



The Michigan 9-1-1 GIS Repository

Training Webinar
June 7, 2017



Today's Agenda

- Background
- Region Administration Tool
- Data Viewer
- Import Data Utility
- Export Data Utility
- Red Line Edit Tools
- Questions





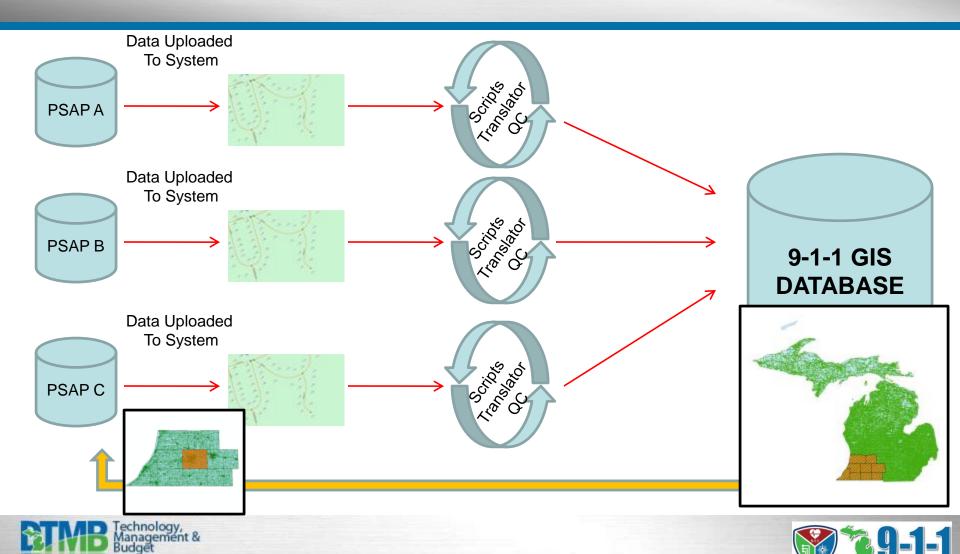
ENHANCE 911 Act Grant Project

- Created a central 9-1-1 GIS Repository
 - Enabling PSAPs to share GIS information
 - Establishing MOAs
 - Setting standards for GIS data entry
 - Future framework for NG9-1-1 database
- Statewide Public Safety Answering Point (PSAP) Boundary Layer
- Statewide Road Centerline Layer





How does it work?



Relevance in the NG911 environment







911 User Request michigan.gov/snc



Form is located under "Current Issues"





PSAP Administration Tools

- Each PSAP (with MOU in place) will have primary designated PSAP Administrator
- Each PSAP (with MOU in place) can assign alternate PSAP Administrators
- Internal communication for approval processes needs to be determined locally
 - For example, approving PSAP boundary changes





Roles

PSAP Administrator	This role is established for the person who will be managing the accounts for the users within a specific PSAP jurisdiction. This role will typically be assigned to the 911 Director. This access is limited to PSAPs that are a branch of the entity that is party to the 'memorandum of understanding' for the 911 GIS Repository.
Alternate PSAP Administrator(s)	This role is established for a person to provide a backup role to the PSAP Administrator for assigning logins or accounts. This role will have the same permissions level in the system as the PSAP Administrator.
Data Importer(s)	This role is established for a person who will be providing GIS data updates to the repository system. This role can be assigned to a PSAP staff member, county GIS department staff member or a vendor. This role is typically assigned to the person who is maintaining the GIS data.
Data Exporter(s)	This role is established for a person who will be extracting GIS data from the repository for 911 purposes on a regular basis. For example, the data exporter might be the person who typically integrates GIS data with existing CAD systems.
Restricted Administrator	This role is established as a 'view only' for PSAPs that are not a branch of the government which is party to the 'memorandum of understanding' for the 911 GIS Repository.





911 User Request

STATE OF MICHIGAN GIS REPOSITORY USER REQUEST

To register application users, the PSAP Director must provide the information in this table and return it via e-mail to armitagem@michigan.gov or fax it to (517) 241-0387, Attn: Mr. Michael Armitage. A description of each role is provided below the table.

911 Repository Role	Name	Organization	Email and phone #
PSAP Administrator			
Alternate PSAP Administrator(s) (Optional)			
Data Importer(s)			
Data Exporter(s)			
Restricted Administrator			

		Sin sac
lame:	Signature:	
	_	

If you have any questions or concerns about this process, please contact:

Mr. Michael Armitage, armitagem@michigan.gov at MSP at (517) 241-2809, fax (517) 241-0387 or

Mr. Mark Holmes, holmesm3@michigan.gov at CSS at (517) 373-7910, fax (517) 373-2939.

<u>PSAP Administrator</u> – This role is established for the person who will be managing the accounts for the users within a specific PSAP jurisdiction. This role will typically be assigned to the 911 Director. This access is limited to PSAPs that are a branch of the entity that is party to the 'memorandum of understanding' for the 911 GIS Repository.

<u>Alternate PSAP Administrator(s) (optional)</u> – This role is established for a person to provide a backup role to the PSAP Administrator for assigning logins or accounts. This role will have the same permissions level in the system as the PSAP Administrator.

<u>Data Importer(s)</u> – This role is established for a person who will be providing GIS data updates to the repository system. This role can be assigned to a PSAP staff member, county GIS department staff member or a vendor. This role is typically assigned to the person who is maintaining the GIS data.

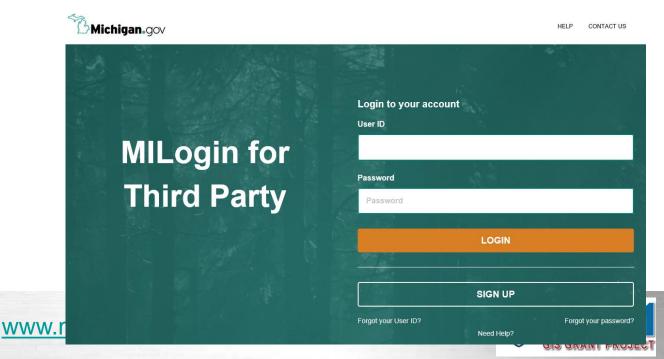
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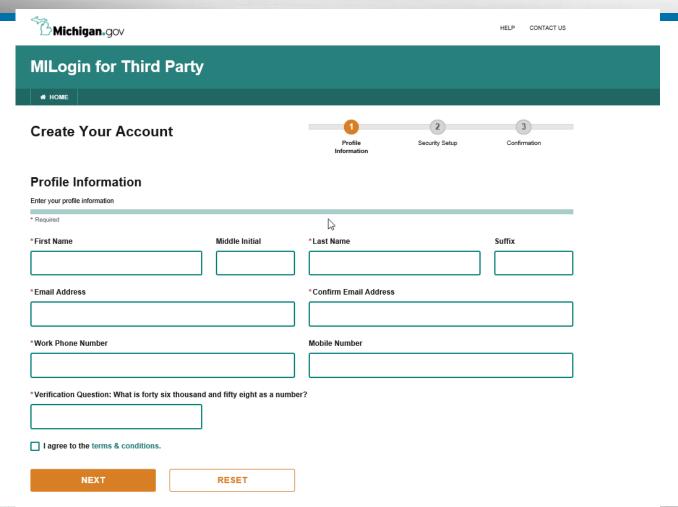




