GIS Centric One Call Ticket Management

Mid-Carolina Electric Cooperative (MCEC)

Looking out for you!

MCEC

Mid-Carolina Electric Cooperative, Inc.

Your Touchstone Energy® Cooperative

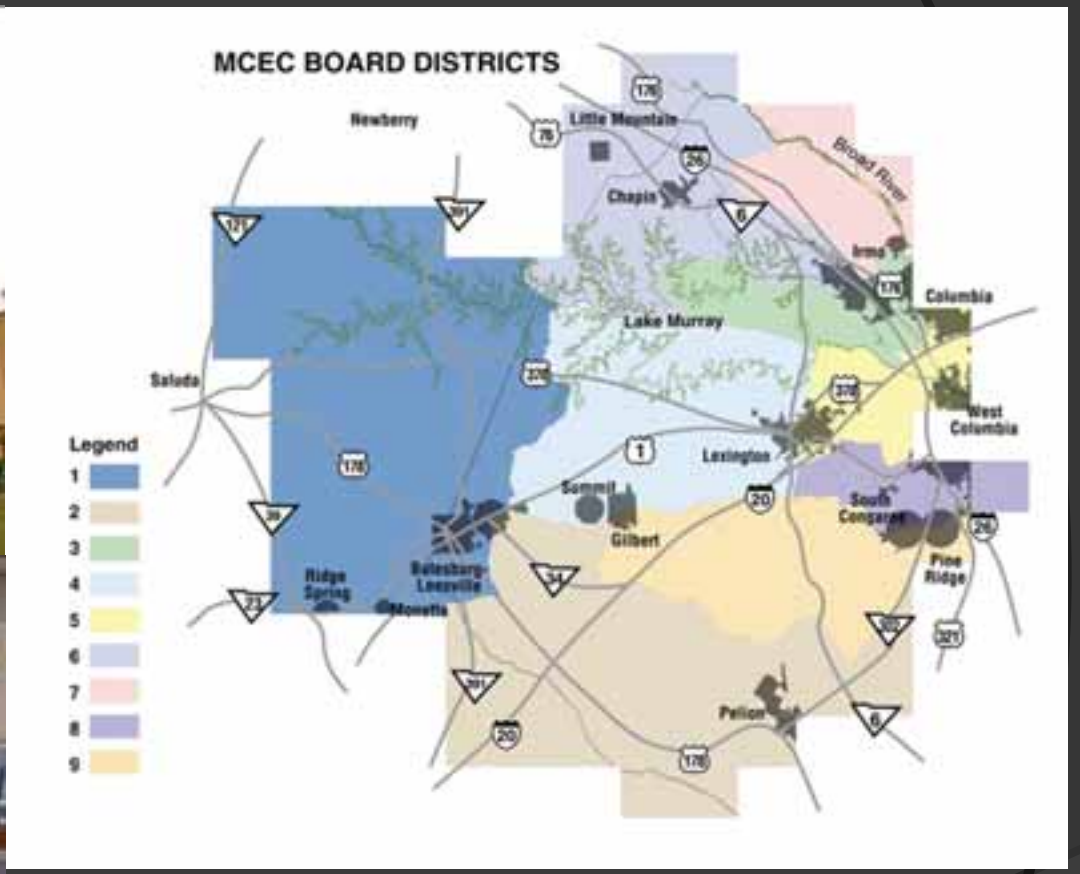
Mid-Carolina Electric distributes electricity in Lexington, Richland, Saluda, Aiken and Newberry counties of South Carolina.

MCEC is primarily an urban cooperative, comprised of 88% single family dwellings, and 12% commercial and industrial facilities.

Dig-Smart

GIS Centric One Call Ticket Management

Mid-Carolina Electric Cooperative (MCEC)



On average, MCEC receives approximately 22,000 tickets per year from the SC 811 call center. This amount varies year to year based on construction and excavation projects.

GIS Centric One Call Ticket Management

Mid-Carolina Electric Cooperative (MCEC)

Tickets

South Carolina 811
Call 811 Before you Dig

Tickets

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MCEC
MID-CAROLINA ELECTRIC COOPERATIVE, INC.
Your Touchstone Energy® Cooperative

Dig-Smart

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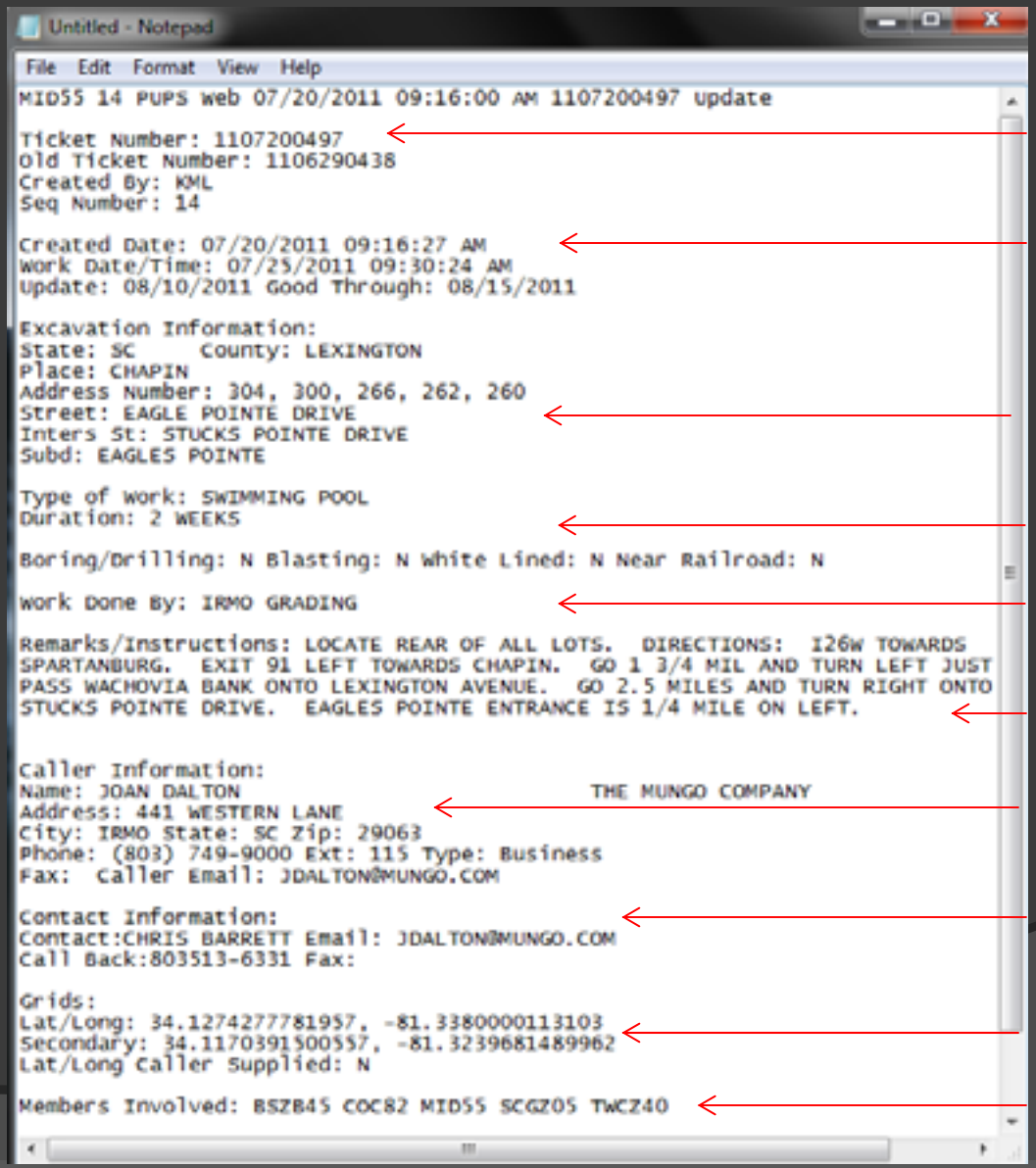
Mid-Carolina Electric Cooperative (MCEC)

What is an Excavation or 811 Ticket?



