

Community TIGER:

A Partnership Tool for Address
and Spatial Data Sharing

Community TIGER



- Web (cloud) based data exchange and data management portal
- Phased and iterative
- Leverages enterprise architecture COTS technology, existing systems and proven workflows
- Utilizes and builds upon the next generation of Esri Community Maps
 - <http://www.esri.com/software/arcgis/community-maps-program>

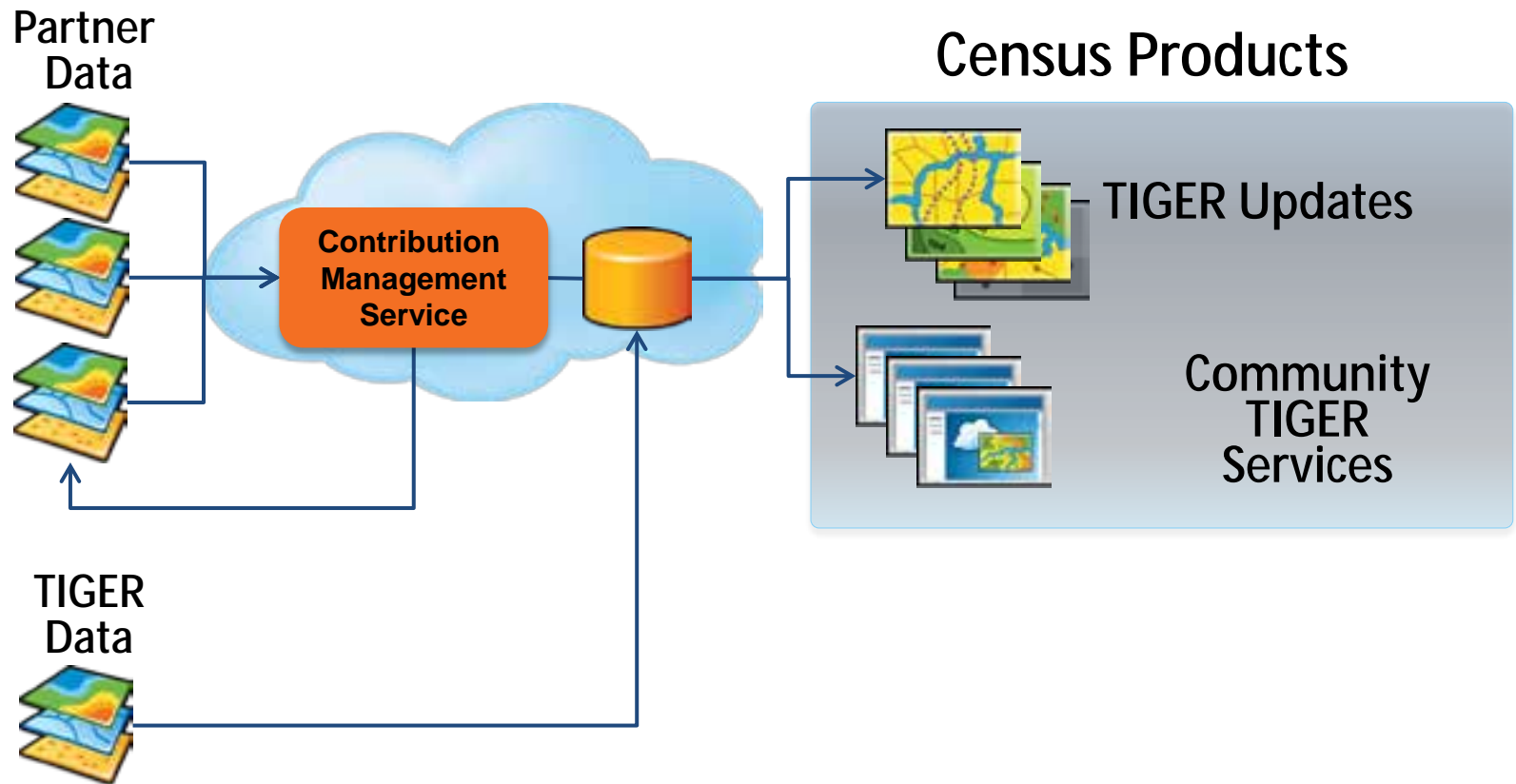
What are we trying to solve?

- The difficulties of address and spatial data exchange between different levels of government in the United States
 - Currently there is not a one system solution for data exchange
 - Different missions
 - Different formats
 - Varying positional and temporal accuracies
 - Inconsistent attribution
 - Over/under geographic coverage

Approach to problem solving

- Define address and spatial standards
- Engage partners and seek input
- Leverage local government data model, ensure interoperability
- Simple but efficient interfaces and tools
- Testing that involves partners
- Incorporate lessons learned from Community Maps program and earlier phases