- State of Michigan employees
 - https://miloginworker.michigan.gov
- Non-State of Michigan employees
 - https://milogintp.michigan.gov

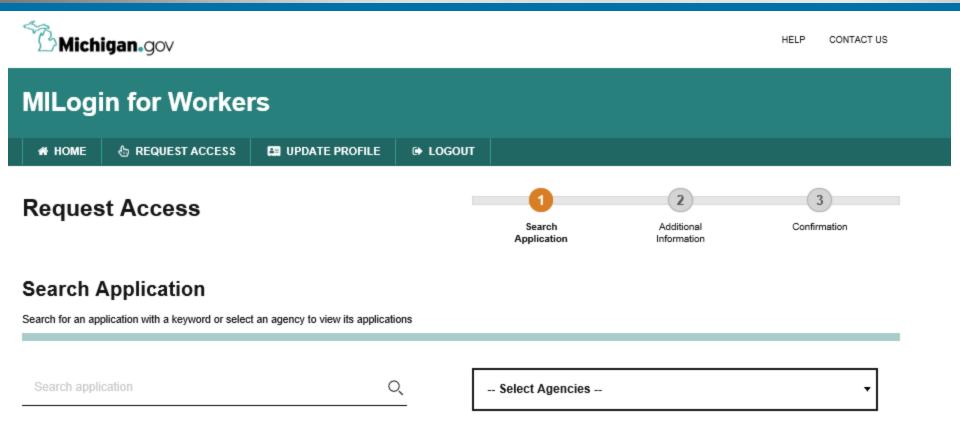




















<NAME> Home Page

Access your applications by clicking on the application links below

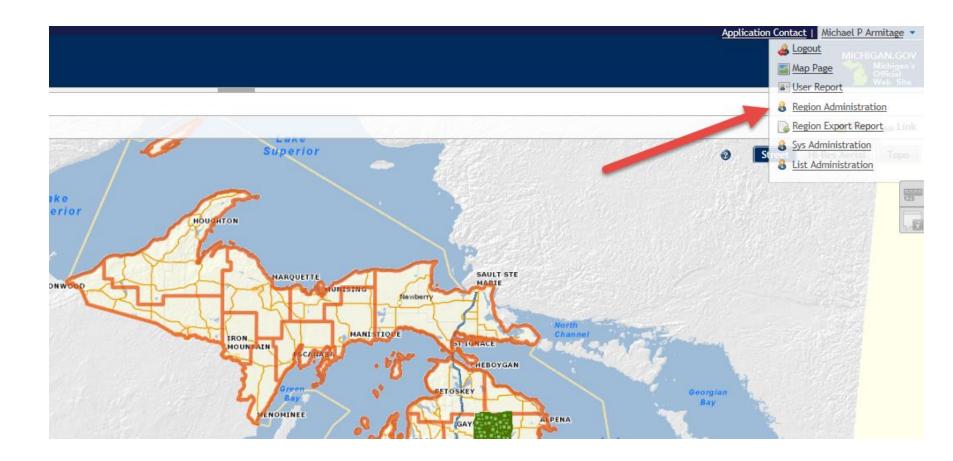


Michigan State Police (MSP)

911 GIS Data Repository











Administration

Regions

Users

- Click the left arrow to view region members, click the user name to set permissions, click the region name to add or remove users.
- Alcona County Central Dispatch
- Alger County Sheriff Department

Laura I Plactic

Laura L Diastic	9
Mark E Holmes	8
Matt Waldron	×

Michael P Armitage

Robert J Hughes &
Todd Brock &

Allegan County Central Dispatch

Set Permissions for Jeffrey Bracket

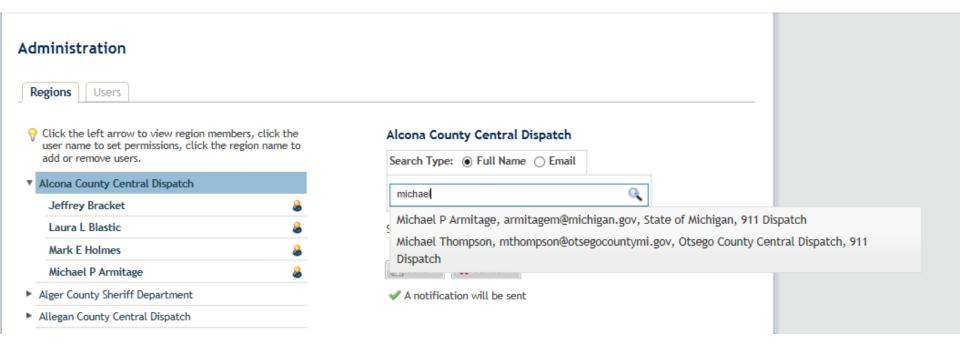
Permission	Region	Roads	Structures	Emergency Service Zones
View Current	✓	✓	✓	✓
View Pending	✓	✓	✓	✓
Can View	✓	✓	✓	✓
Can Edit	✓	✓	✓	✓
Can Import	✓	✓	✓	✓
Can Export	✓	✓	✓	✓
Check All				





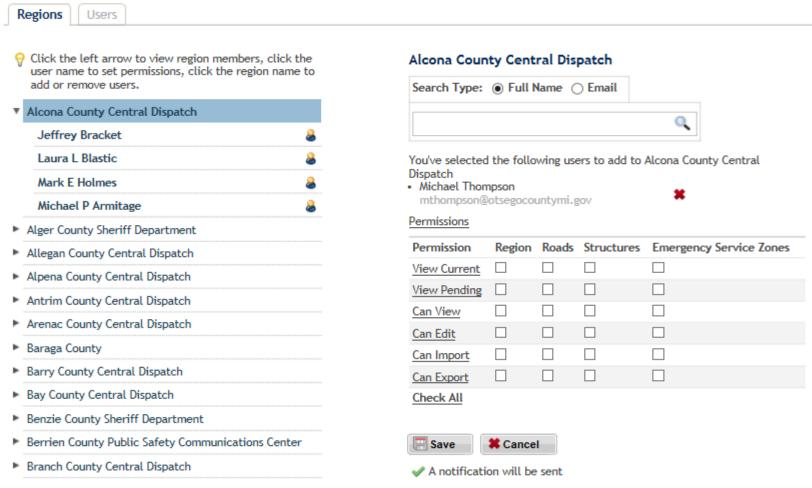
















Region Administration Tools: Permissions

Administration

Regions Olick the left arrow to view region members, click the user name to set permissions, click the region name to add or remove users. Alcona County Central Dispatch Alger County Sheriff Department Laura L Blastic Mark F Holmes Matt Waldron Michael P Armitage Robert J Hughes Todd Brock Allegan County Central Dispatch

Set Permissions for Matt Waldron

Cancel

Permission	Region	Roads	Structures	Emergency Service Zones
View Current				
View Pending				
Can View	✓	✓	✓	✓
Can Edit	✓	✓	✓	✓
Can Import	✓	✓	✓	✓
Can Export	✓	✓	✓	✓
Check All				





Save

PSAP Administration: Remove User from PSAP

- Removing User Accounts
 - Rights are removed by PSAP Administrator
 - Account is Disabled by System Administrator request needs to be submitted by PSAP Administrator
 - Can be Re-Enabled If User Goes to Work at Another PSAP





Removing User Accounts

Administration

Regions

Users

Click the left arrow to view region members, click the user name to set permissions, click the region name to add or remove users.