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- With a dedicated SC 811 email account, all tickets are emailed directly to MCEC
- Tickets arrive into a mail Exchange Server
- Using Dig-Smart Server, tickets are automatically moved into an Oracle database
- Using Dig-Smart Analyzer (running ArcGIS) each ticket is mapped
- The MCEC Enterprise Geodatabase is used for all data verification
- Additional geocoding services are used to refine the ticket address, if needed
- Heads up analysis is performed on each ticket
- Tickets are either assigned to field crews or cleared in the office
- No positive response required…yet, perhaps, we'll see…

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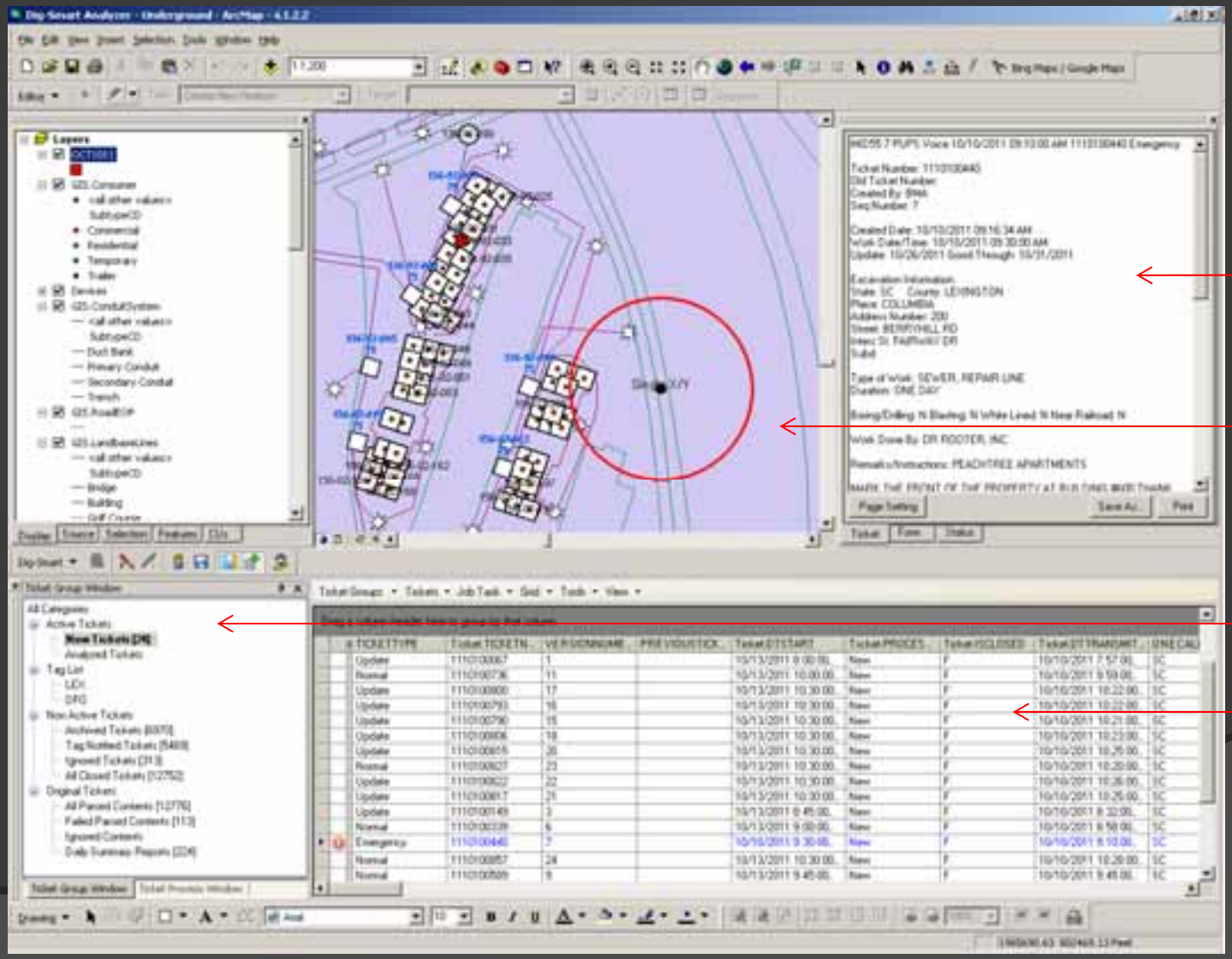
ArcGIS / ArcMap / Dig-Smart Analyzer Interface



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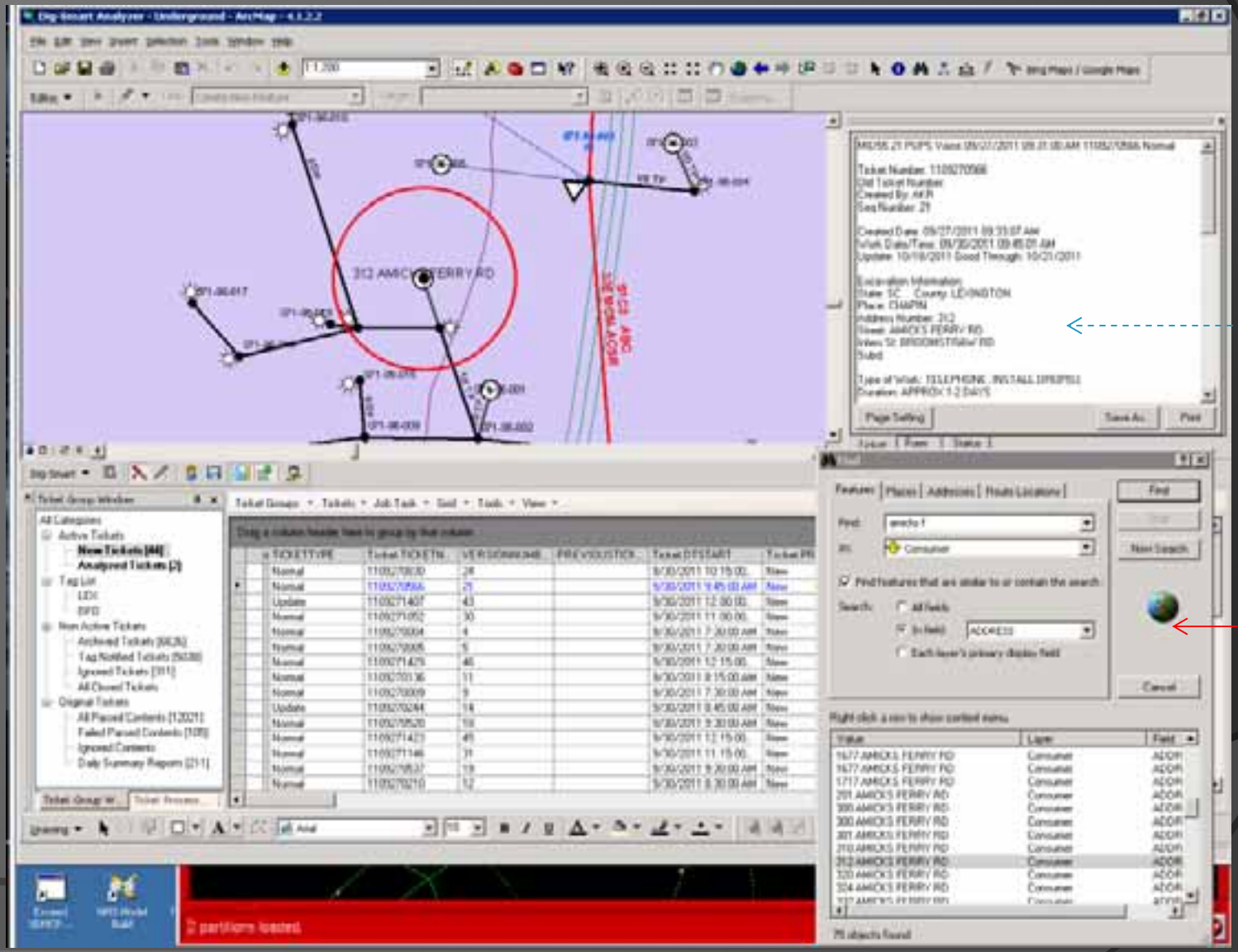
Using Geocoding To Re-Verify X/Y Coordinates or Validate Customer