Simplified System Architecture



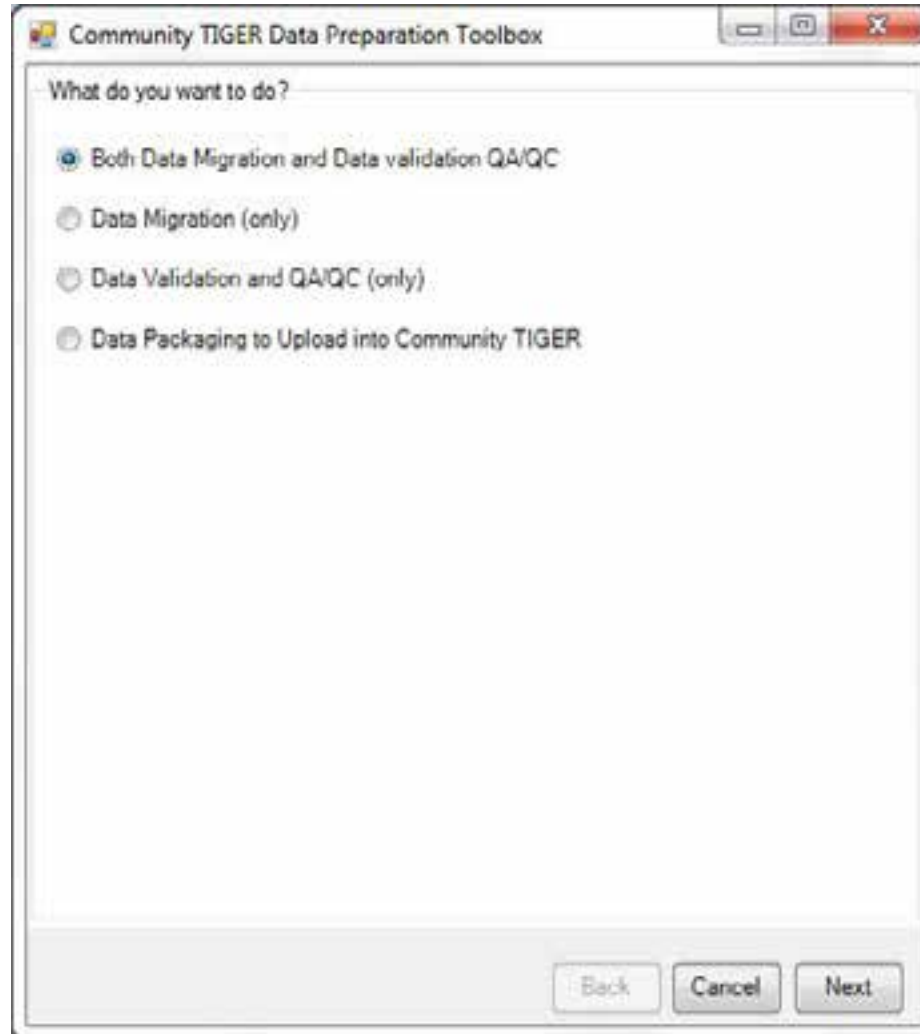
Partner Toolbox

Community TIGER Partner Tool Set

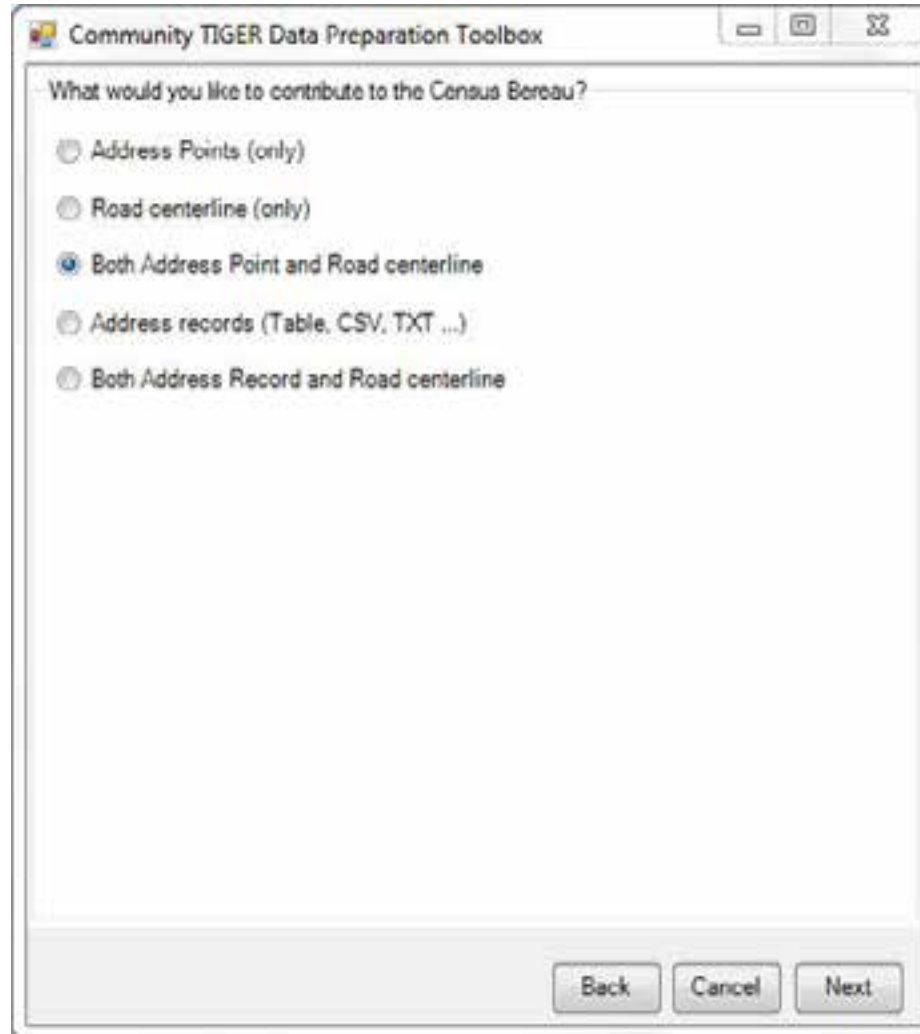
- Data Model
- Data Migration Tool(s)
- Address Data Standardization and De-Duplication Tool
- Data Reviewer Batch Job
 - Address Validation
 - Spatial Validation
 - Metadata Validation
- Data Package Tool
- Procedure document



Data Migration



Data Migration



Community TIGER Data Preparation Toolbox

What would you like to contribute to the Census Bureau?

- Address Points (only)
- Road centerline (only)
- Both Address Point and Road centerline
- Address records (Table, CSV, TXT ...)
- Both Address Record and Road centerline

Back Cancel Next

Data Migration: Set Data Source

Community TIGER Data Preparation Toolbox

Set data source location

1. Road Centerline Source

C:\Users\user\Documents\CT Working Directory\Pflugerville_Sample_Final.gdb\F

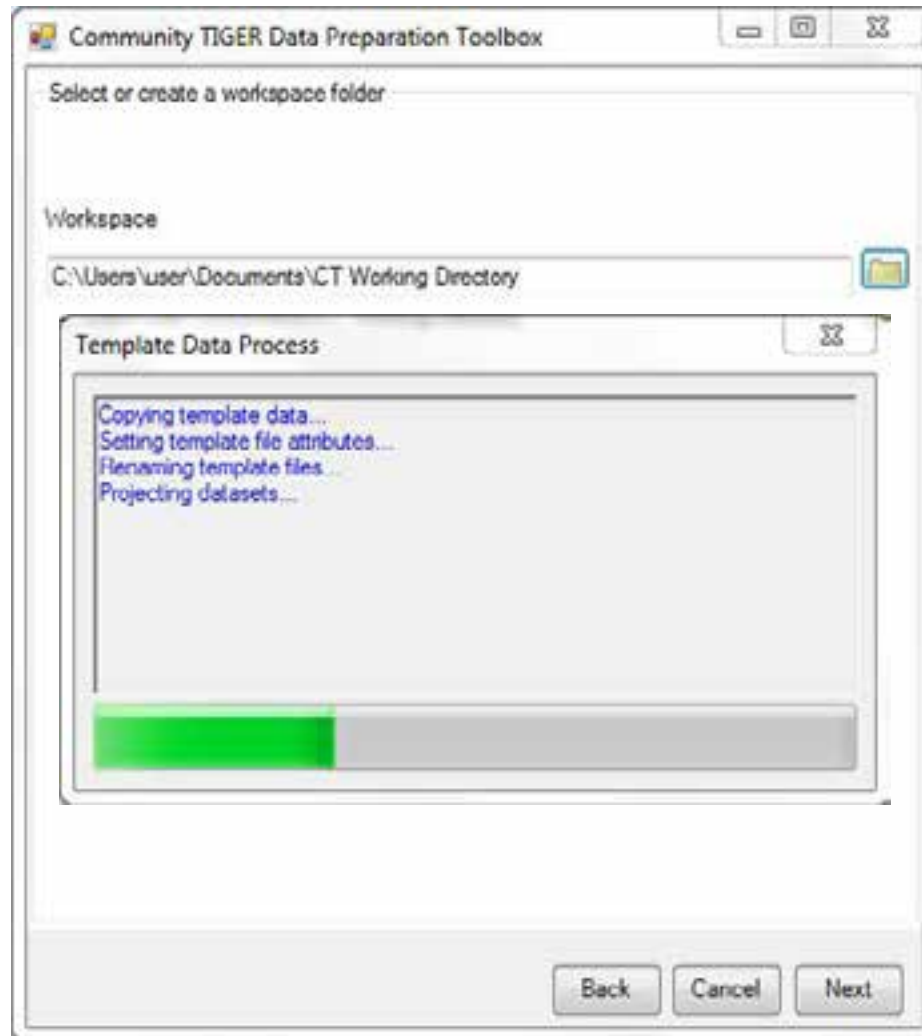
2. Address Point Source

C:\Users\user\Documents\CT Working Directory\Pflugerville_Sample_Final.gdb\F

3. Address Record Source

Back Cancel Next

Data Migration: Create Workspace



Data Migration: Spatial Data Mapping

Community TIGER Data Preparation Toolbox

Source data mapping questions (Road Centerline)

1. What is your State abbreviation code? TX
2. What is your Unique Identifier field? OBJECTID
3. What is your Zip Left field? ZIPLEFT1
4. What is your Zip Right field? ZIPRIGHT1
5. What is your From Left Address range field? FROMLEFT1
6. What is your From Right Address range field? FROMRIGHT1
7. What is your To Left Address range field? TOLEFT1
8. What is your To Right Address range field? TORIGHT1
9. Street name as FULLNAME (with Name, Type and Direction?)
 - Yes What is your Street FULLNAME field? FULLNAME1
 - No
 - What is your Road Pre Modifier field?
 - What is your Street Prefix (Spanish Street) type?
 - What is your Street Prefix Direction?
 - What is your Street name?
 - What is your Street Type?
 - What is your Street Suffix Direction?
 - What is your Road Post Modifier field?
10. What is your Road Class attribute field? ROADCLASS1
11. Do you store Life Cycle status (proposed/paper street or existing) of a Street?
 - Yes No
 - What is the field name? LIFECYCLESTATUS

Back Cancel Next

Data Migration: Address Data Mapping

Community TIGER Data Preparation Toolbox

Source data mapping questions (Address)

1. What is your State abbreviation code? TX

2. What is your Unique Identifier field? OBJECTID

3. What is your Zip Code field? ZIPCODE1

4. What is your City field? CITY1

5. FULL ADDRESS (Number, Name, Type, Direction, etc)?

Yes What is your FULL ADDRESS field? FULLADDR1

No What is your Road Pre Modifier field?

What is your UNITID field?

What is your Street number field?

What is your Street Prefix (Spanish) Type?

What is your Street Prefix Direction?

What is your Street name?

What is your Street Type?

What is your Street Suffix Direction?

What is your Road Post Modifier field?