Alcona County Central Dispatch

Alger County Sheriff Department

Laura L Blastic

Mark E Holmes

Matt Waldron

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Robert J Hughes

Todd Brock

Allegan County Central Dispatch

Set Permissions for Matt Waldron

Cancel

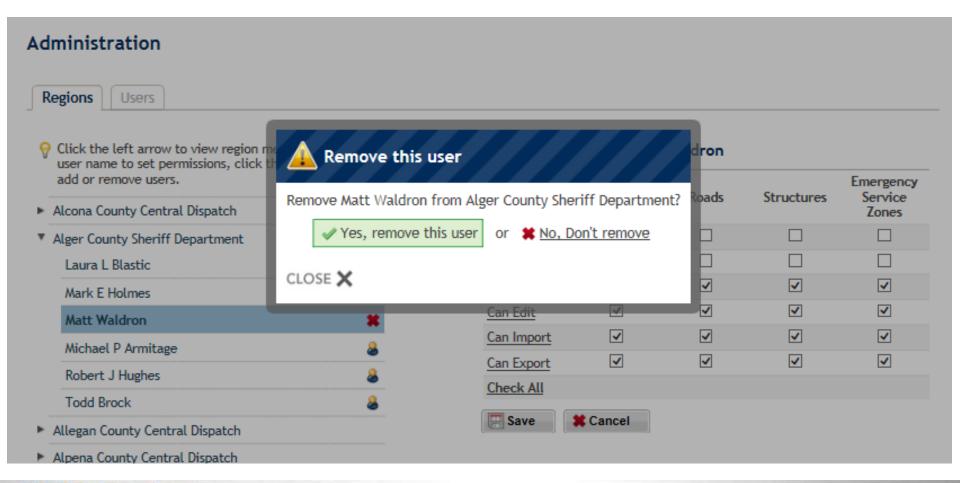
Save

Permission	Region	Roads	Structures	Emergency Service Zones
View Current				
View Pending				
Can View	✓	✓	✓	✓
Can Edit	✓	✓	✓	✓
Can Import	✓	✓	✓	✓
Can Export	✓	✓	✓	✓
Check All				





Removing User Accounts







PSAP Administration Tools

Requesting Data Export Rights for User

PSAPA PSAP B



PSAP Administrator Sends Request for CAD Administrator to have Export Rights for Neighboring County



PSAP Administrator and CAD Administrator Receive Status Email





PSAP Administrator Receives Email to Log into System and Grant User Export Rights to PSAPs Data









PSAP Administration: Requesting Permission

Administration

Regions

Users

Below are users currently assigned to one or more of your regions. You may, edit a user's information, request access to another PSAP, deactivate the user, or create a new user. Note that newly created users will not display in this list until they are assigned to a region.

8	New	User	

Name	Email	Organization	Туре	Phone Number	Actio
Amy L Beach		Ogemaw County Central Dispatch	911 Dispatch	989-345-4911 😝	\
Andrew Giguere		Leelanau County	County GIS Contact	231-256-8152 🕫	% ≥
Andrew Hartwick		St Clair County Central Dispatch	County GIS Contact	269-467-5576	% ≥
Ann Gasperich		Keweenaw County	911 Dispatch	906-337-3471	% ≥
April Heinze		Eaton County Central Dispatch	911 Dispatch	517-543-4924	% ≥





PSAP Administration: Requesting Permission

Administration Regions Users Request access for Amy L Beach to another Region. ☐ Import ☐ Edit ☐ Export Access: ☐ Region ☐ Roads ☐ Structures ☐ ESZs Feature: Region: Alcona County Central Dispatch V Comments: ■ Save Cancel





PSAP Administration: USERS

Administration

Regions Users Below are users currently assigned to one or more of your regions. You may, edit a user's information, request access to another PSAP, deactivate the user, or create a new user. Note that newly created users will not display in this list until they are assigned to a region. New User Name Email Organization Туре Phone Number 989-345-4911 Ogemaw County Central Dispatch Amy L Beach 911 Dispatch \times Andrew Giguere Leelanau County County GIS Contact 231-256-8152 Andrew Hartwick St Clair County Central Dispatch County GIS Contact 269-467-5576 906-337-3471 Ann Gasperich Keweenaw County 911 Dispatch 517-543-4924 (*) April Heinze Eaton County Central Dispatch 911 Dispatch





PSAP Administration: USERS

Administration Users Regions User Information Contact Info Email First Name Amy Middle Initial Last Name Beach Organization ~ Ogemaw County Central Dispatch Type ~ 911 Dispatch Phone 989-345-4911 ✓ Active ✓ Notify user ☐ View or add comments to notification Save Cancel





Data Sharing and Agreements

- Enhanced Access to Public Records Act
 - DTMB Policy Developed Specific to Project
 - Local Participant Will Need a Local Enhance Access to Public Records Act Policy
 - Project Can Provide Examples of Enhance Access to Public Records Act Policies – If Local Participant Does Not Have One in Place
- Memorandum of Agreement Between CSSTP and Each Participating Entity
 - Outlines Roles and Responsibilities of CSSTP and Participants
 - Established Disclaimers for Data Sharing
 - Signed Agreement





Data Sharing and Agreements

 Exported Data Can Only Be Used for 9-1-1 and Public Safety Purposes

The purpose of this MOA is to establish a mutual framework governing the respective organizational relationships, responsibilities, and activities between the parties. This agreement is for the utilization of GIS data for 9-1-1 and public safety purposes within a statewide 9-1-1 GIS repository developed by CSSTP (9-1-1 GIS Program).





Third Party Requests Data From CSSTP



Third Party Makes a FOIA Request for Data Covering 6 jurisdictions



CSSTP References Local Enhanced
Access to Public Records Policy

CSSTP

For GIS Data Fee Schedules

Fees are totaled for all 6 jurisdictions plus any administration fees and third party must pay CSSTP to receive data extract





Third Party Requests Data From CSSTP



Once third party pays costs CSSTP releases data to third party



Local fees are reimbursed by CSSTP to each local jurisdiction



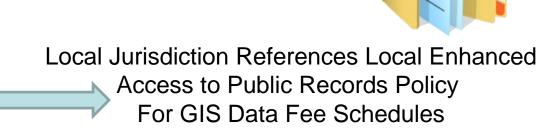




 Third Party Requests Data From a Local Jurisdiction



Third party makes a FOIA request for data covering 6 other jurisdictions that the local jurisdiction has downloaded into its local systems



Fees are totaled for all 6 jurisdictions plus any administration fees and third party must pay local jurisdiction to receive data extract