Geocoding Refinements From GIS and CIS Data

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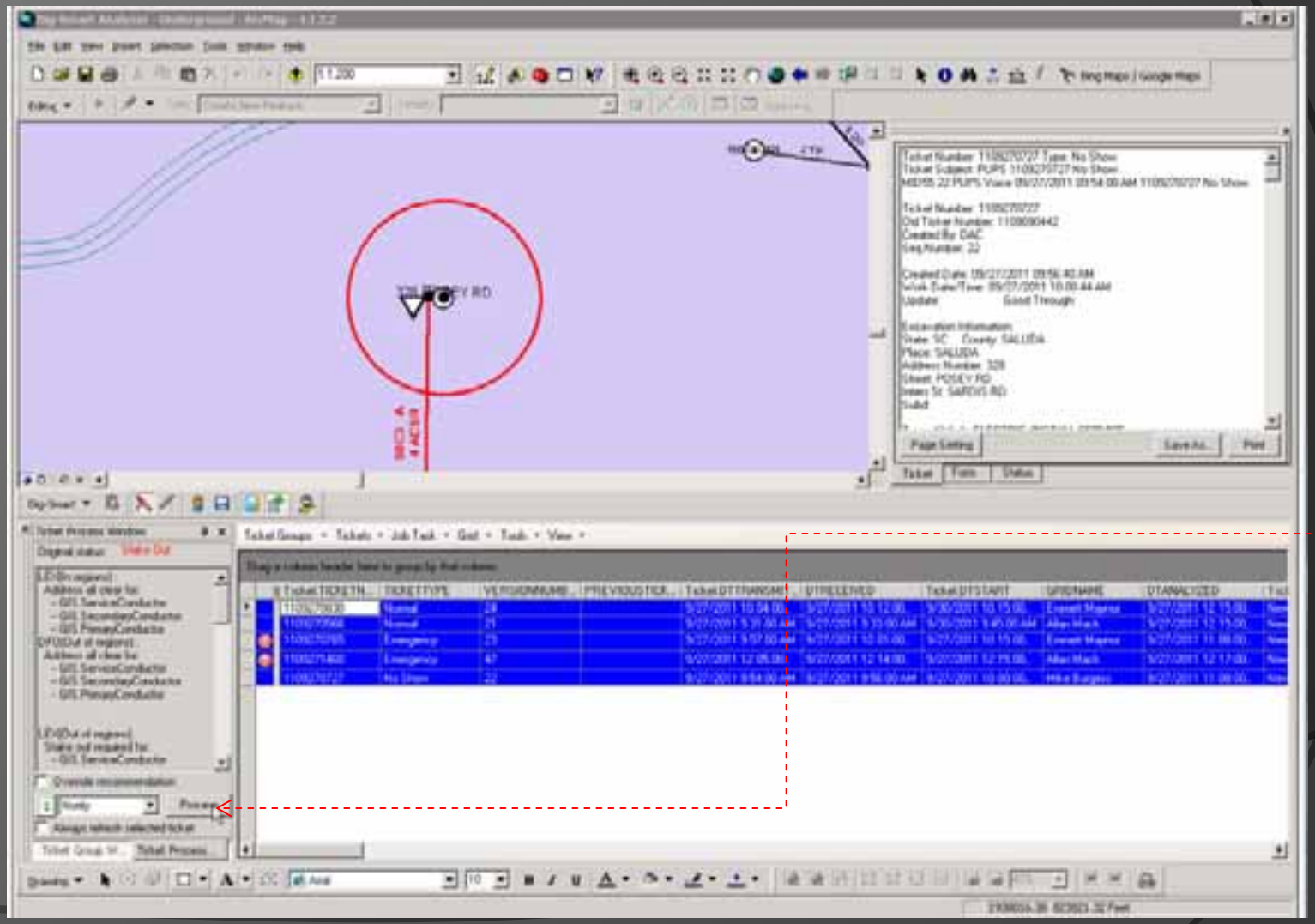
Multi-Ticket Processing With Batch Process Features