6. Store Life Cycle status (proposed or existing) of an Address?

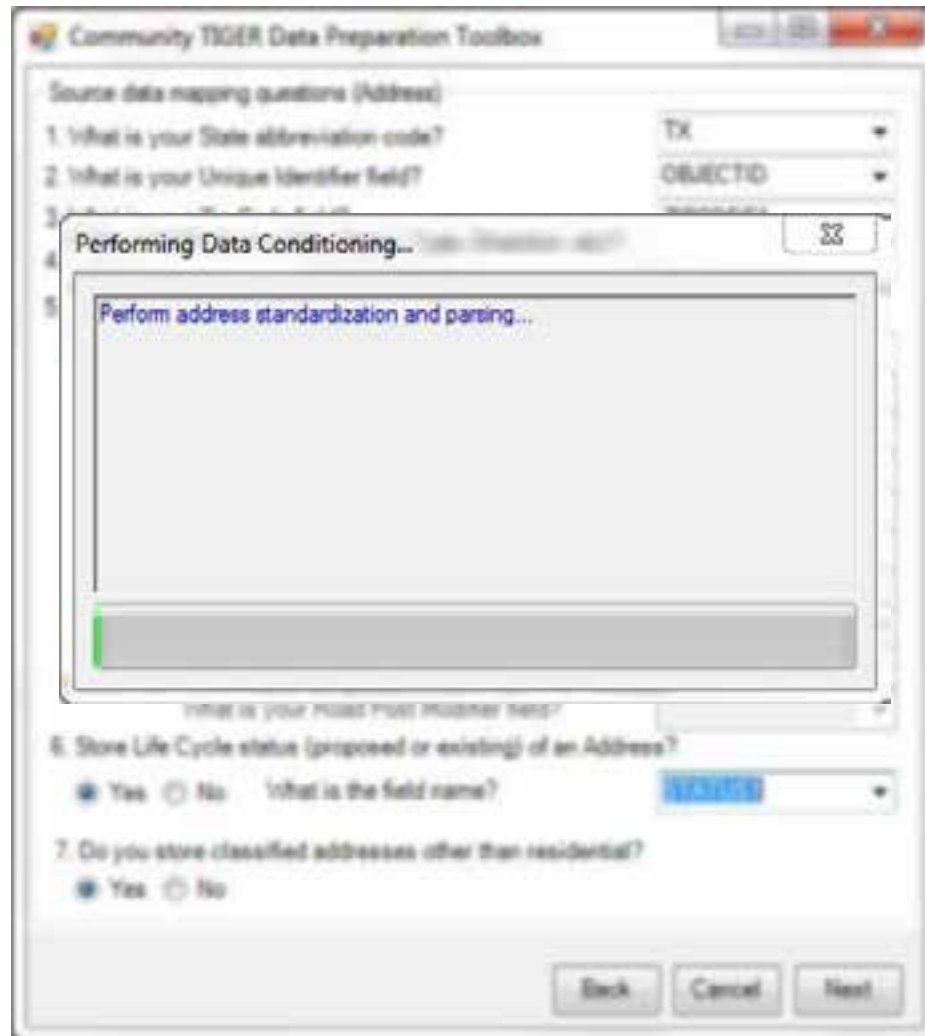
Yes No What is the field name? STATUS1

7. Do you store classified addresses other than residential?

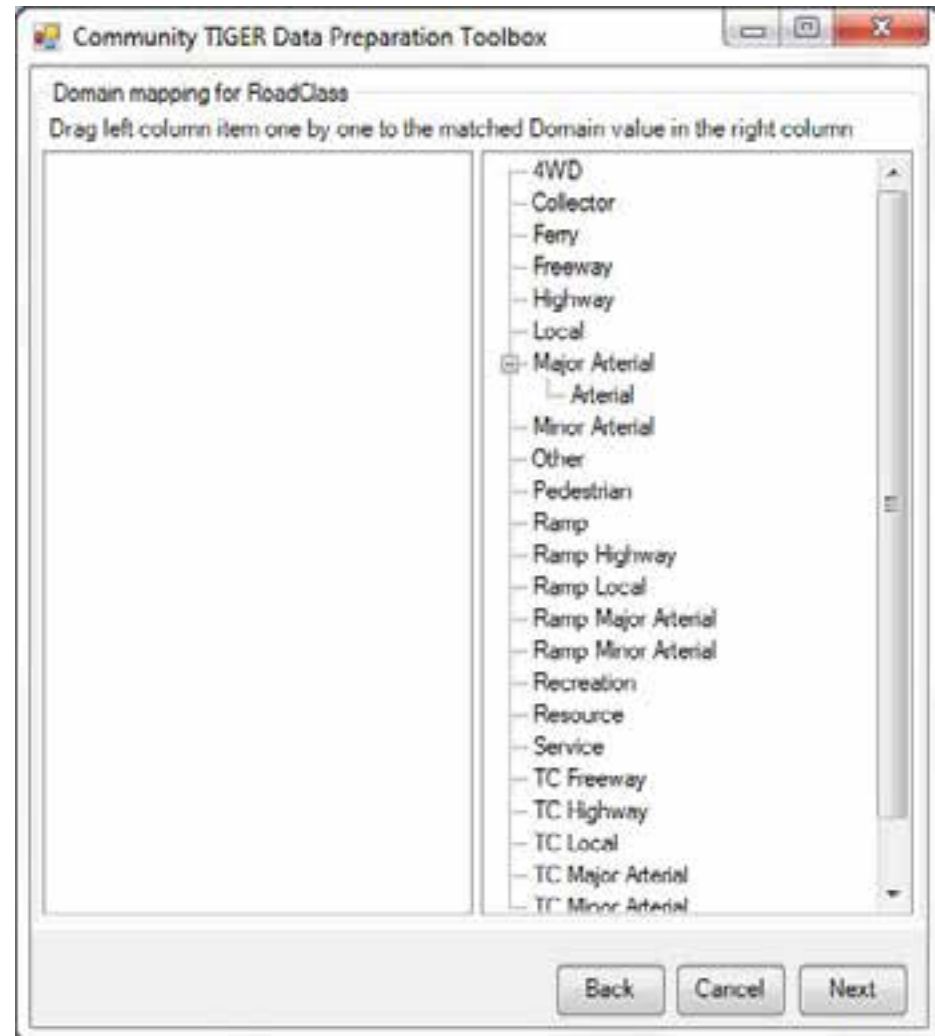
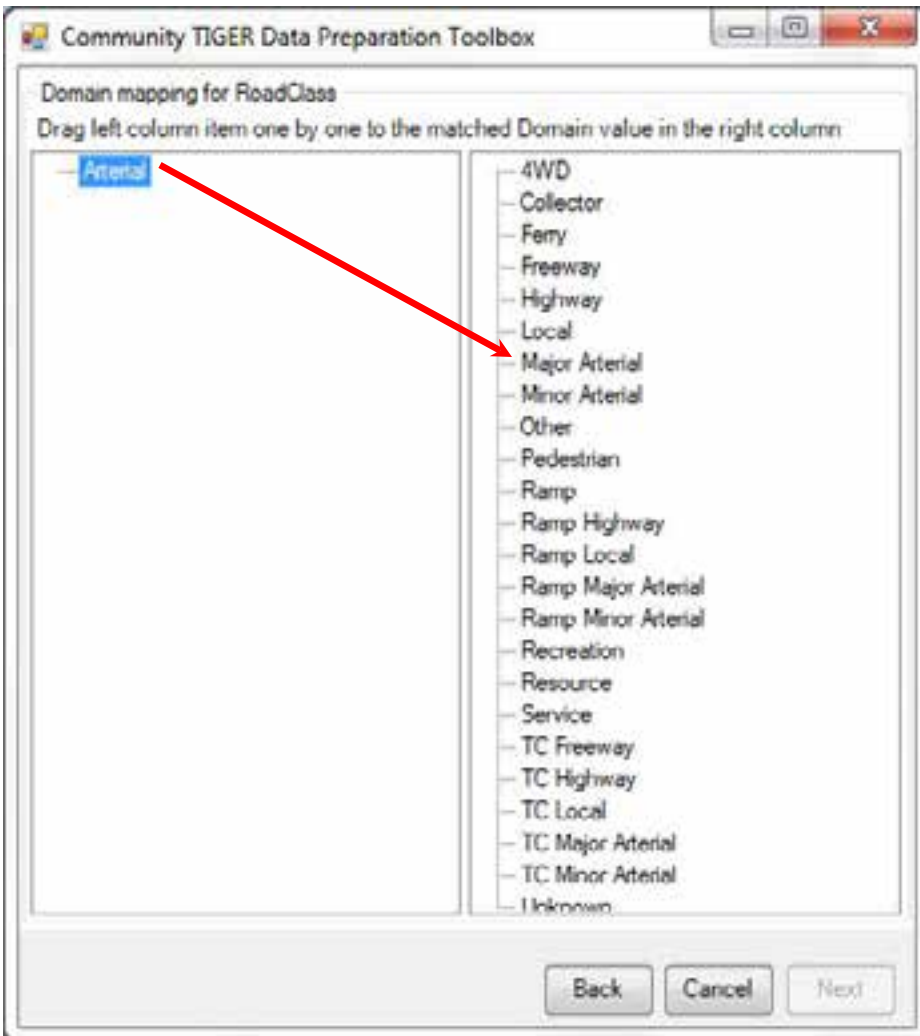
Yes No