Third Party Requests Data From Local

Jurisdictions



Once third party pays costs local jurisdiction releases data to third party



Local fees are reimbursed by local jurisdiction that received the request to each of the 6 other local jurisdictions





- Potential Uses
 - Only available for public safety via secure log in
 - The data viewer could benefit PSAPs where mapping does not currently exist for dispatch
 - The data viewer can be used to search addresses in other jurisdictions
 - Supplemental map to existing systems
 - Accessible via wireless in field or mobile command
 - Can be accessed in an EOC during large incident crossing multiple jurisdictions

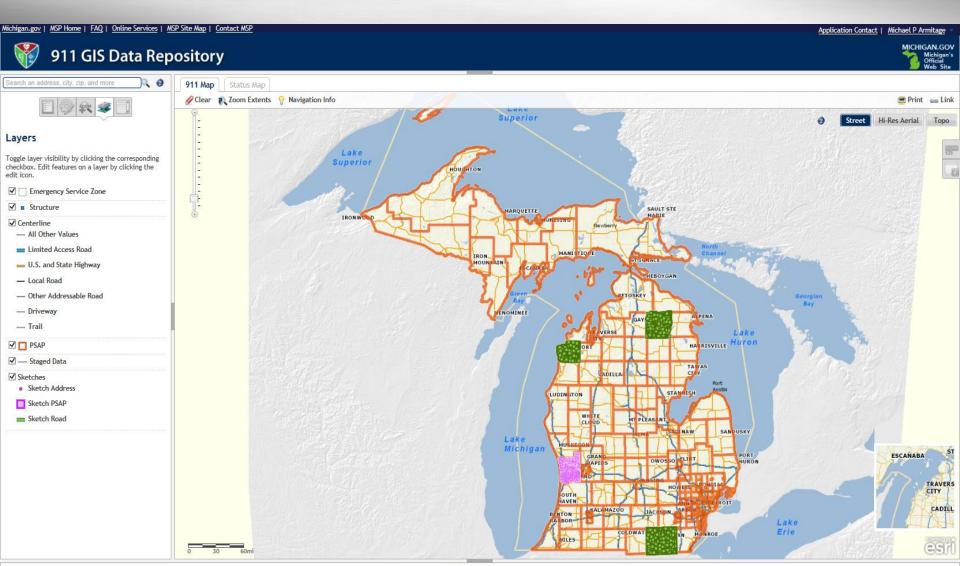


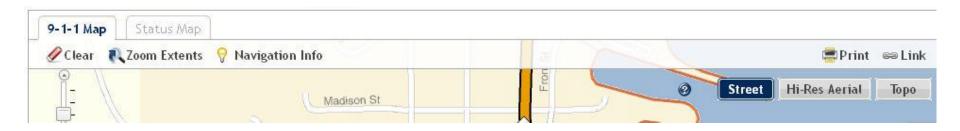


Demonstration

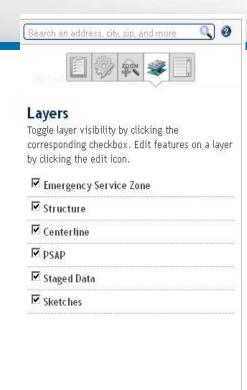




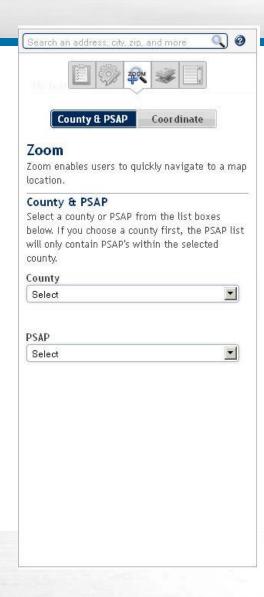




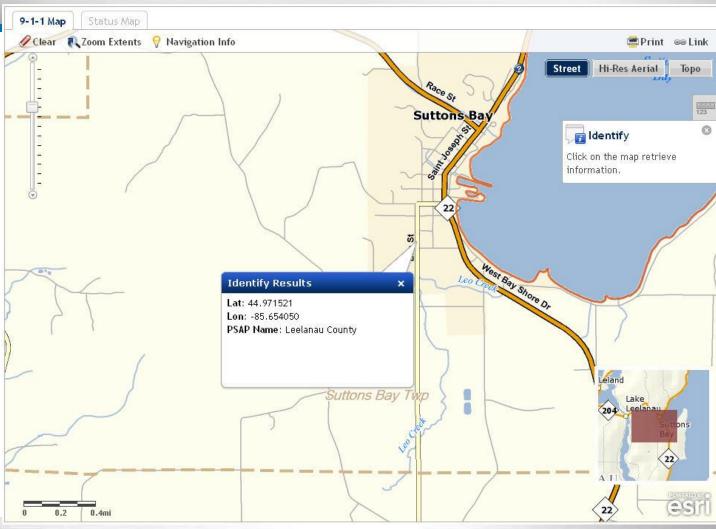




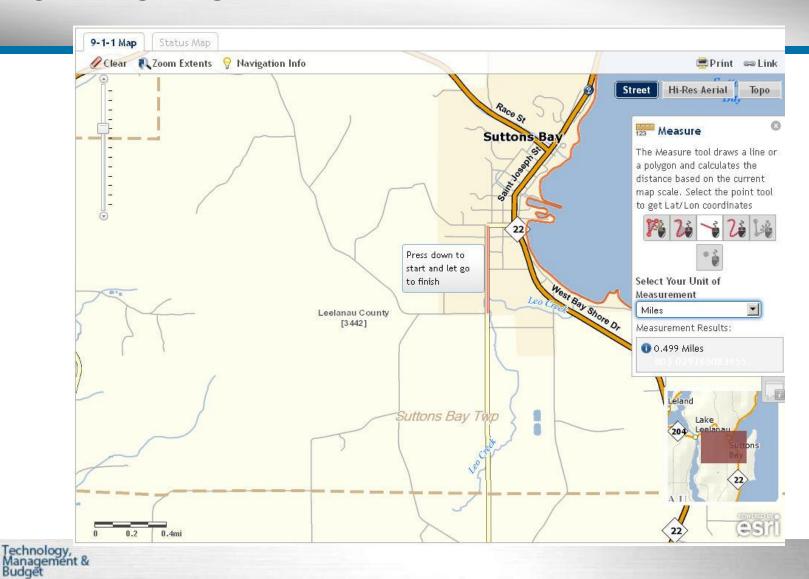


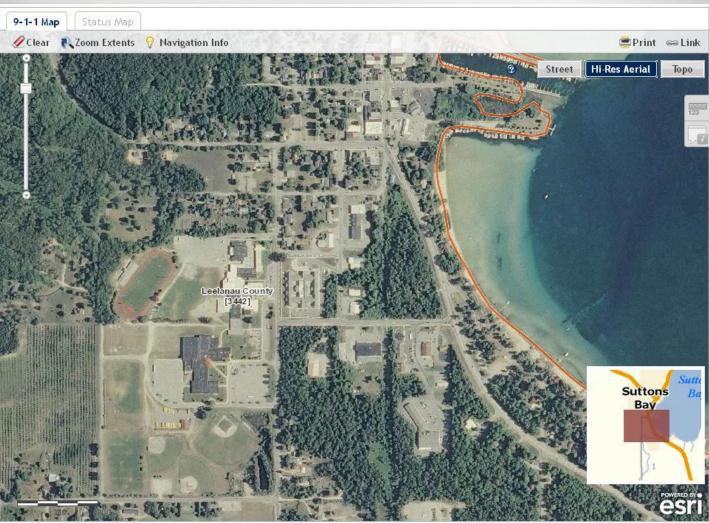










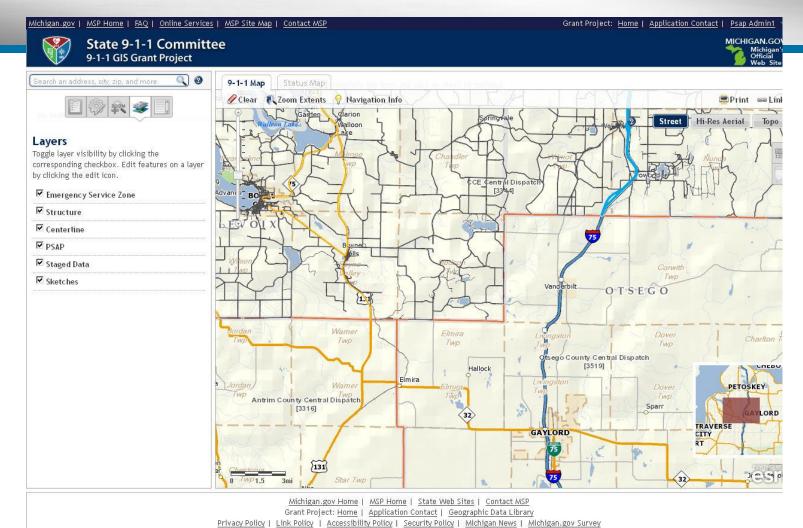




- Map Symbology
 - Populate FCC Codes
 - Populate RDCLASS Field
 - Outlined in addressing guide