After dispatch review, batch processing can occur

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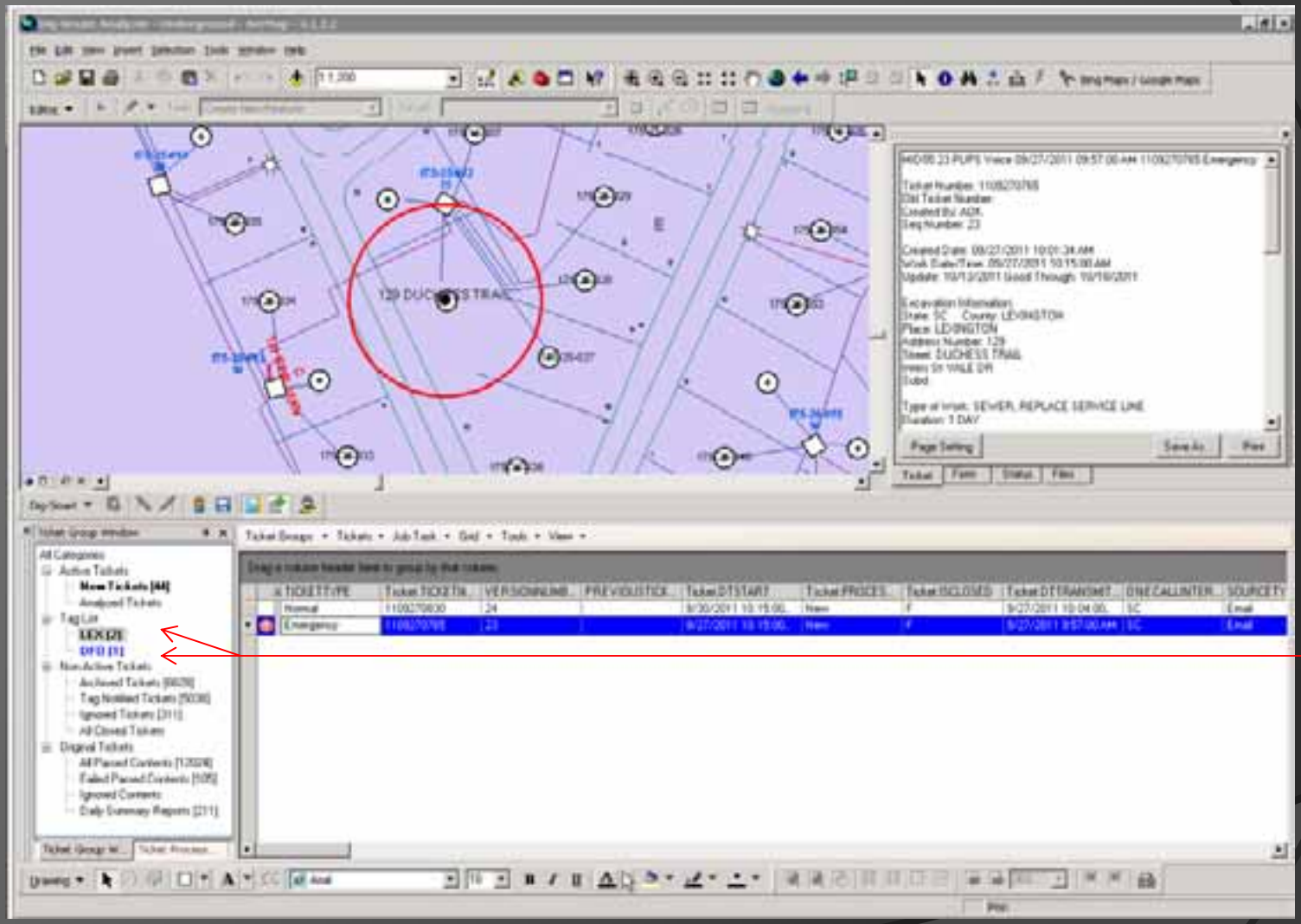

Tickets successfully assigned to locators (Tags) or given all-clear status

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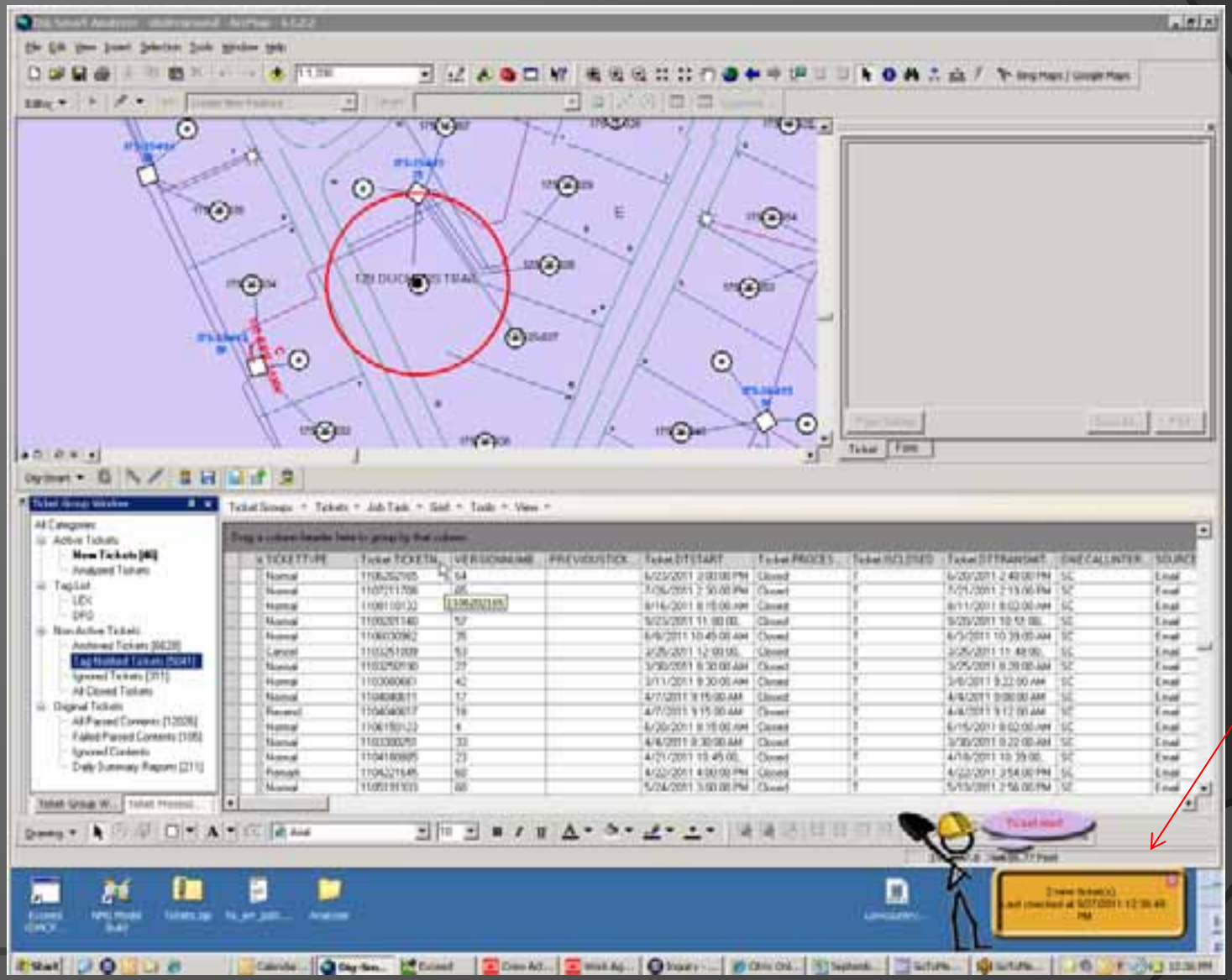

New ticket alerts are audible and visual (SMS and mobile email)

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Current Mobile Workflow

1. Tickets assigned from Analyzer to Field
2. Auto-print function used to create paper record
3. Upon completion of field work, paper record is discarded
4. Dig-Smart database used for all damage & reporting investigations

Future Mobile Workflow

1. Dig-Smart Field used to synchronize tickets to mobile device
2. Localized database to store all field data
3. Daily synchronization with enterprise database
4. Phase out of current hard-copy protocol

