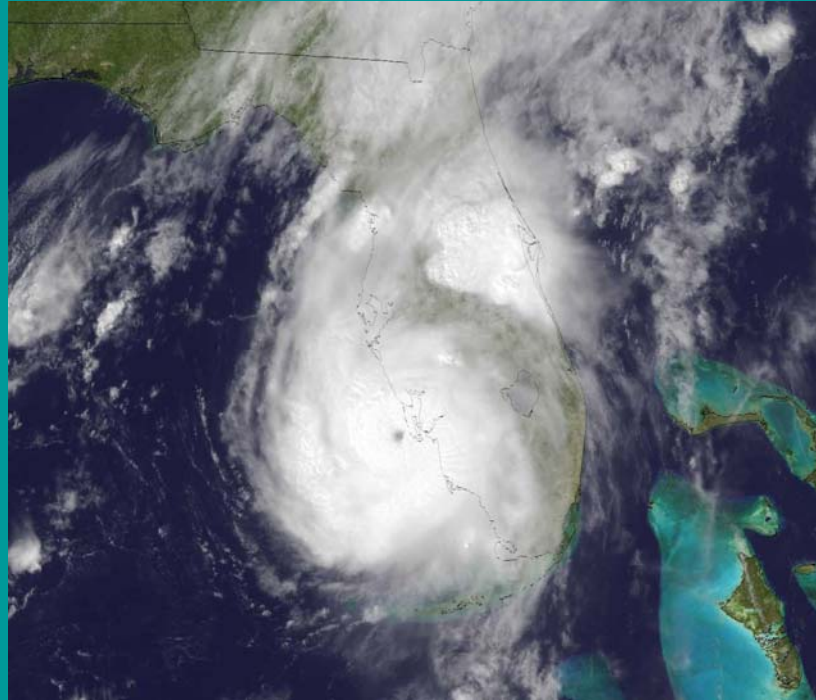




Lee County Florida 2009 MOC Damage Assessment Exercise Summary



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Damage Assessment Exercise

- Conducted during the state-wide Florida Hurricane Exercise
- Conducted county-wide over a period of one day to test the functionality of the new Damage Assessment applications used by several government entities simultaneously
- Server Software Used: ESRI ArcGIS Server Advanced 9.3 
- Damage Assessment Software Used: Incident Inventory Control (I²C) for structural assessments, Damage Assessment for Signalized Intersections (DASI) for intersection assessments 

Why did we use Damage Assessment Tools Built on the ArcGIS Mobile Framework ?

- SPEED - a way to replace paper forms and get damage assessment data from the field to decision makers instantly
- SYNCRONIZATION – when field devices are synced, the server receives the collected data and in return the field devices receive all data from the server that has been synced by other field devices

LEE COUNTY, FLORIDA
DETAILED DAMAGE ASSESSMENT FIELD WORK SHEET

1. Property Address:		2. STRAP #:			
3. Owner's Name		4. Contact #:			
5. Owners' Address (if different from above):					
6. Renter's Name (if applicable):					
7. Type of Structure Damaged:		<input type="checkbox"/> Residential	<input type="checkbox"/> Wood Frame		
		<input type="checkbox"/> Multi-family	<input type="checkbox"/> Masonry		
		<input type="checkbox"/> Commercial	<input type="checkbox"/> Metal Building		
		<input type="checkbox"/> Industrial	<input type="checkbox"/> Mobile Home		
8. Primary Residence: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't Know					
9. Insurance: Owner Insured: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't Know					
Renter Insured: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't Know					
Structural Damage :		Percent of Damage:	Minor (.25)	Major (.5)	Destroyed (1)
Component	Percent of Structure				
Roof/Trusses	20	<input type="checkbox"/> 5	<input type="checkbox"/> 10	<input type="checkbox"/> 20	<input type="checkbox"/> 20
Exterior Walls	20	<input type="checkbox"/> 5	<input type="checkbox"/> 10	<input type="checkbox"/> 10	<input type="checkbox"/> 20
Interior Walls	15	<input type="checkbox"/> 3.75	<input type="checkbox"/> 7.5	<input type="checkbox"/> 15	<input type="checkbox"/> 15
Floors/Flooring	10	<input type="checkbox"/> 2.5	<input type="checkbox"/> 5	<input type="checkbox"/> 10	<input type="checkbox"/> 10
Foundation	20	<input type="checkbox"/> 5	<input type="checkbox"/> 10	<input type="checkbox"/> 20	<input type="checkbox"/> 20
Plumbing	5	<input type="checkbox"/> 1.25	<input type="checkbox"/> 2.5	<input type="checkbox"/> 5	<input type="checkbox"/> 5
Electrical	5	<input type="checkbox"/> 1.25	<input type="checkbox"/> 2.5	<input type="checkbox"/> 5	<input type="checkbox"/> 5
A/C & Heat	5	<input type="checkbox"/> 1.25	<input type="checkbox"/> 2.5	<input type="checkbox"/> 5	<input type="checkbox"/> 5
Sub Totals		_____ %	_____ %	_____ %	
10. Total Damage (add Subtotals) Percent:					
11. Damage Category:	a. <input type="checkbox"/> Minor 25% or less	b. <input type="checkbox"/> Major 25.01% to 50%	c. <input type="checkbox"/> Destroyed Exceeds 50%		
12. Building experienced previous flood loss <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't Know					
13. Structural Information:					
a. Should power remain off?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Undetermined		
b. Is the building uninhabitable?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Undetermined		
c. Is engineering needed for repair?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Undetermined		
d. Should structure be demolished?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Undetermined		
e. Is (was) there water in the structure?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If Yes, Depth _____		
f. Were pictures taken? If so, Team	Roll _____	Frame _____			
14. Comments:					
15. Placard Issued:					
a. <input type="checkbox"/> Inspected, no restriction on use, no placard issued b. <input type="checkbox"/> Limited entry (Yellow) c. <input type="checkbox"/> Unsafe to enter or occupy (Fluorescent Orange)					
16. Team: Member names:					
Form completed by _____ (Please print) Date: _____					

