

New York State Association of Metropolitan Planning Organizations **WORKING GROUP MEETING MINUTES**

WORKING GROUP: GIS Working Group

MEETING DATE: May 12, 2016, 10AM – 2PM

MEETING LOCATION: 3rd Floor, Union Station - 321 Main Street, Utica, New York 13501

ATTENDEES:

Adirondack/Glens Falls Transportation Council – A/GFTC: Kate Mance
Binghamton Metropolitan Transportation Study – BMTS: John Sterbentz (phone)
Capital District Transportation Committee – CDTC: Teresa LaSalle
Elmira-Chemung Transportation Council – ECTC: Mike Perry
Genesee Transportation Council – GTC: Chris Tortora
Greater Buffalo-Niagara Regional Transportation Council – GBNRTC: Not Present
Herkimer-Oneida Counties Transportation Study – HOCTS: Jeff Quackenbush, Ethan Brennan, Erin Tylutki
Ithaca-Tompkins County Transportation Council – ITCTC: Not Present
New York Metropolitan Transportation Council – NYMTC: Mummesh Patel
Orange County Transportation Council – OCTC: Lauren Burns, Ashlee Long (phone)
Poughkeepsie-Dutchess County Transportation Council – PDCTC: Not Present
Syracuse Metropolitan Transportation Council – SMTC: Jason Deshaies, Andrew Fraiser
Ulster County Transportation Council – UCTC: David Staas (phone)
Watertown Jefferson – WJCATC: Not Present
New York State Department of Transportation – NYSDOT: Andrew Haynes, Andrew Chatterton, Kevin Hunt, Korey McCallister
Centro Central New York Regional Transportation Authority: Paula Cutrone
Dewberry – Krista Rand (phone), Mat Mampara (phone)
RSG: Christine Sherman

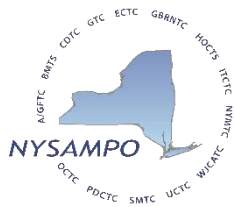
MINUTES:

- 1. 10:00 – 10:10AM: Introductions/Agenda (All)**
- 2. 10:10 – 10:30AM: Other GIS-Related Updates from NYSDOT (Kevin Hunt, NYSDOT)**

NYS Roads and Highways (R&H) (Hunt)

NYSDOT reached out to Highway Data Services. They are working on a number of fronts, including the local roads project. The build is nearly complete across the state (there is a little work still going in NYC). The process is currently undergoing a quality control phase. (Staff includes a combination of Kaitlyn Clark, Mike Fay, and about 15 to 20 people; 10-12 of people are contracts brought on for the project and three to four are State staff). The data is expected to be released by the end of next year. NYSDOT is in a position where we need to complete the GIS network and make updates in the roadway inventory. NYSDOT will soon focus in on the local networks, which is the layer used for CHIPS funding.

NYSDOT is hosting meetings with local/regional offices to go over changes, demonstrate their process, and address concerns on any individual roads on the GIS network. NYSDOT visited Regions 1, 6, and 7.



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After the group gets through HPMS, they will continue upstate visits. NYC, Long Island, and Region 8 will be the last of the meetings. Meetings should be complete by the end of the calendar year.

The NYS Streets layer is maintained by the NYS GIS Program Office, which is responsible for the framework of the State's GIS datasets. (Working on state's ortho-imagery program, address points across the state, company address points statewide, the framework streets layer, the mile point layers, highway data service expanding to all public roads, and the network of streets with linear referencing for DOT business data.) NYSDOT is currently adding local roads to the mile point layer, as all DOTs across the country were mandated to add public roads to this layer. The mile point route layer will ultimately define the length of the road. There may be changes to the overall length of the road when compared to the traditional source for that information. NYSDOT will compare and communicate changes.

Question: Are they looking at official road names as part of this effort? SMTC recently looked at road names while dealing with their local highway inventory and tried to use official road names. It sometimes requires referencing paper maps or old meeting minutes. Response: LHI does not have the alternate name but LHI strives for the most recognizable of the name posted in the field. LHI is recognized as correct - but not always right.