GIS Centric One Call Ticket Management

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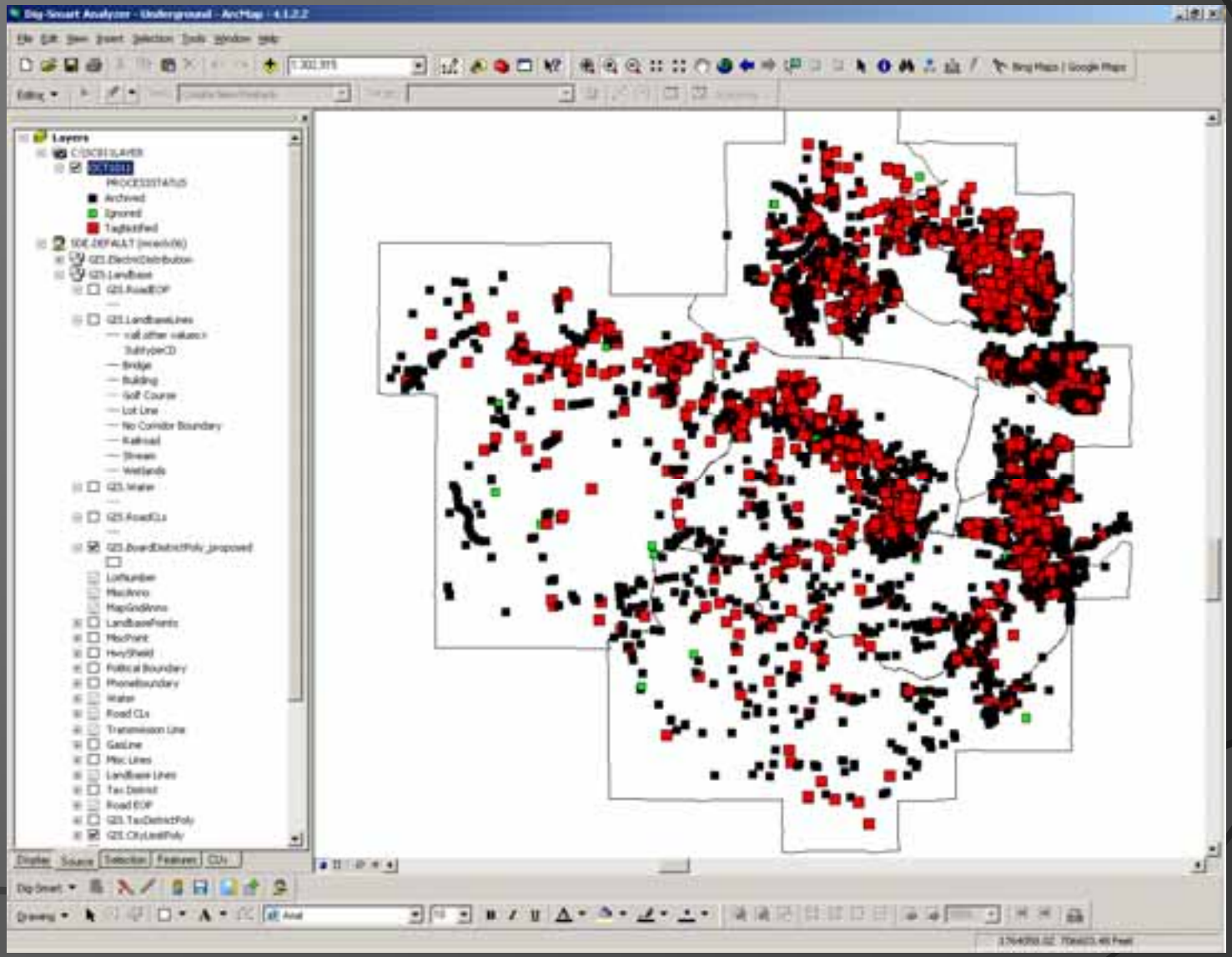
Push-Pin Map / Dashboard View of Tickets for Entire System (3/2011-10/2011)



Red indicates work completed, black indicates ticket was all-clear and green dots indicate an intentionally ignored request

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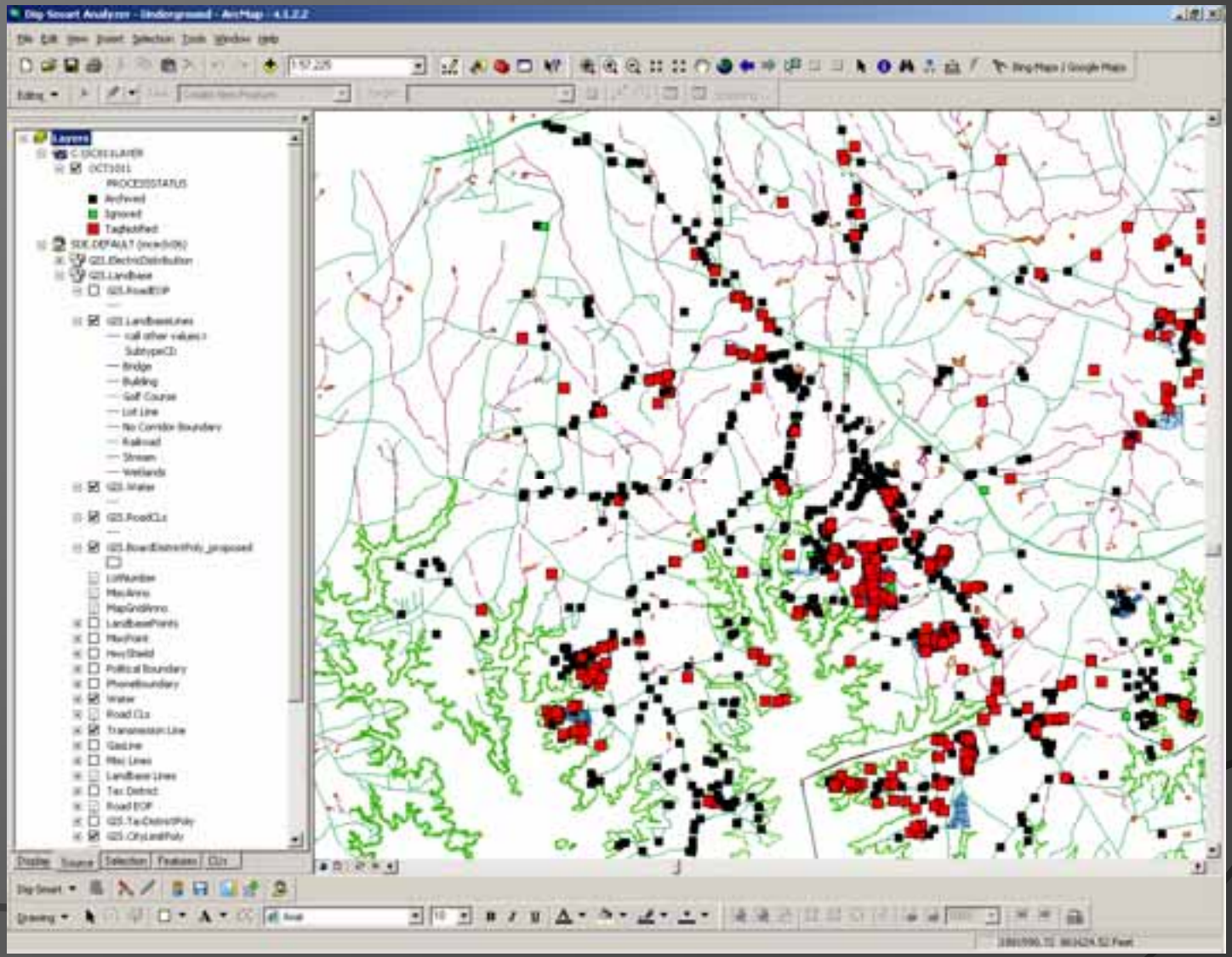
Zoomed-In-View of Push-Pin Map Showing Ticket Distribution