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- Road centerlines
- MSAG only for validation against new centerline layer being uploaded
- Emergency Service Zones Optional
 - Beneficial for Mutual Aid
 - Will be beneficial for NG9-1-1 and interoperability
- Site Structure Points Optional
 - Can be partial layer

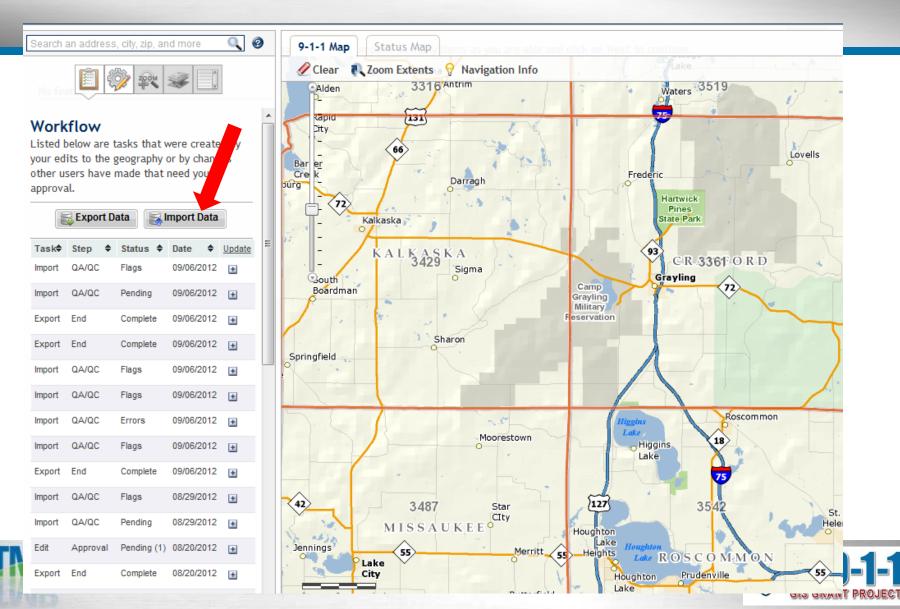


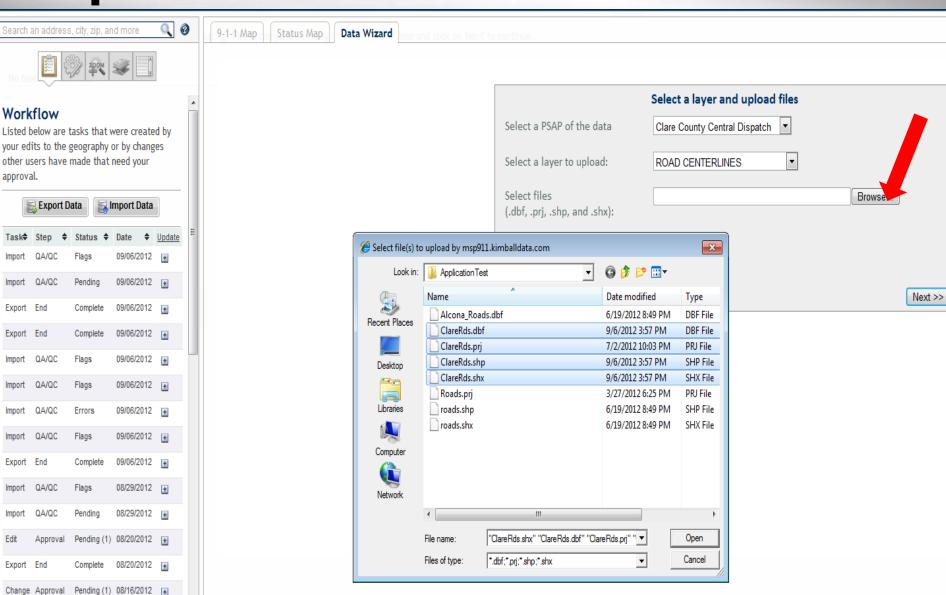


Demonstration









9-1-1 Map

Status Map

Data Wizard

Please match data fields.

ROAD CENTERLINES

Match Fields

Repository Standards Your Shapefile Fields

SOURCE (type:A) * SOURCE

DATEUPD (type:D) * DATEUPD •

EFFDATE (type:D)

RCLID (type:A) * RCLID •

·

•

COUNTRY (type:A) * COUNTRY •

STATE L (type:A) * STATE L •

STATE_R (type:A) * STATE_R •

v COUNTY_L (type:A) * COUNTY_L

COUNTY_R (type:A) * COUNTY_R

MUNI_L (type:A) * MUNI_L •

MUNI R (type:A) * MUNI R •

* MCDDIV L (type:A) *

* MCDDIV_R (type:A) *

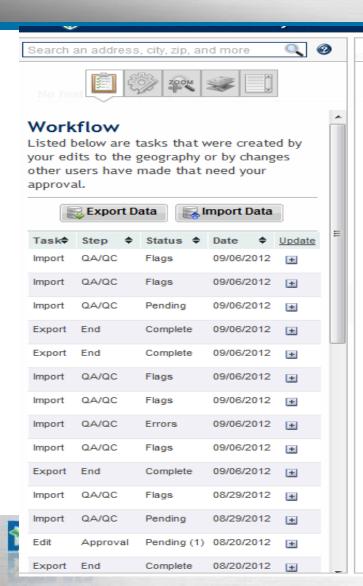
• UNCORP_L (type:A) •

UNCORP_R (type:A)

www.michigan.gov/911gisgrant







9-1-1 Map Status Map

Workflow Details

Data Wizard

Centerline QA/QC Report (Flag Summary)