Based on FHWA mandates: (1) NYSDOT incorporated reverse direction to the inventory system. When NYSDOT creates the next inventory system, reverse direction for interstate will be included in the geodatabase. The original focus was on interstates, but highway services will focus on other major divider features. (2) Part of the FHWA rulemaking for HPMS was road length precision for the inventory. Lengths are currently in hundredths of a mile. When NYSDOT looked at converting to thousandths of a mile, it created a significant number of small segments that did not add value to the system, so NYSDOT has concern moving forward with the change in roadway length. How it will impact the inventory moving forward remains to be seen.

Program Support System (Hunt)

NYSDOT is also working on various projects including kick offs this week for the Program Support System (PSS). NYSDOT will use Oracle Primavera Portfolio Manager to assess "what if" scenarios for program managers. Oracle is working with NYSDOT on implementation. There is a GIS component that will allow system users to use the mile point system to locate their projects. It is similar to what exists today but updates to the linear referencing system.

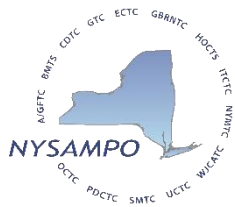
Height, Overweight and Oversized Credentialing System (Hunt)

DOT is working on HOOCS (Height, Overweight and Oversized Credentialing System) project, which will create a system to handle oversized vehicle permitting. This system will automate all aspects of the commercial vehicle permitting process. There will be a soft production of the system this summer and full launch later this year or early next year. Anything they find in terms of routing issues will be easy to locate using the unique identification number on the NYS Streets layer. (The system will focus on the State routing system.) NYSDOT also formed partnerships with local agencies for oversized routing.

Question: Who is the appropriate contact person for this information? Response: In Albany County, Adam Lugowski is the PM. He may direct you to staff on the permitting side.

Parcel Data (Hunt)

The GIS Programs office is working on standardization of parcel data. The latest efforts (2015 data) are available on the Clearinghouse (<http://gis.ny.gov/>). The team is currently working to get the latest parcel



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boundaries from all of the state's counties, and they plan to merge that information with the Office of Real Property Services' centroid data. The result will be centralized info for each parcel using the 2015 data.

Question: Was the data stripped down for certain fields? Response: Yes, it is down to 10 to 12 fields.

3. 10:30 – 10:50AM: Presentation on a Geospatial Tool for NYSDOT and NYSERDA to Assess Criticality of Transportation Infrastructure (Krista Rand & Mat Mamapara, Dewberry)

Project Background (Mampara)

The project focuses on transportation infrastructure and vulnerability to climate change. The project is supported under the Project 2931 Climate Change Adaptation Resources and Strategies set of work. They funded a number of projects looking at need for resiliency and adaptation across NYS. There are two parts of the project. This presentation looks at the first part.

Part 1 looks at transportation criticality and developing an approach to identify criticality that does not underrepresent rural parts of the state. Most criticality frameworks hinge on AADT data. The idea behind the project is to expand the definition of criticality and develop an assessment tool at the state-level - that are also transferrable at the local-level - to support identification of a criticality framework.

FHWA's work in criticality is at nexus between assets, asset management, and vulnerability of these assets to extreme events. Next steps are to create parameters and ultimately arrive at a comprehensive and equitable criticality assessment framework.

Feedback from MPOs (Rand)

Vulnerability focuses on how easily something be destructed. Criticality asks how important that thing is. This project looks at what is important from the perspective of "surviving" compared to "thriving." The project team is looking at what metrics are accessible given current data. The project team is reaching out to DOTs, local transportation officials, MPOs, emergency management officials, and other governing bodies to engage in the survey. It is nine questions and designed to ask which metrics are important and what else the project team should consider. Dewberry will share the survey results with the group and conduct follow up calls if the group is interested to gather a deeper understanding of the different use cases.