All ArcGIS thematic and cartographic elements can be used for map reporting

Thematic sorts can occur from any table in the schema and be joined to other schemas as necessary

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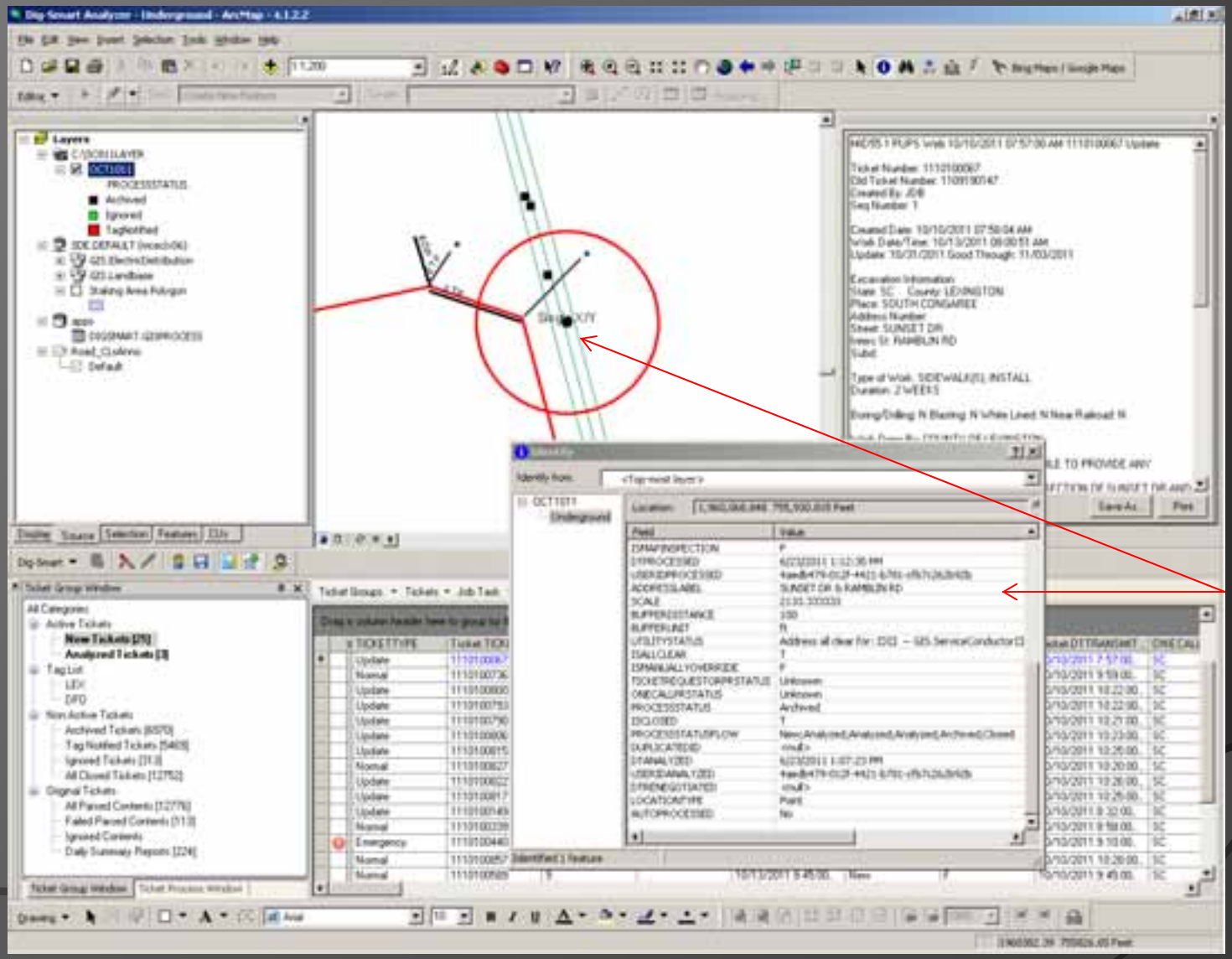
ArcMap Tool “Identify” Used To Research Previous Tickets



As long as table joins have occurred, clicking on a completed ticket from the past retrieves all historical information.

Useful for proximity searches and redundant ticket requests

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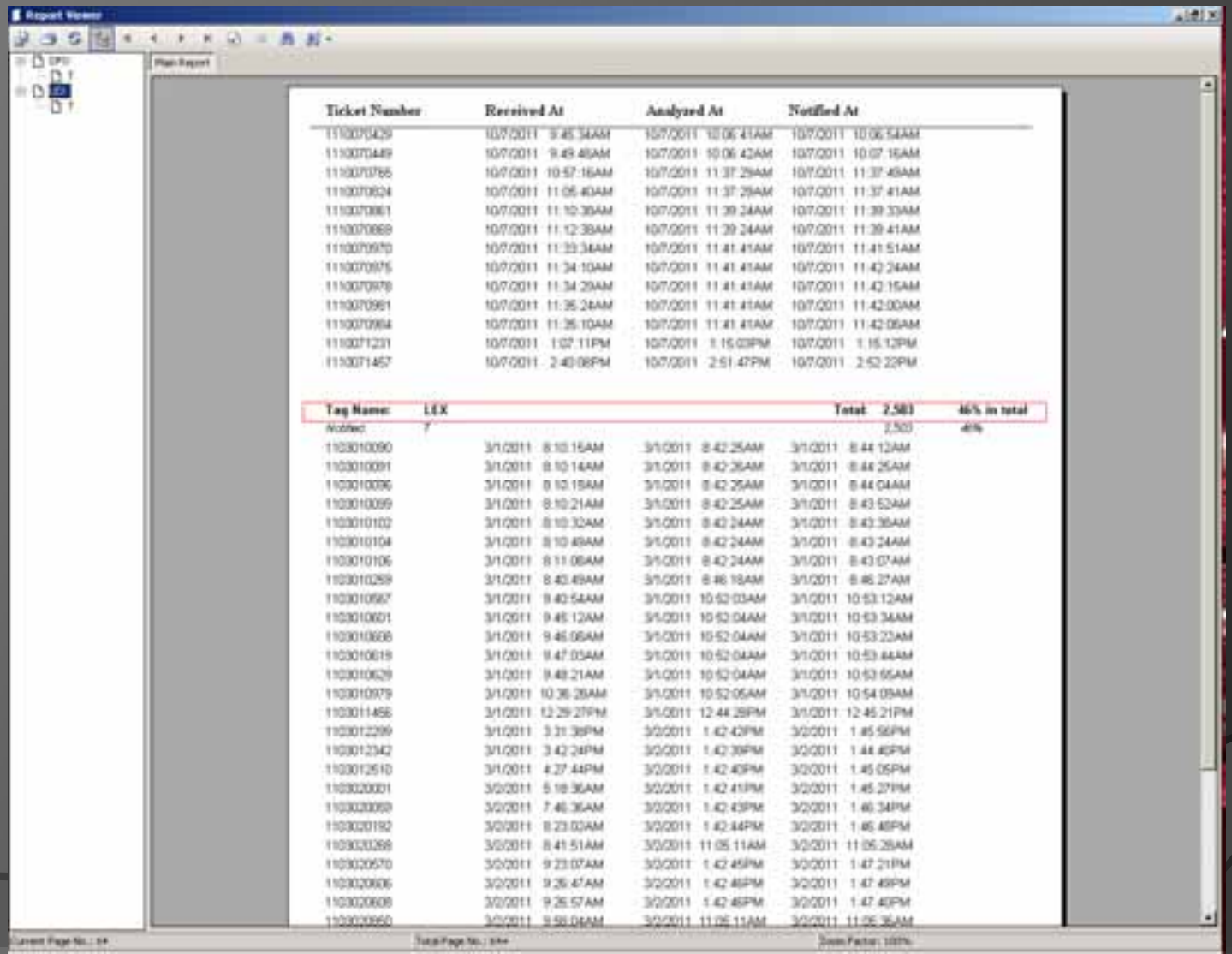
Dig-Smart Table Reports on Tickets by Tag Assignment