Back Cancel Next

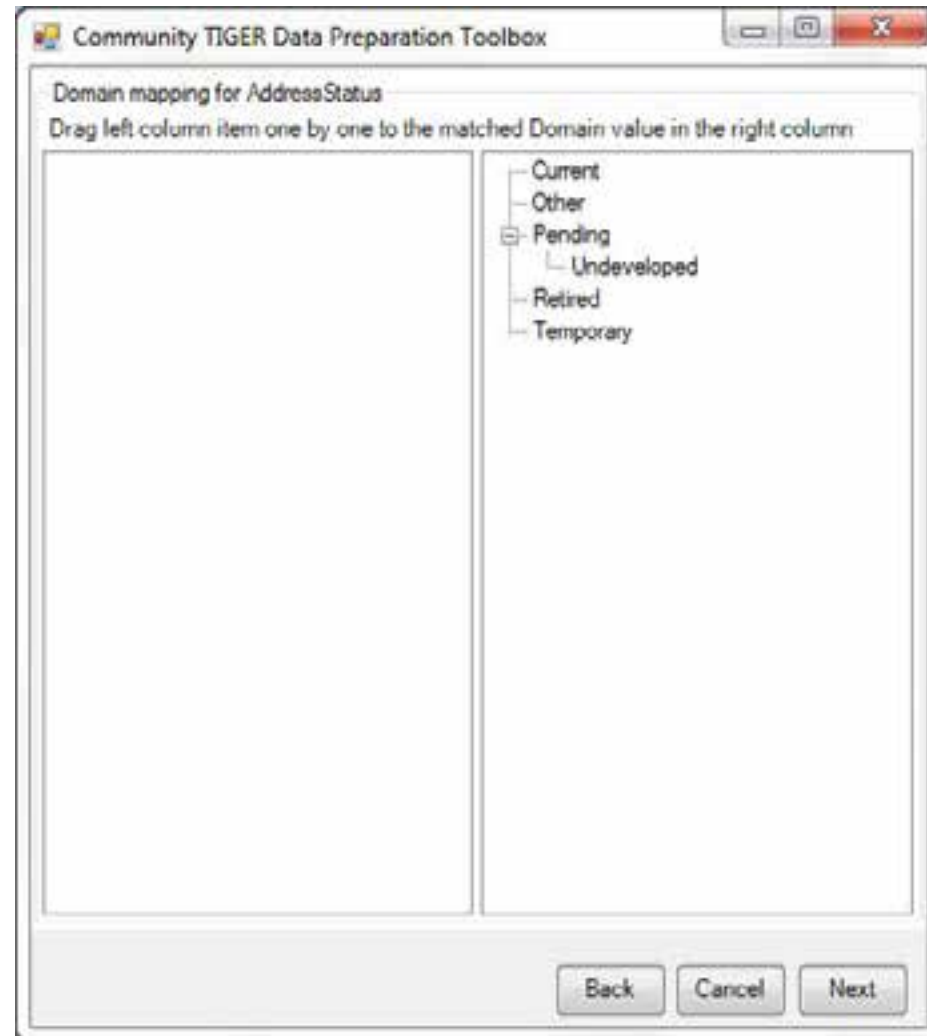
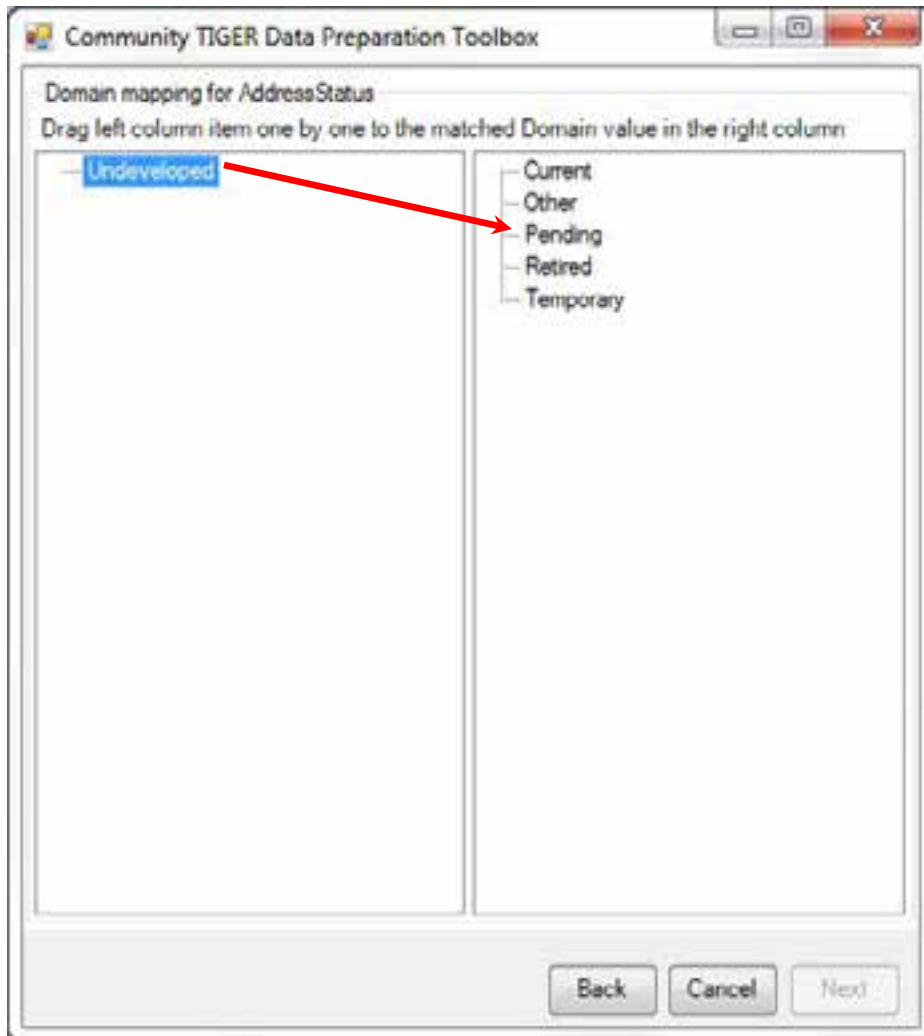
Data Migration: Data Conditioning