Damage Assessments Collected

- I²C:

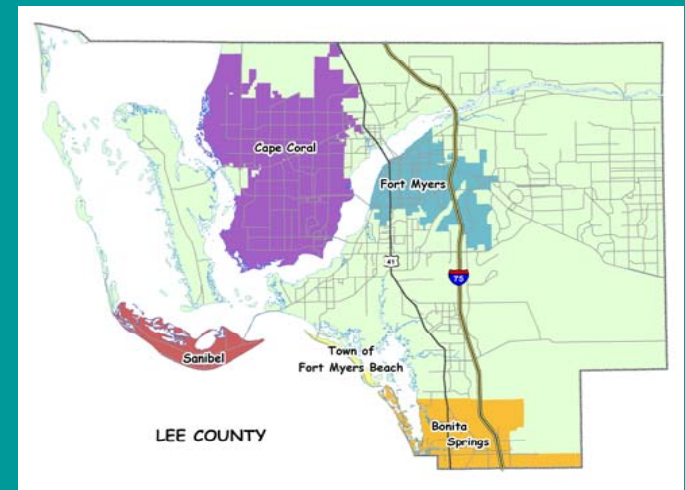
Preliminary Housing/Business, Full Housing/Business, Incidents (road blockages), Human Needs

- DASI:

Signalized Intersection Assets – Intersection Health, Generators, UPS, Poles, Spans/Mast Arms, Signal Heads, Regulatory Signs, Street Signs, Pedestrian Units, Street Lights