Ticket Number	Received At	Analyzed At	Notified At
1110070429	10/7/2011 9:45:34AM	10/7/2011 10:06:41AM	10/7/2011 10:06:54AM
1110070449	10/7/2011 9:49:46AM	10/7/2011 10:06:42AM	10/7/2011 10:07:16AM
1110070765	10/7/2011 10:57:16AM	10/7/2011 11:37:29AM	10/7/2011 11:37:49AM
1110070824	10/7/2011 11:05:40AM	10/7/2011 11:37:29AM	10/7/2011 11:37:41AM
1110070861	10/7/2011 11:10:36AM	10/7/2011 11:39:24AM	10/7/2011 11:39:33AM
1110070869	10/7/2011 11:12:38AM	10/7/2011 11:39:24AM	10/7/2011 11:39:41AM
1110070970	10/7/2011 11:33:34AM	10/7/2011 11:41:41AM	10/7/2011 11:41:51AM
1110070975	10/7/2011 11:34:10AM	10/7/2011 11:41:41AM	10/7/2011 11:42:24AM
1110070978	10/7/2011 11:34:29AM	10/7/2011 11:41:41AM	10/7/2011 11:42:15AM
1110070981	10/7/2011 11:35:24AM	10/7/2011 11:41:41AM	10/7/2011 11:42:00AM
1110070984	10/7/2011 11:35:10AM	10/7/2011 11:41:41AM	10/7/2011 11:42:06AM
1110071231	10/7/2011 1:07:11PM	10/7/2011 1:15:03PM	10/7/2011 1:15:12PM
1110071457	10/7/2011 2:40:08PM	10/7/2011 2:51:47PM	10/7/2011 2:52:22PM
Tag Name:	**LEX**		**Total: 2,583** **46% in total**
Notified:	7		2,583 46%
1103010090	3/1/2011 8:10:15AM	3/1/2011 8:42:25AM	3/1/2011 8:44:12AM
1103010091	3/1/2011 8:10:14AM	3/1/2011 8:42:26AM	3/1/2011 8:44:25AM
1103010096	3/1/2011 8:10:15AM	3/1/2011 8:42:25AM	3/1/2011 8:44:04AM
1103010099	3/1/2011 8:10:21AM	3/1/2011 8:42:25AM	3/1/2011 8:43:52AM
1103010102	3/1/2011 8:10:32AM	3/1/2011 8:42:24AM	3/1/2011 8:43:36AM
1103010104	3/1/2011 8:10:49AM	3/1/2011 8:42:24AM	3/1/2011 8:43:24AM
1103010106	3/1/2011 8:11:08AM	3/1/2011 8:42:24AM	3/1/2011 8:43:07AM
1103010259	3/1/2011 8:43:49AM	3/1/2011 8:46:18AM	3/1/2011 8:46:27AM
1103010567	3/1/2011 9:40:54AM	3/1/2011 10:52:03AM	3/1/2011 10:53:12AM
1103010601	3/1/2011 9:45:12AM	3/1/2011 10:52:04AM	3/1/2011 10:53:34AM
1103010608	3/1/2011 9:46:06AM	3/1/2011 10:52:04AM	3/1/2011 10:53:22AM
1103010619	3/1/2011 9:47:05AM	3/1/2011 10:52:04AM	3/1/2011 10:53:44AM
1103010629	3/1/2011 9:48:21AM	3/1/2011 10:52:04AM	3/1/2011 10:53:55AM
1103010979	3/1/2011 10:36:28AM	3/1/2011 10:52:05AM	3/1/2011 10:54:09AM
1103011456	3/1/2011 12:29:27PM	3/1/2011 12:44:28PM	3/1/2011 12:45:21PM
1103012299	3/1/2011 3:31:38PM	3/2/2011 1:42:42PM	3/2/2011 1:45:56PM
1103012342	3/1/2011 3:42:24PM	3/2/2011 1:42:39PM	3/2/2011 1:44:40PM
1103012510	3/1/2011 4:27:44PM	3/2/2011 1:42:40PM	3/2/2011 1:45:05PM
1103020001	3/2/2011 5:18:36AM	3/2/2011 1:42:41PM	3/2/2011 1:45:27PM
1103020059	3/2/2011 7:46:36AM	3/2/2011 1:42:43PM	3/2/2011 1:46:34PM
1103020192	3/2/2011 8:23:03AM	3/2/2011 1:42:44PM	3/2/2011 1:46:48PM
1103020268	3/2/2011 8:41:51AM	3/2/2011 11:05:11AM	3/2/2011 11:05:28AM
1103020570	3/2/2011 9:23:07AM	3/2/2011 1:42:45PM	3/2/2011 1:47:21PM
1103020606	3/2/2011 9:26:47AM	3/2/2011 1:42:46PM	3/2/2011 1:47:49PM
1103020608	3/2/2011 9:26:57AM	3/2/2011 1:42:46PM	3/2/2011 1:47:40PM
1103020660	3/2/2011 9:56:06AM	3/2/2011 11:05:11AM	3/2/2011 11:05:36AM

In addition to map reports, table reports can be created based on date/time variables