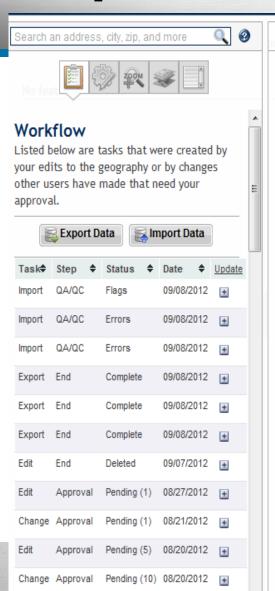
Flag Name	Flags	Exceptions
Record_Count	3849	0
MUNI_LR_ISEmpty	1	0
EFFDATE_DatatypeNotValid	3849	0
LOGreaterThanHI	24	0
RangeContainsAllZeros	213	0
RangeParityInvalid	8	0
RangeOverlap	65	0
STSNoMatch	1	0
FlippedRange	12	0

Select a Flag Name above to see all records that failed that scrub.

Export with No Data (flags only): Excel CSV

Export with Data: Excel CSV





9-1-1 Map

Back to Summary

Data Wizard

Flagged Records

Status Map

Displaying records that failed the	Flag:	RangeOverlap
------------------------------------	-------	--------------

Workflow Details

First	Previous	Page 1 of 4	20 ▼ Next	<u>Last</u>	Record Cou	nt: 65		
RCLID	Street	Left Community	Right Community	LLO	<u>LHI</u>	RLO	RHI	Exception
1981	W ASHARD RD	FREEMAN TWP	FREEMAN TWP	7501	7989	7500	7988	0
1982	W ASHARD RD	FREEMAN TWP	FREEMAN TWP	6001	6299	6000	6298	0
1983	W ASHARD RD	FREEMAN TWP	FREEMAN TWP	6301	6549	6300	6548	0
1984	W ASHARD RD	FREEMAN TWP	FREEMAN TWP	6551	6699	6550	6698	0
1987	W ASHARD RD	FREEMAN TWP	FREEMAN TWP	6051	6999	6050	6998	0
3346	W ASHARD RD	FREEMAN TWP	FREEMAN TWP	7501	7989	0	0	0
3318	BEECH TREE	SURREY TWP	SURREY TWP	3131	3199	3130	3200	0
3320	BEECH TREE	SURREY TWP	SURREY TWP	3131	3149	3130	3148	0
3147	S CLARE AVE	GRANT TWP	GRANT TWP	9041	9999	9040	9998	0
841	S CLARE AVE	GRANT TWP	GRANT TWP	9001	9939	9000	9938	0
3380	N CORNING ST	FARWELL	FARWELL	171	299	170	298	0
2414	N CORNING ST	FARWELL	FARWELL	1	199	2	198	0
3145	S EBERHART AV	E GRANT TWP	GRANT TWP	11911	11999	11900	11998	0
842	S EBERHART AV	E GRANT TWP	GRANT TWP	11001	11909	11000	11908	0
1027	FIVE LAKES DR	GRANT TWP	GRANT TWP	7401	7579	7400	7578	0
3096	FIVE LAKES DR	GRANT TWP	GRANT TWP	7581	7749	7580	7748	0

Exception Field

Add a field called EXCEPTION to your local data – Long Integer Data
 Type

Exception Code	Exception Description	
1	Limited Access Highway Features	
2	Driveways or Non-Addressable Feature	
3	Legacy Addressing Scenario	
4	Local Road Naming Convention	
5	Value Falls Outside of Jurisdiction	
6	Correction Pending Local Review	
7	Overlapping Segment Is Valid	





- RCLIDs Need to be populated and unique
 - Can use any local unique ID locally needs to be compatible for upload into alphanumeric field type with a 50 character limit
 - Populate using OBJECTID or FID during import process or calculate that field to OBJECTID or FID in your local data





- QA/QC check similar to data assessments that were run as part of grant project
- Additional field checks during import
 - Jurisdiction values
 - Source and date of update
- Critical Errors That would prevent loading of data – no projection file, no RCLID, data types





- User needs to have been assigned export rights to export any other jurisdiction's dataset
- PSAP Administrator must initiate request for one of their users to have export rights to neighboring jurisdiction's data
- PSAP Administrators have export rights to all dataset as a system setting
 - Allows for access to datasets in case of large emergency event





Demonstration

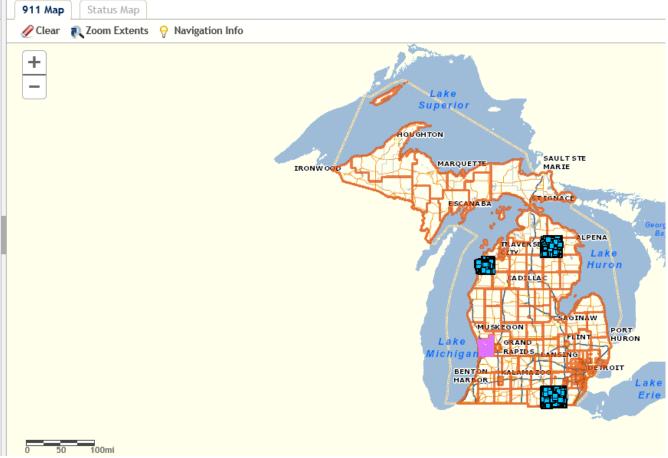






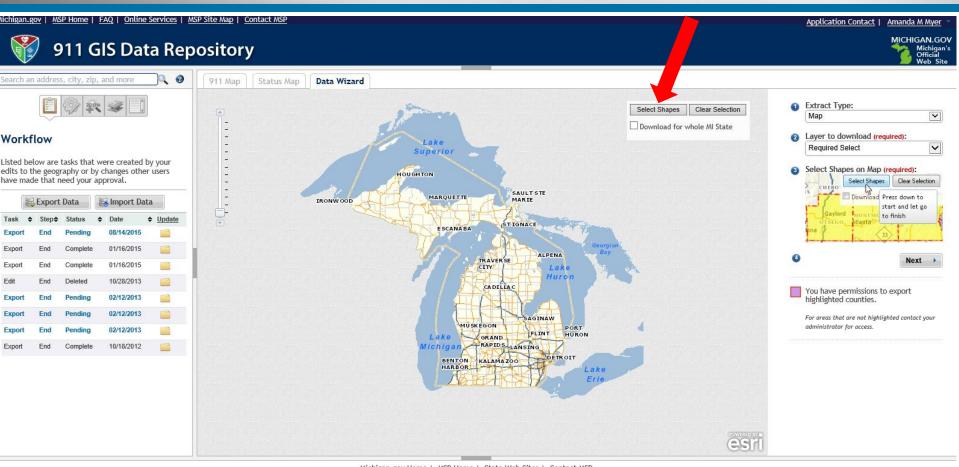
911 GIS Data Repository











Michigan.gov Home | MSP Home | State Web Sites | Contact MSP
Application Contact | Geographic Data Library