Participants

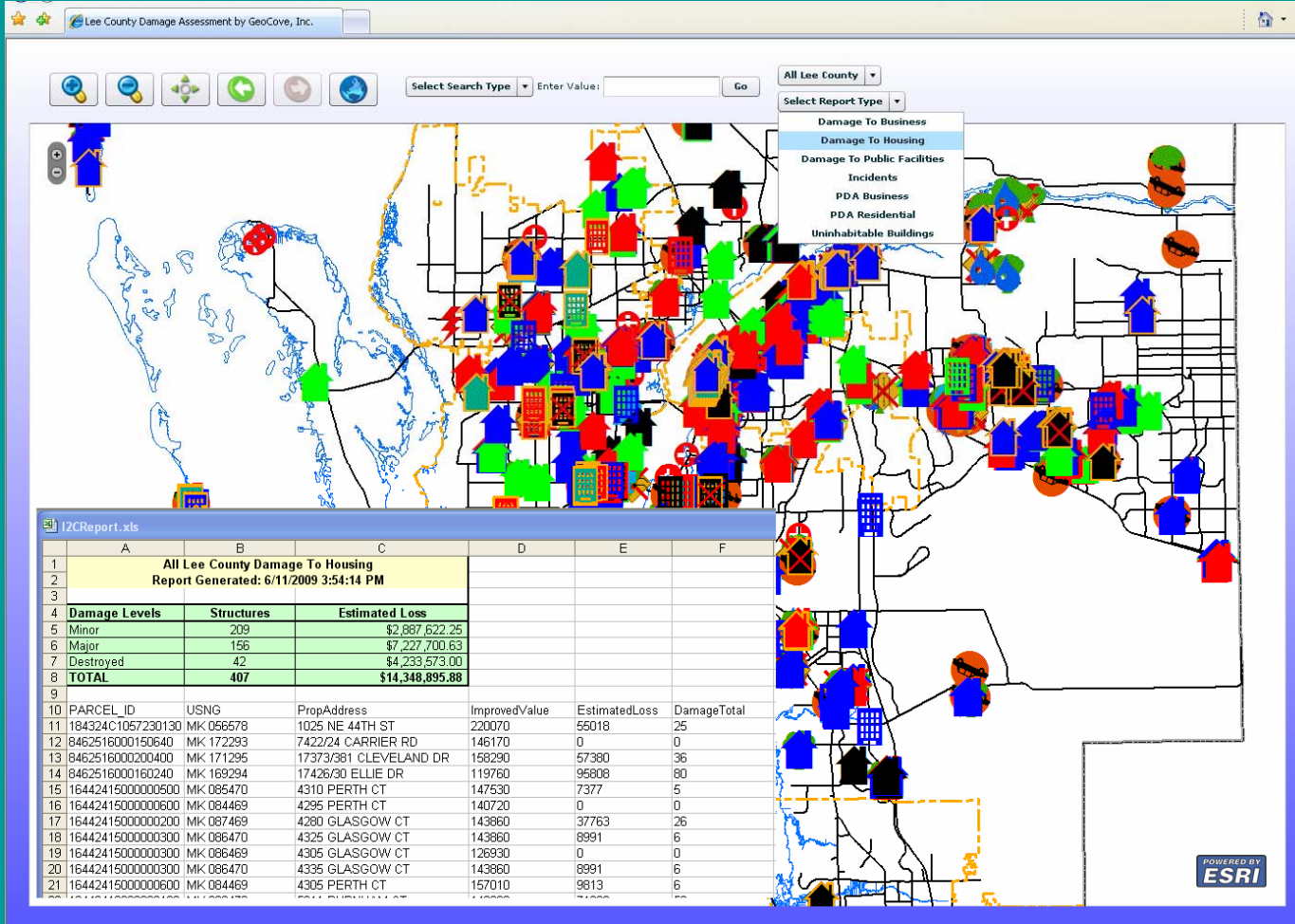
- Lee County Building and Codes Departments (30)
- Lee County Human Services (2)
- Lee County Economic Development (2)
- Lee County DOT Traffic Division (12)
- Fort Myers Building and Codes Departments (34)
- Cape Coral Fire, Building and Codes Departments (17)
- City of Sanibel (3)
- Captiva Fire Control (2)



Results...