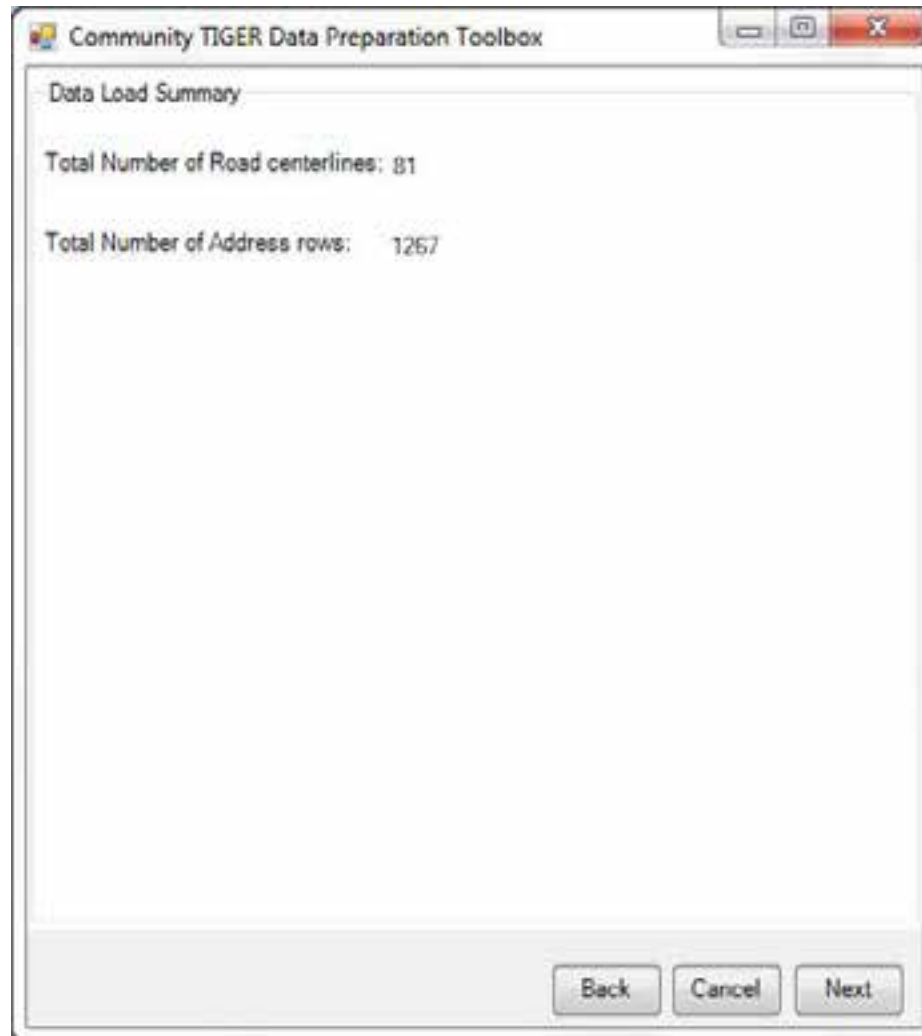
Data Migration: Domain Mapping



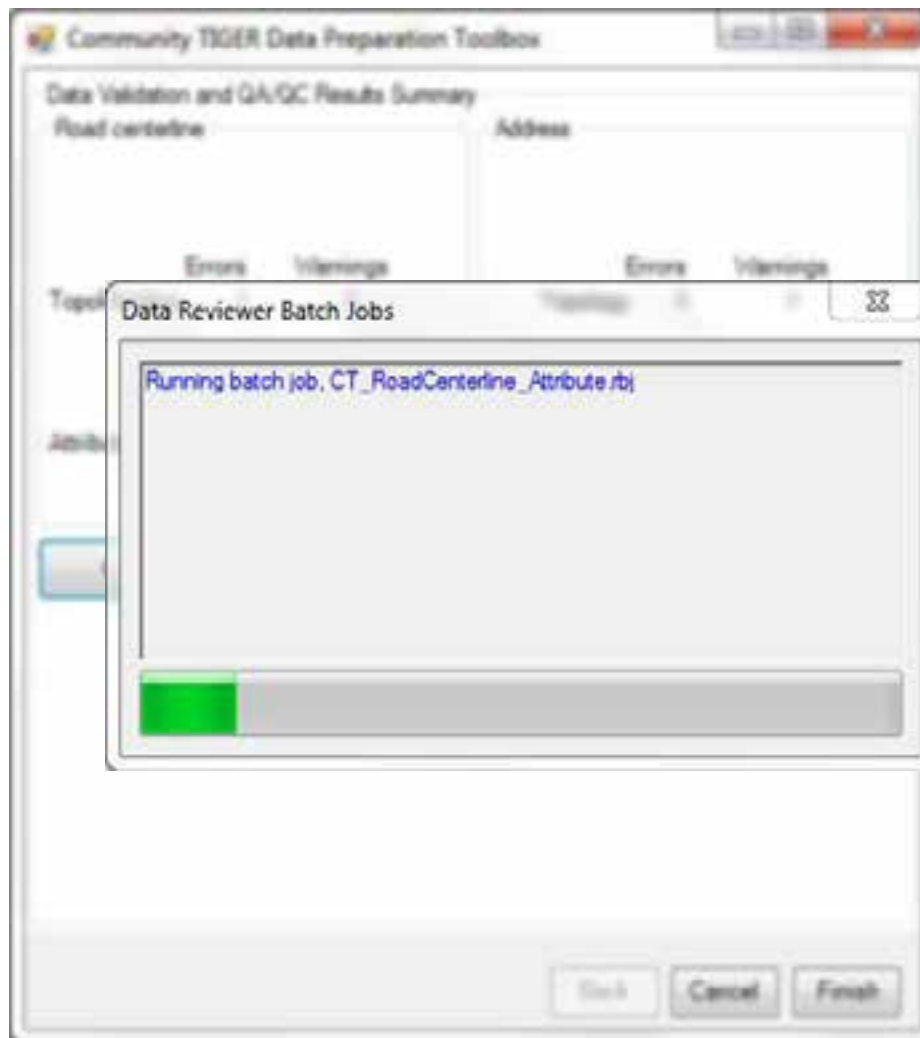
Data Migration: Domain Mapping



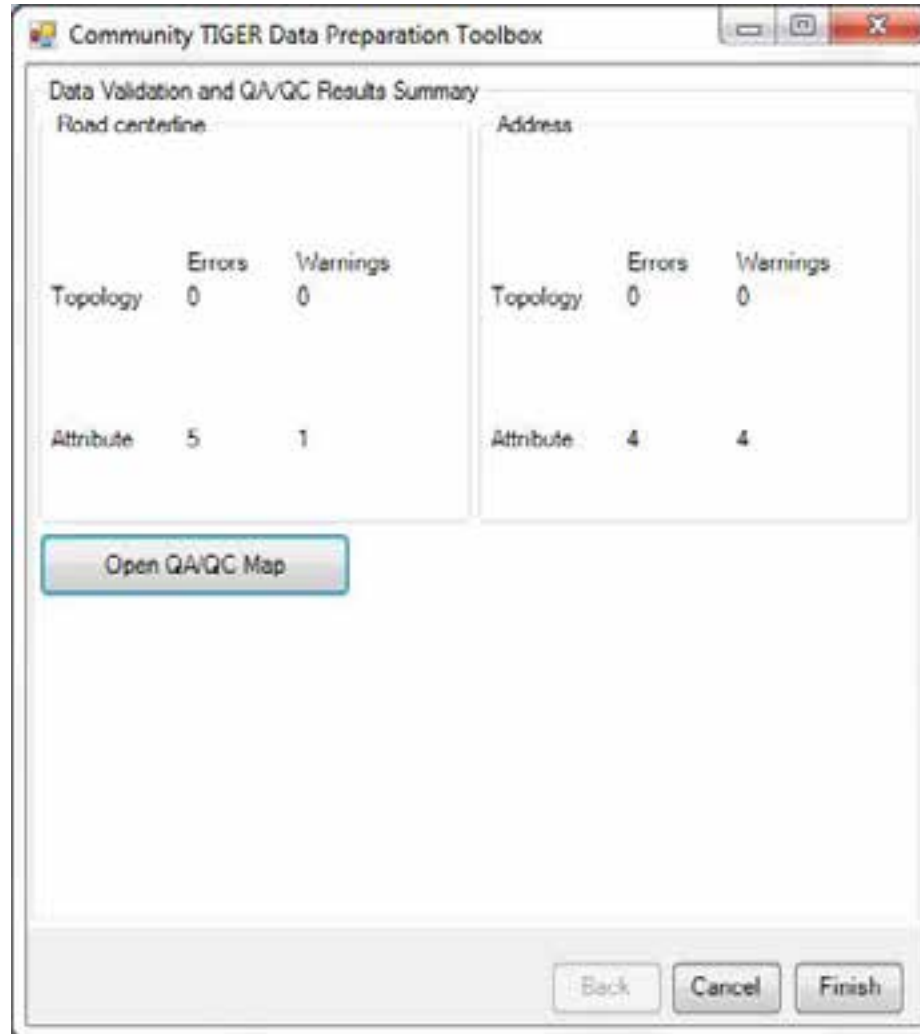
Data Migration: Data Load Summary



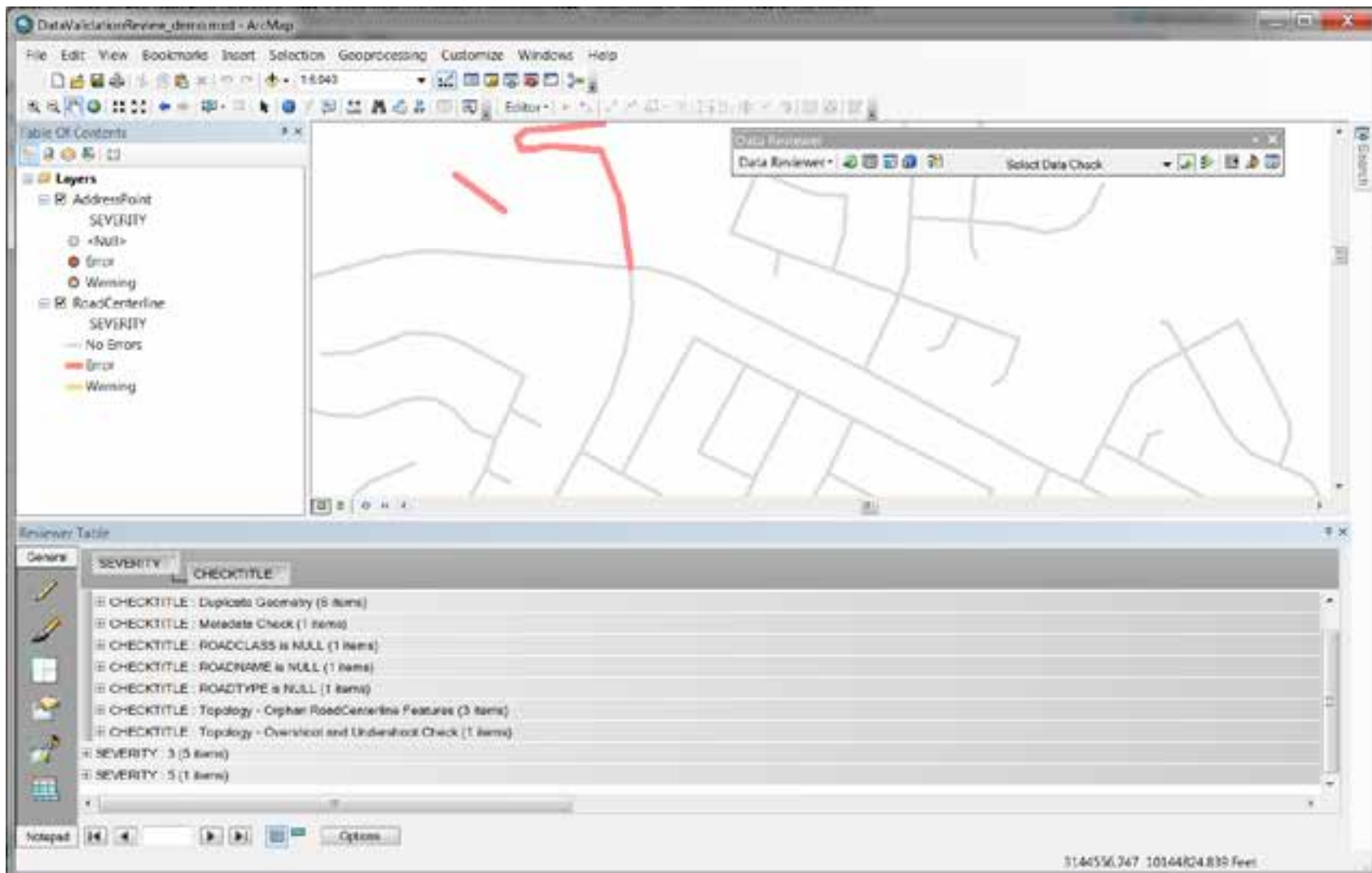
Data Validation



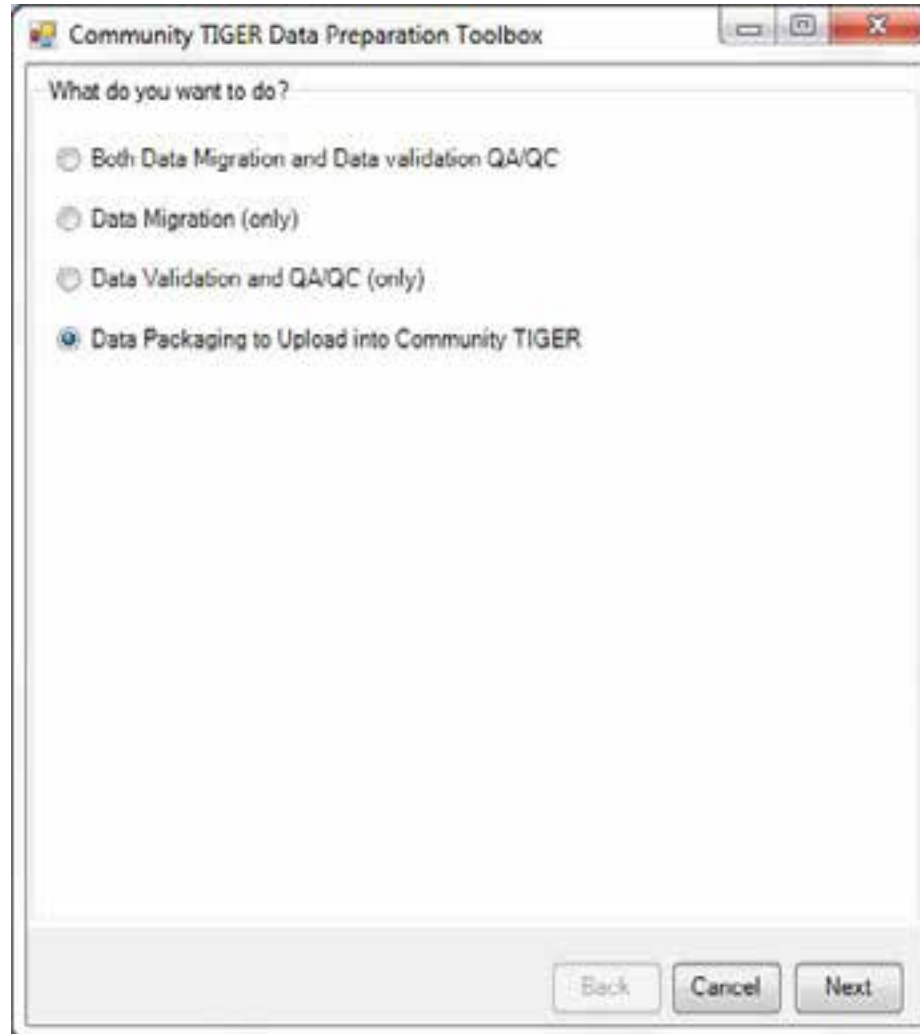
Data Validation: QA/QC Results



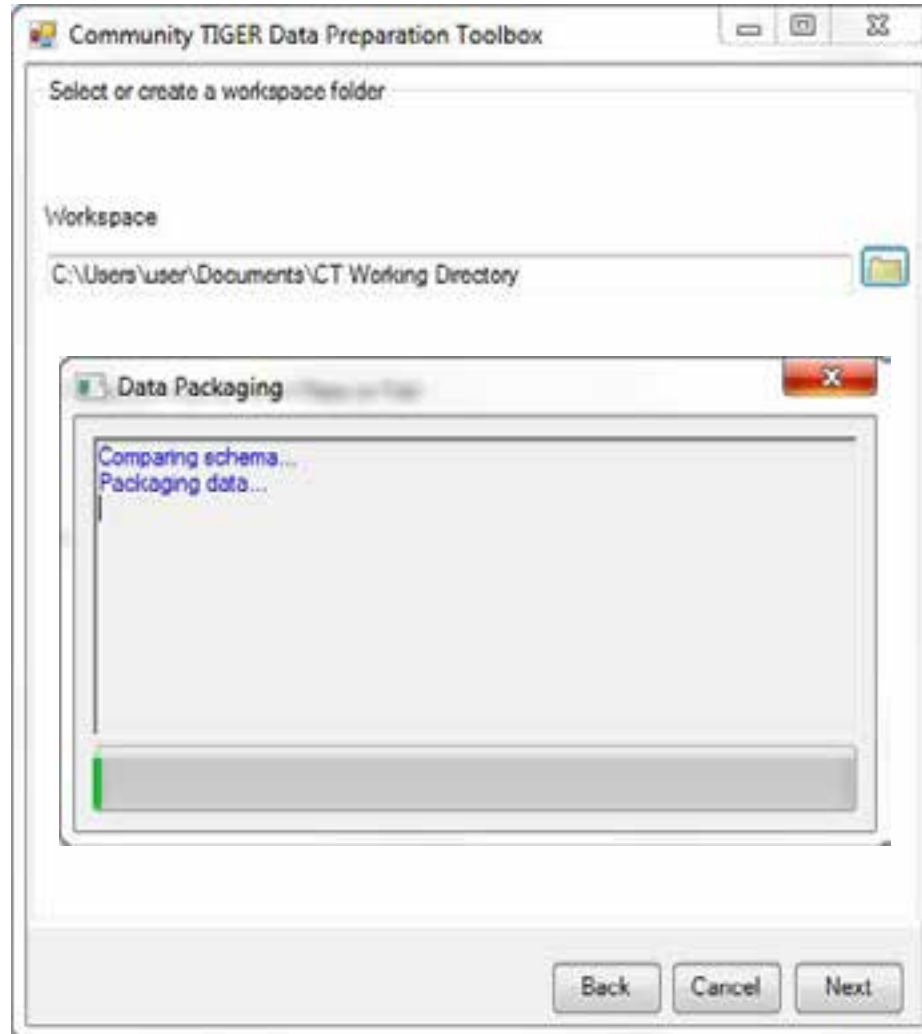
Data Validation: QA/QC Map



Data Packaging



Data Packaging: Select Workspace



Data Packaging: Summary

Community TIGER Data Preparation Toolbox

Data Packaging Summary

1. Schema validation Pass or Fail :

PASSED

2. Data packaging result Pass or Fail :

PASSED

3. Upload data package

Upload

Back Cancel Finish

Contribution Management System (CMS)

- A file tracking system for all address and spatial data transmitted from a partner to the Census Bureau.
- A secure data exchange environment created for all storage and transmission of partner data, including all required password protection and encryption when necessary.
- Track all partner files delivered to the Census Bureau
 - unedited files (testing purposes)
 - edited files
 - final transaction files

CMS: Data Upload

Community TIGER: Contribution Management

Active Contribution | Contribution History

Notifications **0** | Lili's Test

Upload Contribution

- 1 Upload Data**
[Upload your data](#)
- 2 Preview Your Data**
[Upload revised data](#)
- 3 Finalize Contribution**
[Review your map](#)
- 4 Feedback from Census**
Not submitted yet

Data Analysis

Automated QC Results

0 Errors	0 Warnings	0 Messages
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[Download as file.gdb](#)

Layers

Awaiting contribution

Content Analysis

[Show on map](#)