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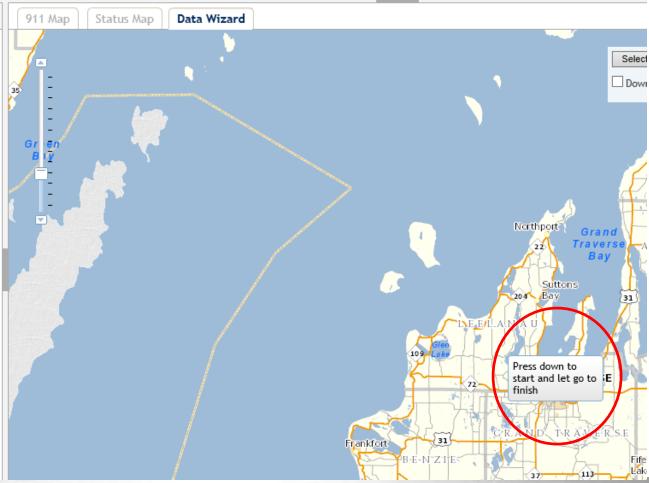
911 GIS Data Repository



Workflow

Listed below are tasks that were created by your edits to the geography or by changes other users have made that need your approval.

Export Data				
Task ♦	Step 	Status \$	Date	♦ <u>Update</u>
Export	End	Pending	08/14/2015	
Export	End	Complete	01/16/2015	
Export	End	Complete	01/16/2015	
Edit	End	Deleted	10/28/2013	
Export	End	Pending	02/12/2013	
Export	End	Pending	02/12/2013	
Export	End	Pending	02/12/2013	
Export	End	Complete	10/18/2012	

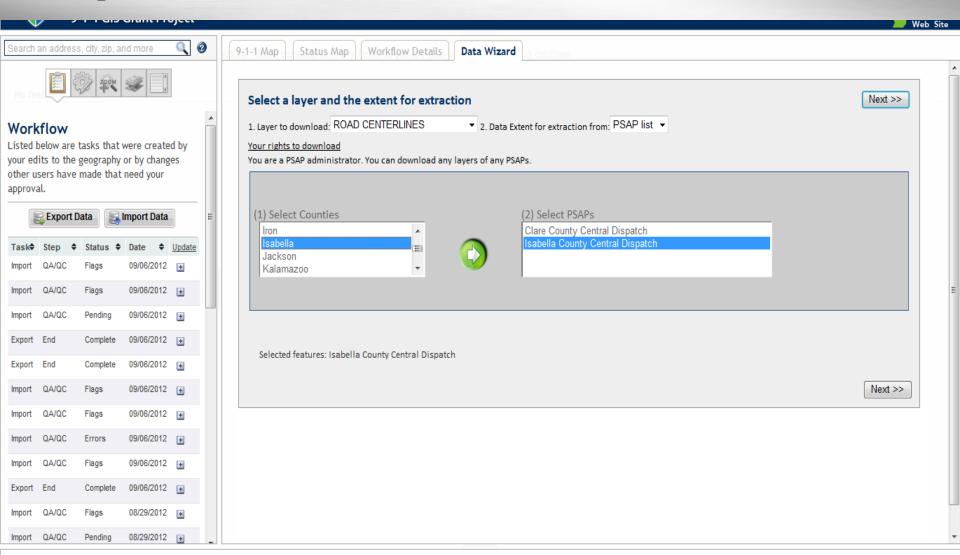


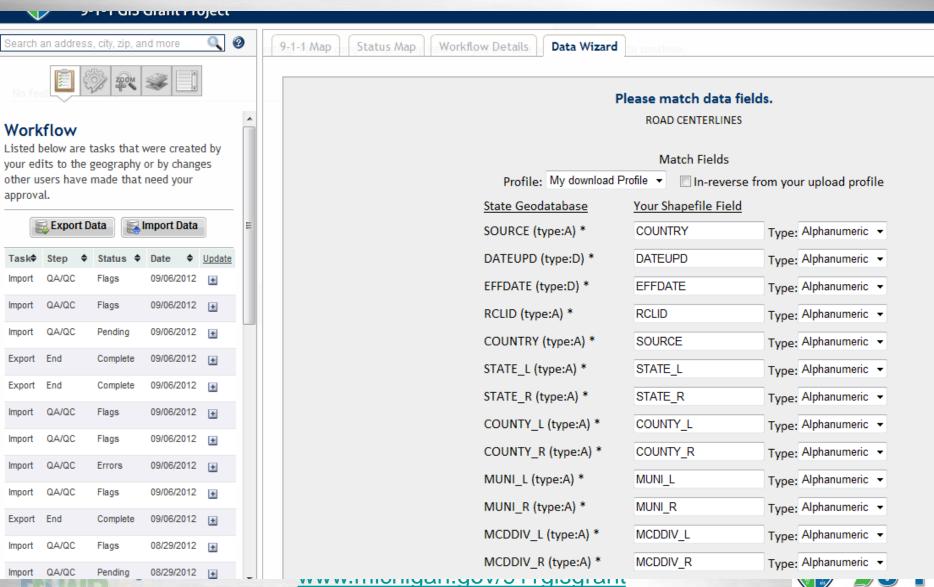


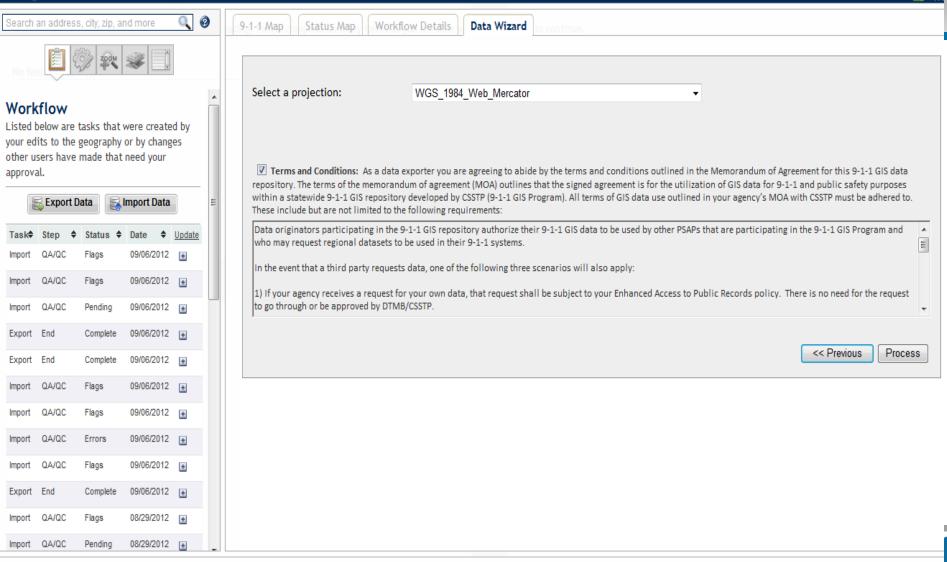




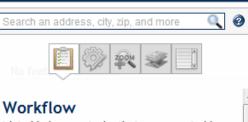








ON ONAMI PROJECI



Listed below are tasks that were created by your edits to the geography or by changes other users have made that need your

E Evnort Data | Import Data

approval.