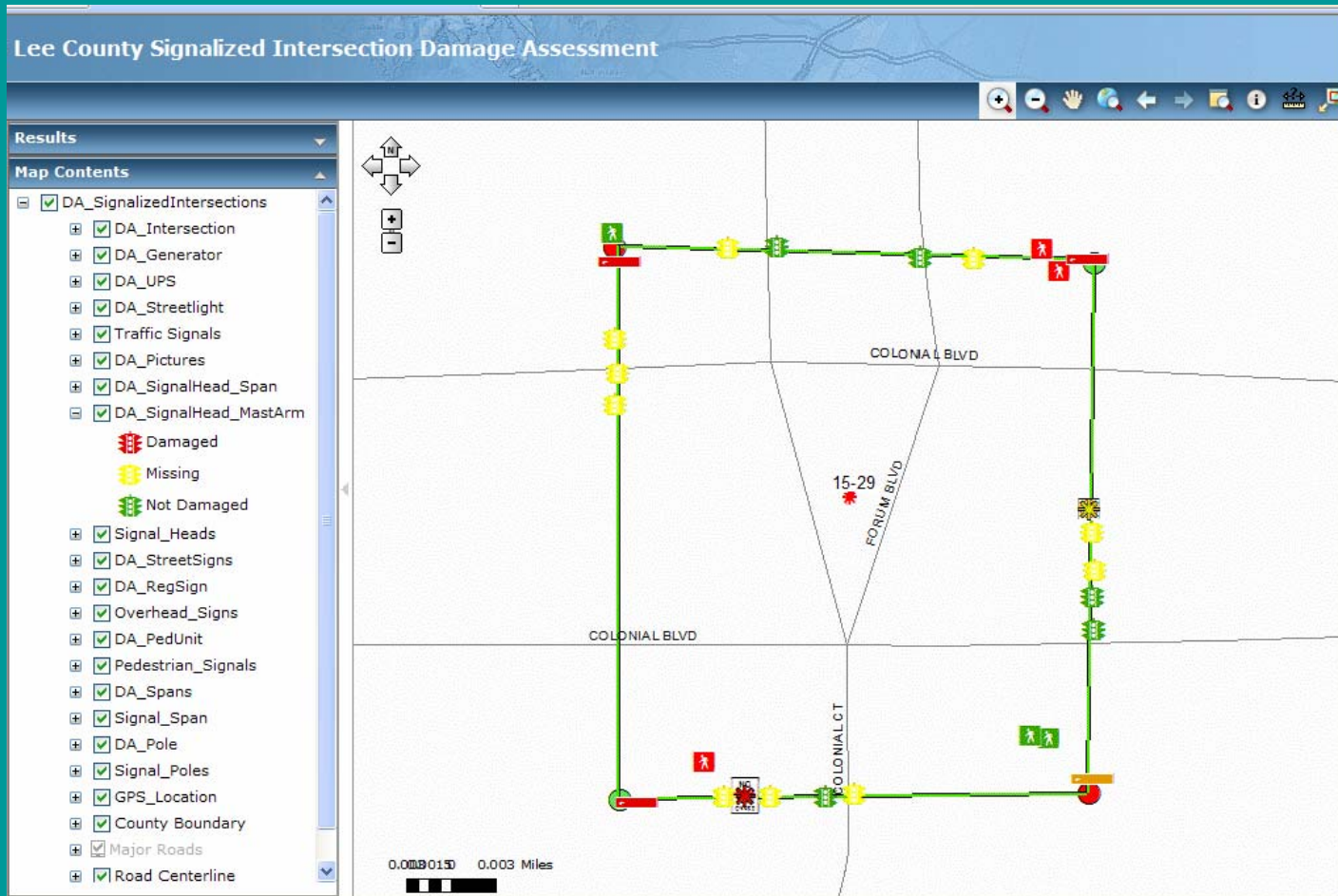
- 102 people participated in entering Damage Assessments
- 76 Teams: 1-4 people per team
- Collected 298 Preliminary Housing assessments totaling \$19 Million in estimated loss
- Collected 60 Preliminary Business assessments totaling \$37 Million in estimated loss
- Collected 408 Full Housing damage assessments totaling \$14 Million in estimated loss
- Collected 59 Full Business damage assessments totaling \$135 Million in estimated loss.
- Collected 500 Incidents (road blockages)
- Collected 45 Human Needs assessments
- Collected assessments at 55 Signalized Intersections

Damage Assessment In Action



Assessment Reporting Website:
http://lcfgis05.leegov.com/I2C_Reports

Damage Assessment In Action



Signalized Intersection Website:
<http://lcfgis05.leegov.com/DASI>

Damage Assessment Activities



City of Fort Myers EOC Briefing

Damage Assessment Activities



Lee County DOT
Signalized Intersection Assessment

Damage Assessment Activities



Demonstrating Damage Assessment Reporting Website to Lee County Emergency Management

Lessons Learned:

- Make sure to click **INSIDE** the parcel when creating an assessment, as that is what records the correct Parcel ID number
- Incidents are to report road or canal blockages, don't place incidents in backyards.
- I²C – no problems with the data entry or syncing
- DASI – first time it was used, found a few work flow issues and data fields that can be clarified or removed.

User Comments:

- “Exercise was time well spent” – *Michael Titmuss, City of Fort Myers Chief Code Enforcement Manager*
- “Tool is worth it’s weight in gold” – *Gerald Campbell, Lee County EOC Planning Section Chief*
- City of Fort Myers Fire Chief and City Manager gave kudos for the cross municipal coordination
- “The computer based system is a great tool” – *Sarah Clarke, Lee County DOT Project Manager*

THANKS!!!!

- Many thanks to all who participated, out in the field and behind the scenes. Thanks to Darryl Palmer, Craig Swadner, Bert Smith, and Mike Meeks for getting the application installed on all the participating field devices.
- Thanks to Karyn Tareen and her staff at GeoCove, Inc. for their hard work in getting the application ready for prime time!

Now that we are prepared... let's not have any hurricanes!!



Lee County GIS

<http://leegis.leegov.com>

- Map Downloads
- Data Downloads
- Links to Web Applications