Suggested TIGER updates to be sent to Census:

CMS: Data Review

Community TIGER: Contribution Management

Active Contribution | Contribution History | Notifications 0 | Lili's Test

Upload Contribution

1 Upload Data
✓ Received January 31st, 2013

2 Preview Your Data >

- Review data analysis results
- Preview your map
- Optionally upload revised data to resolve issues

Upload revised data

3 Finalize Contribution
Review your map

4 Feedback from Census
Not successful yet

Data Analysis [View details](#)

Automated QC Results

5 Errors	9 Warnings	15 Messages
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[Download as file gdt](#)

Layers

RoadCenterline	99%	2	5	6
AddressPoint	98%	3	4	9

Content Analysis [Show on map](#)

Suggested TIGER updates to be sent to Census:

RoadCenterline(adds)	12
RoadCenterline(modified)	22
AddressPoint(adds)	20
AddressPoint(modified)	5

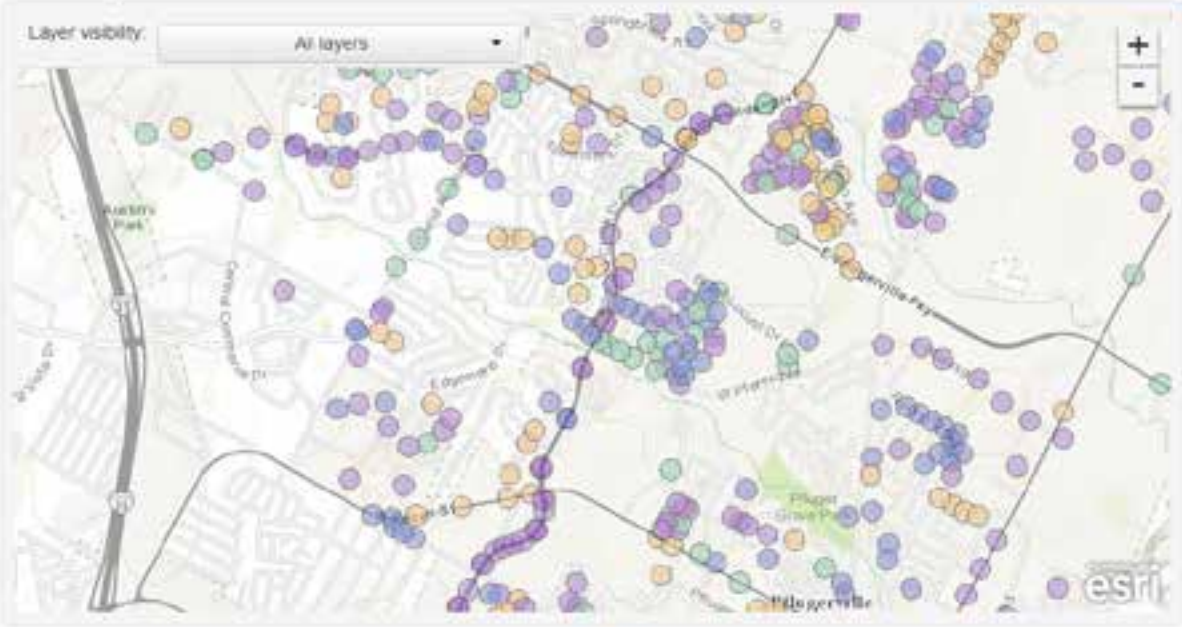
CMS: Data Analysis

Community TIGER: Contribution Management

Active Contribution | Contribution History | Notifications 0 | Lin's Test ▾

Data Analysis Download as file gdb Back to contribution

Layer visibility: All layers



hide table

All	Errors 5	Warnings 0	Messages 15			
ID	Type	Layer	Description	Mark as exception		
2165	Messages	RoadCenterline	Write GP Results to Reviewer Table	<input type="checkbox"/>		
2166	Messages	RoadCenterline	Write GP Results to Reviewer Table	<input type="checkbox"/>		

CMS: Finalize Contribution

Community TIGER: Contribution Management

Active Contribution | Contribution History

Notifications 1 | Lili's Test

Upload Contribution

✓ Upload Data
Received January 31st, 2013

2 Preview Your Data [▶](#)

- [Review data analysis results](#)
- [Preview your map](#)
- Optionally upload revised data to resolve issues

[Upload revised data](#)

3 Finalize Contribution

[Review your map](#)

4 Feedback from Census
Not submitted yet

Data Analysis

[View details](#)

Automated QC Results

5 Errors	9 Warnings	15 Messages
--------------------	----------------------	-----------------------

[Download as file.gdb](#)

Layers

RoadCenterline	99%	2	5	6
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Content Analysis

[Show on map](#)

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RoadCenterline(modified)	22
AddressPoint(adds)	20
AddressPoint(modified)	5


CMS: Census Feedback

Community TIGER: Contribution History

Active Contribution Contribution History Notifications Lili's Test

Contribution History [Back to Contribution History](#)

Census Feedback





hide table

ID	Proposed Submission Type	Census Acceptance Status	Actions
1	Add	Accepted	Approve
2	Add	Accepted	Approve
3	Add	Accepted	Approve
4	Modified	Accepted with modifications	Approve
5	Modified	not used	Approve

CMS: Contribution History

Community TIGER: Contribution History

Active Contribution Contribution History Notifications  Lili's Test 

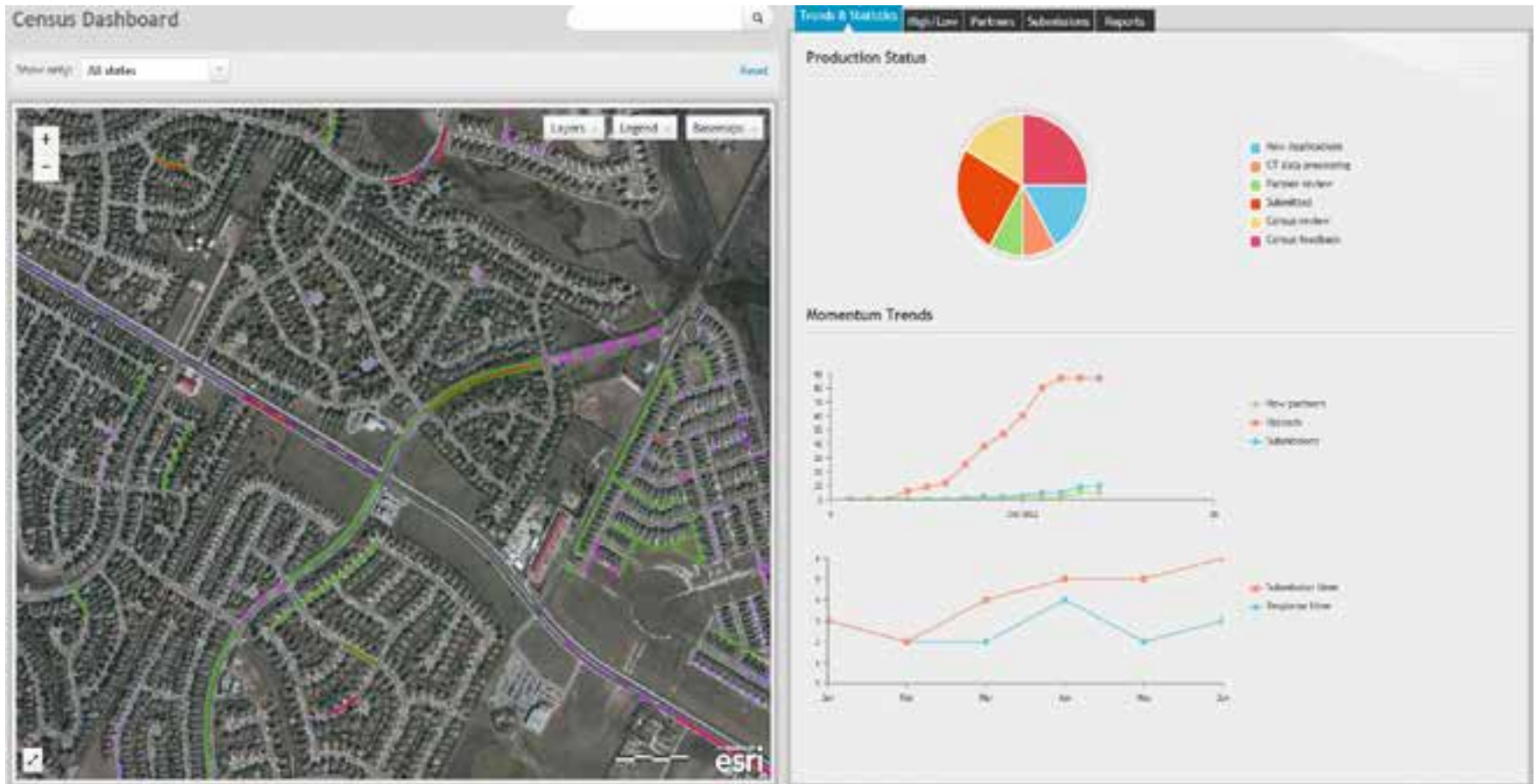
Contribution History

Id	Status	Uploaded	Completed	Feedback	Details
1	In Progress	Jun 15, 2012	Jun 17, 2012		View Details
2	Completed	Jun 10, 2012	Jun 17, 2012	Awaiting feedback	View Details
3	Completed	Jun 15, 2012	Jun 17, 2012	View Feedback	View Details