Export Data					
Task≑	Step ♦	Status ♦	Date ♦	<u>Update</u>	ı
Export	End	Complete	09/06/2012	+	ı
Import	QA/QC	Flags	09/06/2012	+	
Import	QA/QC	Flags	09/06/2012	+	
Import	QA/QC	Pending	09/06/2012	+	
Export	End	Complete	09/06/2012	+	
Export	End	Complete	09/06/2012	+	
Import	QA/QC	Flags	09/06/2012	+	
Import	QA/QC	Flags	09/06/2012	+	
Import	QA/QC	Errors	09/06/2012	+	
Import	QA/QC	Flags	09/06/2012	+	
Export	End	Complete	09/06/2012	+	

Flags

08/29/2012

Workflow Details 9-1-1 Map Status Map Data Wizard

Export Workflow, Created: 9/6/2012 11:06:12 PM

Step	Status	End	System Messages	Workflow Details
Begin	Complete	9/6/2012 11:07:02 PM		
End	Complete	9/6/2012 11:07:02 PM	Data is ready to download. Click here.	

- CAD profiles
- Working with your CAD vendor to integrate regional maps
- Review edge-match, when possible and coordinate with neighboring jurisdictions where larger discrepancies exist
- Data layers road centerlines, PSAP boundaries, emergency services zones*, structure points* (* incomplete statewide layers)





Red Line Edits- PSAP Boundary

- PSAP Boundary Change Requests
 - Internal communication must be established at local level for approval process
 - Jurisdictions where Michigan Geographic Framework road centerlines are being use have opportunity to use the PSAP Boundary Change tools to make requests or approve changes since PSAP layer developed for the project is statewide





Red Line Tools – PSAP Boundary

Requesting PSAP Boundary Change

PSAP A



Les Zuex185

Compare Foster Twp

Geels

PSAP B



PSAP Administrator
Makes Red Line Edit and Starts
Approval Workflow



PSAP Administrator
Receives Email to Log into
System and Approve PSAP Boundary
Change

PSAP Administrator Receives
Status Email



PSAP Administrator
Approves or Denies
PSAP Boundary Change





Red Line Tools – PSAP Boundary

Requesting PSAP Boundary Change

CSSTP



If Approved by All Affected
PSAPs. CSSTP Staff Make
Boundary Change and Workflow
Sent for Final Approval By All PSAPS
Affected By Change

PSAP Administrator Receives
Status Fmail

Affected PSAPs



PSAP Administrators
Receive Email to Log into
System and Review Final Boundary Edits
And Make Final Approval

PSAP Administrator
Approves or Denies
PSAP Boundary Change







Red Line Edits- PSAP Boundary

Demonstration





Red Line Edits – Roads or Points

- All users can add red line edits for road or structure points
 - Internal protocol for who red lines can be established, if necessary
 - Notification email goes to PSAP admin and GIS importer for the jurisdiction that the red line is drawn
 - If road is drawn across multiple PSAP jurisdictions, PSAP admin and GIS importer from both jurisdictions get notifications





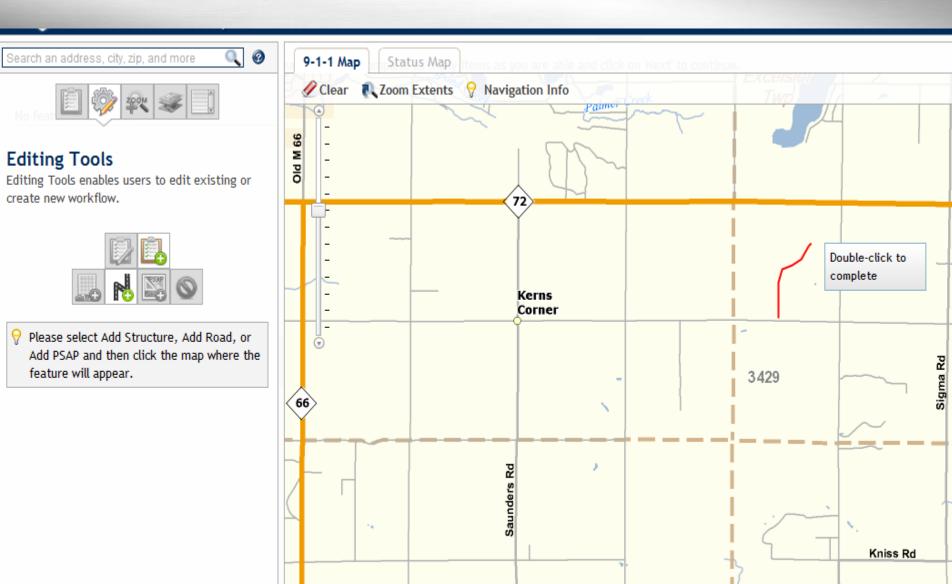
Red Line Edits - Roads or Points

Demonstration





Red Line Edits - Roads or Points



Edge-matching

- Edge-matching is run during import. Roads are snapped to PSAP boundary layer
- Continued coordination between jurisdictions for edge-matching and addressing attributes along boundaries is also a NENA recommendation for sustaining long-term 9-1-1 GIS data integrity in preparation for NG9-1-1



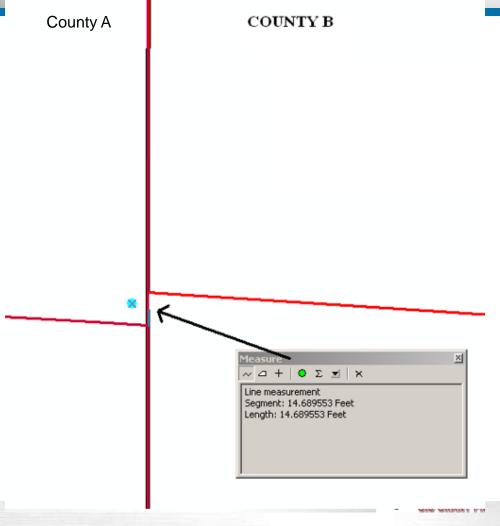


Edge-matching





Edge-matching







Addressing Guide

- Guidelines for addressing techniques
- Continue to incorporate standardization
- Road naming guidelines
- Addressing scenarios
- There will be unique local addressing scenarios
- GIS and MSAG synchronization





More Information

- www.michigan.gov/911GISGrant
- www.michigan.gov/snc
 - Harriet Miller-Brown
 - ➤ Miller-BrownH@michigan.gov
 - **>** 517-243-2075
 - Cindy Homant
 - ➤ HomantC@michigan.gov
 - **>** 517-284-3032
 - Mark Holmes
 - ➤ HolmesM3@michigan.gov
 - **>** 517-241-6469





Questions

Open Discussion