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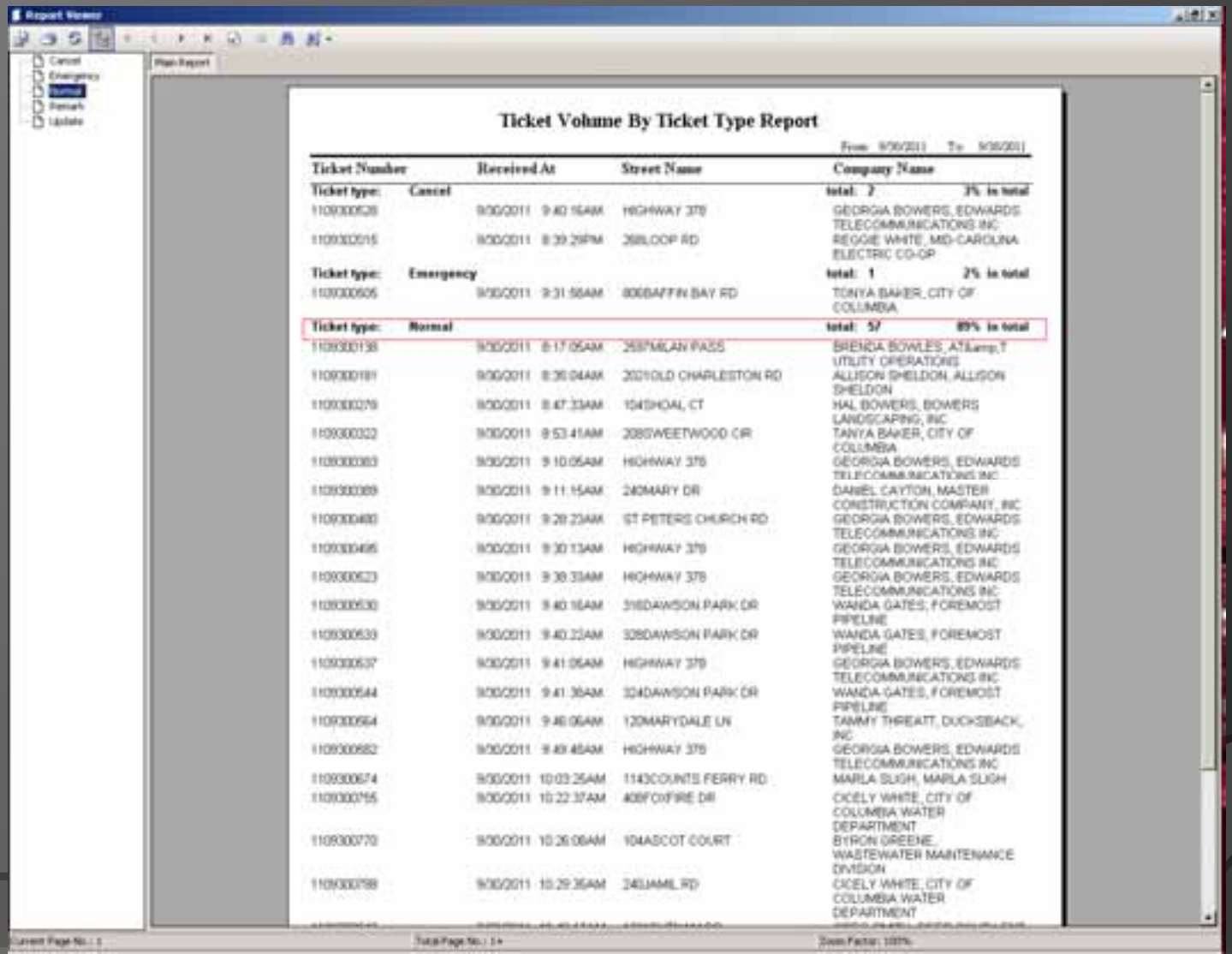
Dig-Smart Table Reports on Tickets by Ticket Type



Ticket Volume By Ticket Type Report

From 9/30/2011 To 9/30/2011

Ticket Number	Received At	Street Name	Company Name
Ticket type: Cancel			**total: 2 3% in total**
1109300528	9/30/2011 9:40:16AM	HIGHWAY 378	GEORGIA BOWERS, EDWARDS TELECOMMUNICATIONS INC
1109300515	9/30/2011 8:39:29PM	268LOOP RD	REGGIE WHITE, MID-CAROLINA ELECTRIC CO-OP
Ticket type: Emergency			**total: 1 2% in total**
1109300505	9/30/2011 9:31:56AM	806BAFFIN BAY RD	TONYA BAKER, CITY OF COLUMBIA
Ticket type: Normal			**total: 57 89% in total**
1109300138	9/30/2011 8:17:05AM	268PIMLAN PASS	BRENDA BOWLES, AT&T UTILITY OPERATIONS
1109300191	9/30/2011 8:36:04AM	2021OLD CHARLESTON RD	ALLISON SHELDON, ALLISON SHELDON
1109300270	9/30/2011 8:47:33AM	104SHOAL CT	HAL BOWERS, BOWERS LANDSCAPING, INC
1109300322	9/30/2011 9:53:41AM	208SWEETWOOD CIR	TANYA BAKER, CITY OF COLUMBIA
1109300363	9/30/2011 9:10:05AM	HIGHWAY 378	GEORGIA BOWERS, EDWARDS TELECOMMUNICATIONS INC
1109300389	9/30/2011 9:11:15AM	240MARY DR	DANIEL CAYTON, MASTER CONSTRUCTION COMPANY, INC
1109300480	9/30/2011 9:20:23AM	ST PETERS CHURCH RD	GEORGIA BOWERS, EDWARDS TELECOMMUNICATIONS INC
1109300495	9/30/2011 9:30:13AM	HIGHWAY 378	GEORGIA BOWERS, EDWARDS TELECOMMUNICATIONS INC
1109300523	9/30/2011 9:38:33AM	HIGHWAY 378	GEORGIA BOWERS, EDWARDS TELECOMMUNICATIONS INC
1109300530	9/30/2011 9:40:16AM	316DAWSON PARK DR	WANDA GATES, FOREMOST PIPELINE
1109300533	9/30/2011 9:40:23AM	328DAWSON PARK DR	WANDA GATES, FOREMOST PIPELINE
1109300537	9/30/2011 9:41:06AM	HIGHWAY 378	GEORGIA BOWERS, EDWARDS TELECOMMUNICATIONS INC
1109300544	9/30/2011 9:41:36AM	324DAWSON PARK DR	WANDA GATES, FOREMOST PIPELINE
1109300564	9/30/2011 9:46:06AM	120MARYDALE LN	TAMMY THREATT, DUCKSBACK, INC
1109300582	9/30/2011 9:49:46AM	HIGHWAY 378	GEORGIA BOWERS, EDWARDS TELECOMMUNICATIONS INC
1109300674	9/30/2011 10:03:25AM	1143COUNTS FERRY RD	MARLA SLIGH, MARLA SLIGH
1109300755	9/30/2011 10:22:37AM	408FOXFIRE DR	CICELY WHITE, CITY OF COLUMBIA WATER DEPARTMENT
1109300770	9/30/2011 10:26:06AM	104ASCOT COURT	BYRON GREENE, WASTEWATER MAINTENANCE DIVISION
1109300788	9/30/2011 10:29:35AM	240JAMIL RD	CICELY WHITE, CITY OF COLUMBIA WATER DEPARTMENT

In addition to map reports, table reports can be created based on date/time variables

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Summary

- *Dig-Smart Implemented in 2007 for One Call Ticket Management*
- *GIS Centric Being Core Element/Requirement With SDE Integration*
- *Small Deployment, Approximately 22,000 Tickets Annually*
- *Percent Requiring Staking Varies From 33%-66% On Average, Varied Per Month*
- *Mobile Workforce Implementation in 2012 (i.e. GPS, AVL, etc)*
- *Dig-Smart Field Implementation 2012*
- *Objectives Achieved:*
  - *-Reduced Time Spent Completing Requests*
  - *-Historical Tickets Stored In-House, Oracle Database*
  - *-GIS Can Produce Maps Anytime*
  - *-Positive Response Compliance (Future SC811 Initiative)*

GIS Centric One Call Ticket Management

Mid-Carolina Electric Cooperative (MCEC)

THANK YOU

Lew DuBose
MCEC
Dispatch Supervisor
Lexington, SC
803-749-6441
lew@mcecoop.com

Jim Schoenberg
Dig-Smart, LLC
President
Rio Rancho, NM
505-850-8192
jschoenberg@dig-smart.com