8896
Stakeout Work Order Number	<Null>
Creation User	Migration
Date Created	7/21/2008
Date Modified	<Null>
Last User	<Null>
Structure ObjectID	76039



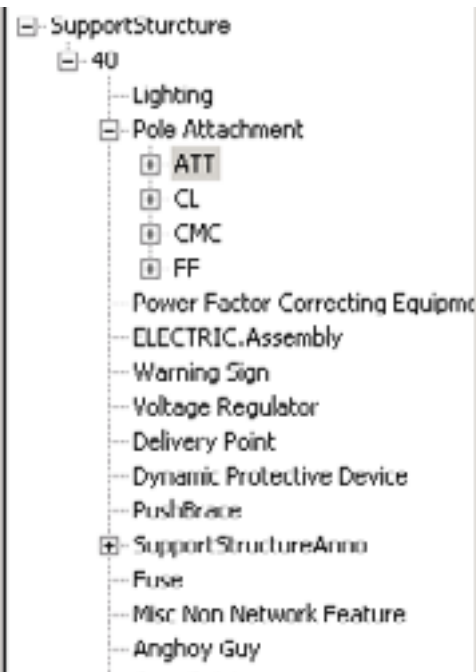
Attachers Information Display



*Display All
Attachers*



Display Number of Attachers



Property	Value
OBJECTID	244508
Owner	AT&T
Attachment Type	Telephone
Attachment Height	30
ATTACHMENTDI...	14
ATTACHMENTRE...	<Null>
AttachmentReq...	Direct
Attachment Date	2/11/1961
Classification	JointUse
Billable	No
Project Number	61-2337
Stakeout Work ...	<Null>
Creation User	DEGROOR
Date Created	9/27/2011 5:52:17 PM
Date Modified	9/27/2011 5:53:50 PM
Last User	DEGROOR
Structure ObjectID	392604
GLOBALID	{CB8FCF51-65A9-4AD}
Owner Info	<Null>

Field Inventory



- Discover unauthorized attachments
- Correct attachment counts
- Manage 3rd party code violation notifications and corrections
- Resolve ownership parity
- Code violation discovery



Process

Inspection Data / Code Violations

Attributes

Other Poles

- MIGRATION
 - PoleInspection
 - SupportStructureAnno
 - ELECTRIC.Assembly
 - Pole Attachment

1 features

Property	Value
OBJECTID	2
Creation User	WLS
Date Created	6/10/2009
Date Modified	<Null>
Last User	<Null>
Facility ID	504757
Inspection Date	6/2/2009
Inspection Type	Inspection
Inspector	Pete
Comments	Clearance to Power
Structure Object ID	76839
Inspection Company	INDS
Crew Number	3
Foreman	B. Jones
Supervisor	M. Smith

Dynamic Protective Device

Lighting

Miscellaneous Network Feature

25'


22.2'

7'