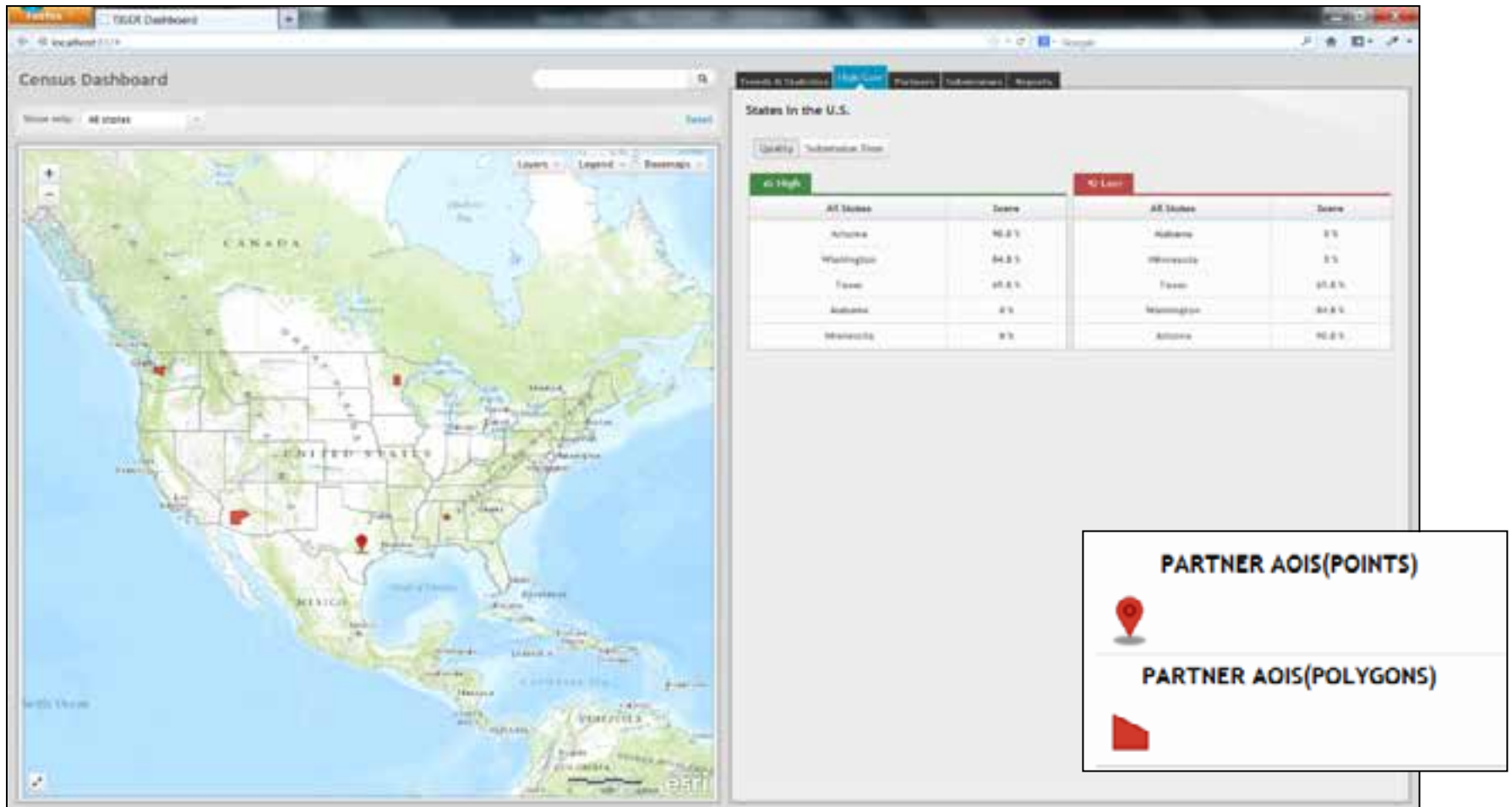
Census Dashboard

- The dashboard will be GEO's view of the uploaded submission
- Will allow Census staff to:
 - view Community TIGER submissions against a basemap of TIGER features
 - check the status of partner submissions
 - view quality of data
 - view summary reports
- Query tools are built in for searches by geography or partner ID

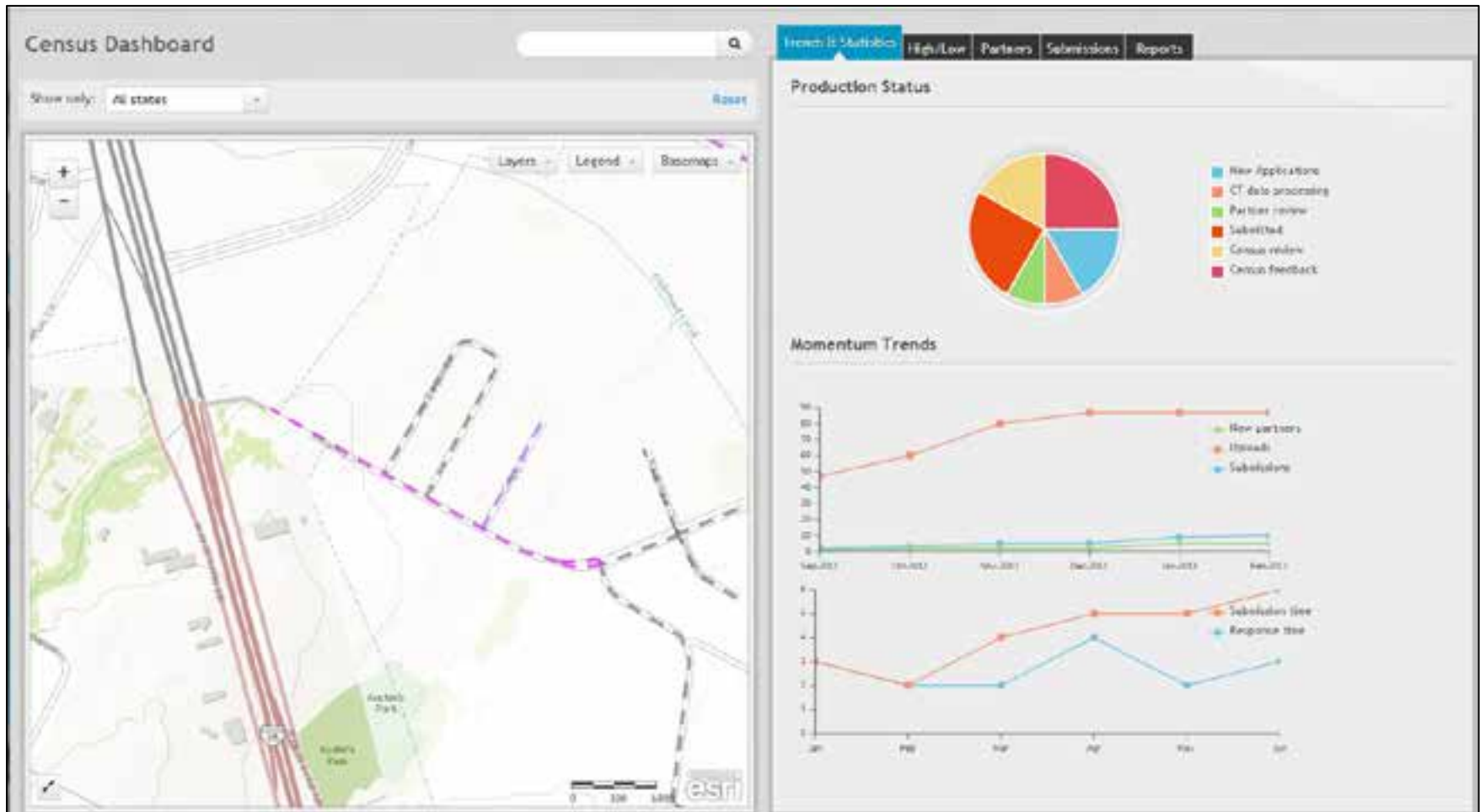
Dashboard: Trends and Statistics



Dashboard: Data Quality



Dashboard: Content Analysis



Questions?

CommunityTIGER Team

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Contact us at: geo.community.tiger@census.gov