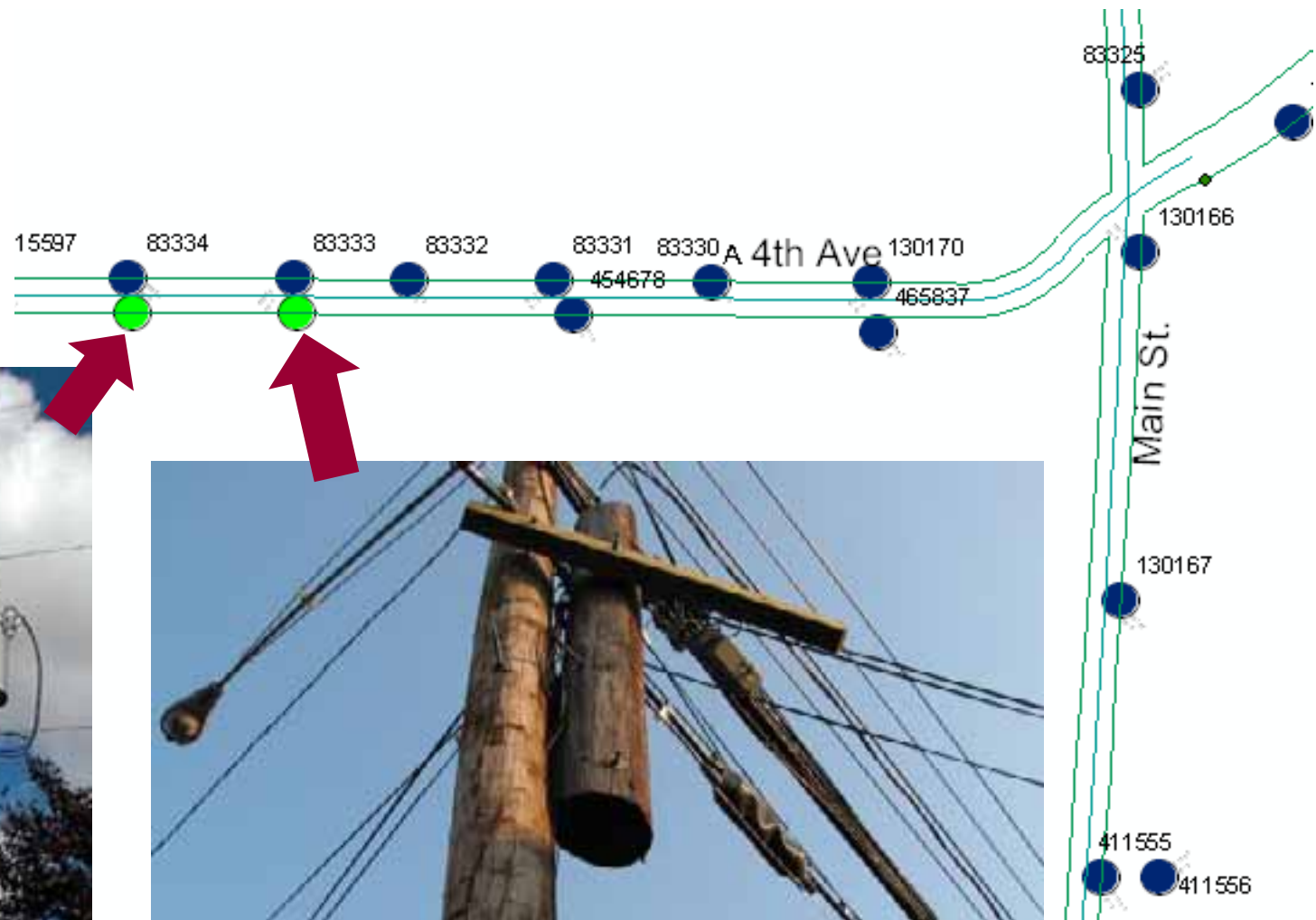
161293

485980

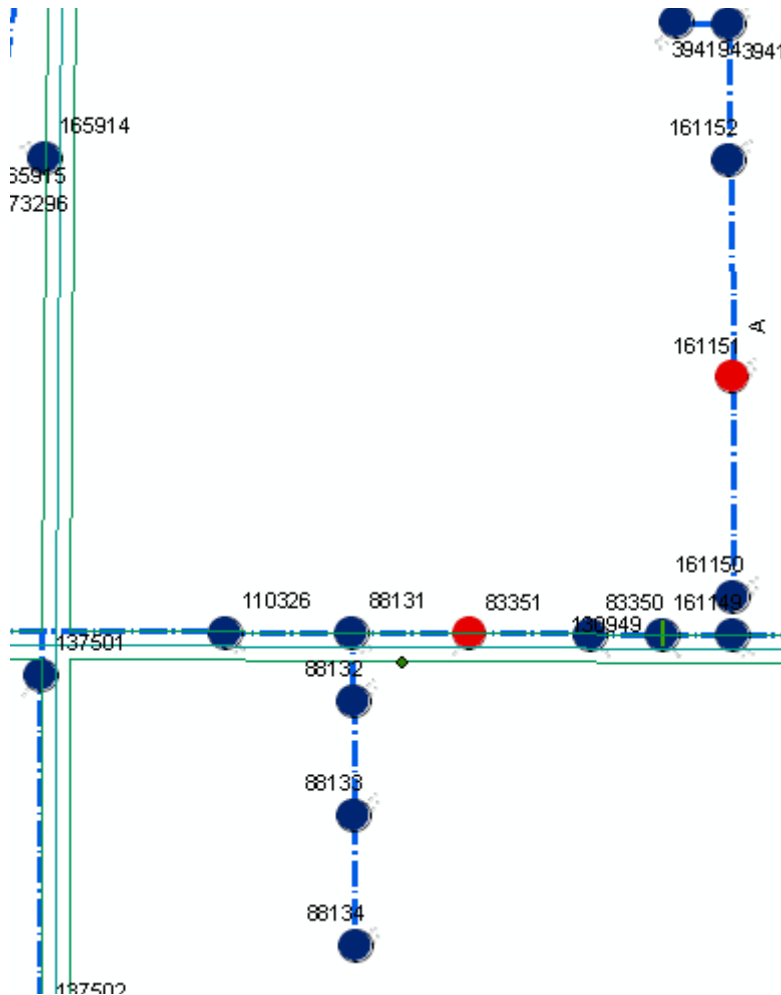
504757



Double-wood (2-pole) Reconciliation



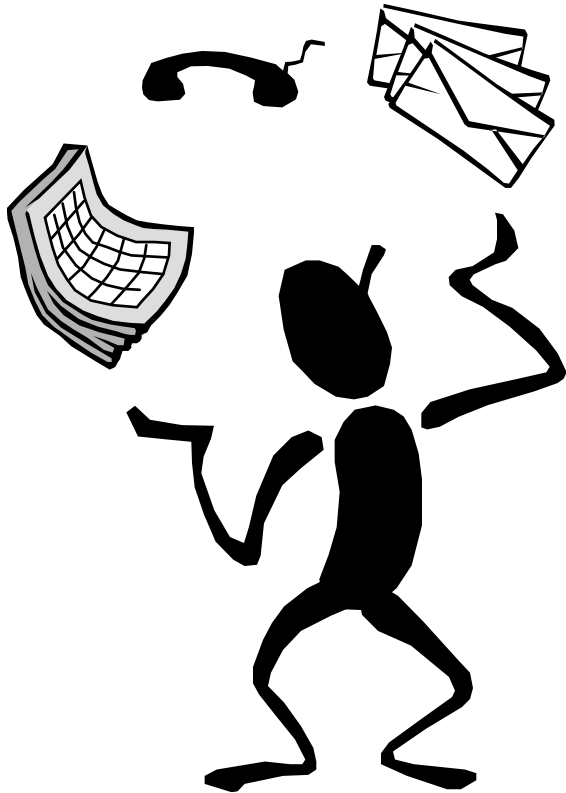
Record Accuracy / Billings



Records indicate cable company is only on Blue poles

Spot inventory can reconcile attachment record accuracy

JU Management Systems



- Web-based Notification and communication
- Workflow management / process enforcement
- Contract and agreement terms enforcement
- Data management
- Schedule management
- Reporting / management information

Enforce your process with predefined workflow

Deliver alerts as project changes status

Date and time-stamping on project history

Rental changes and billing tracking.

Attachment Proposal

Proposal Number: 86432-09G

Proposal Subtype: JI Proposal

Proposal Status: Recap Complete; Proposal Closed

+ OE Information - Initiator

+ AT&T Information - Respondent

+ Proposal Information (9/12/2008 2:47 PM)

+ Proposal Reply (9/12/2008 2:52 PM)

+ Reply Confirmation (9/12/2008 2:52 PM)

+ Acknowledgement (9/12/2008 2:53 PM)

+ Acknowledgement Confirmation (9/12/2008 2:53 PM)

+ OE Construction (9/12/2008 2:55 PM)

+ AT&T Construction (9/12/2008 2:59 PM)

+ OE Construction (9/12/2008 3:00 PM)

+ OE Recap (9/12/2008 3:00 PM)

+ AT&T Recap (9/12/2008 3:04 PM)

- Agreed Recap (9/12/2008 3:04 PM)

Agreed Rentals Added to OE's Poles	1
Agreed Rentals Removed from OE's Poles	1
Agreed Rentals Added to AT&T's Poles	0
Agreed Rentals Removed from AT&T's Poles	1
Agreed Engineering Cost to OE	\$ 0.00
Agreed Make Ready Billing to OE	\$ 0.00

Enter data through user-friendly interface

Pole level file attachment

Auto-populate fields through interface or fill tools

Support mixed pole ownership activities

Pole-specific action selection

2 pole condition tracking

Attachment Proposal - Poles 86432-09G

Entry Order

Pole Owner
OE Pole Number
AT&T Pole Number

Proposal Information (p)

Pole Owner
OE Pole Number
AT&T Pole Number
Address
Street Name
Dist and Dir from Ref Loc
Reference Location
OE's Proposed Action
Height
Class
Year Set
New Joint
Existing Feet Excess
New Pole Height
New Pole Class
Proposed Feet Excess
2-Pole Condition

1 2 3 4

Delete
0 documents
Delete
0 documents
Delete
0 documents
Delete
0 documents

OE
OE2345-14
OE
OE2345-21
ATT565907
AT&T
OE2345-23
AT&T
OE2345-25
AT&T
OE2345-34

ATT565367
ATT565907
ATT565762
ATT565874
ATT565990

560
564
564
560
572

Hwy 371
Hwy 371
Hwy 371
Hwy 371
Hwy 371

120' N/O
Pole 565990

Replace Pole
Place Pole
Remove Pole
Discontinue JU
Discontinue JU
Notify 2-Pole

Reg. Pole Purchase
Establish JU
EJU on New Pole
Add Contact or O/L
Replace Contact
Service Notification
Discontinue JU
Notify 2-Pole
Rec Corr - JFNR (R)
Rec Corr - JFNR (R)

Existing

Shared Pole Maps



Questions



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