Question: Thinking about vulnerability and criticality – access to tourist attractions and access to outdoor recreation facilities seem more like frills. Response: When Dewberry spoke with smaller tourist-based economics, many of them highly prioritize these things because their economy is based on them.

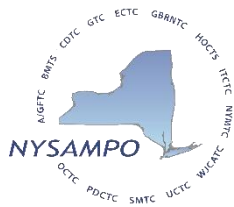
Question: Do the parameters for infrastructure include state or federal aid eligible roads or all roads? Response: At this moment, it includes state infrastructure.

Dewberry will send out the survey to the group and follow up once responses come in.

4. 10:50AM – 12:00PM: NYSDOT Highway Data Services Traffic Count Program - Presentation (Andrew Chatterton and Andrew Haynes, NYSDOT)

Short Count Data (Chatterton)

The primary focus at the DOT is to work on collecting data on the highways for AADT and classification. There are over 37,000 sites across the state. Haynes looks at continuous counts across the state, and Chatterton looks at short counts (48 hours to 7 days).



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In the Traffic Data Viewer (TDV), the average daily traffic line work is in a continuous state of development. The stations are identified by the NYS region county code and unique four-digit station number reference. A new segment is created when a 10-15 percent deviation occurs in AADT in the route. In the TDV, AADT is displayed on sections in current year estimates. The current year is defined and labeled in the viewer. (Right now that is 2014; the 2015 update will come out at the end of summer.) If an actual count is collected in the current year it should be displayed on that link in black, but if there was not a count done on that link in the current year - an estimate has been created to the current year. To create estimates, NYSDOT looks at growth and decline in that region and apply. NYSDOT always goes back to the last actual counts to growth rate rather than building estimate on top of estimate. (Note that almost all growth rates in the state fall between -1% and 1% per year.) The symbology on the traffic data viewer is in a color scheme based on traffic. Heavy traffic is in red and light traffic is in green.

Adding line decorations or arrows at the end of the segments gives more meaning to the station, as the user can see the beginning and ending of the segments/stations.

NYSDOT's program collects data every three years on the system. In recent years, FHWA added a number of ramps to the data collection that are on a six-year rotation. Overall, NYSDOT collects data on a regular basis on 37,000 stations across the state, this is split it up between 3-5-6 year programs. Data is being collected on about 11,000 sites each year. If NYSDOT is not actively collecting, they can get the information from the local government.

Question: If an MPO thinks that the AADT changes substantially over one of the stations/segments, what can they do to potentially make a change? Response: The MPO should send an email to or call the regional coordinator to express their concern. The MPO can then work with NYSDOT to take different counts and determine the number of sites to count. This already happens sometimes and there is usually only a 1-2% difference.

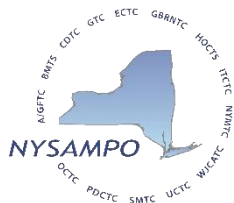
NYSDOT is required to report for the whole system every three years. If NYSDOT adds a segment one year, they are on the hook for sending reports at that level of detail from that point forward. Since they are currently on the hook for reporting on 37,000 stations, NYSDOT combines similar AADTs wherever they can.

Question: When you are collecting volumes at a station or if you are looking at class counts, does that change from year to year? Response: Yes and no. Whenever there is an HPMS sample site, we are reporting to FHWA through the system, so we try to get 13-bin class data by using road tubes if we can. For sites where NYSDOT cannot get class counts, NYSDOT downgrades those to volume only. NYSDOT also tried to get class counts for all bridges and railroad crossings with over 500 vehicles per day.

Looking at the TDV, the roadway equipment should be very close to the site locations shown in the triangles/points. There are some sites with in-pavement equipment. These are permanent short count sites. When looking at short counts, there is no complete set of points on all locations where NYSDOT collected data. If NYSDOT receives a GPS coordinate with the new count data and it not near a station, they throw the data out rather than guessing. NYSDOT also collects data on local roads, local bridges, and local railroad crossings. The point data shows up in the TDV, but the colored AADT line does not appear.

The traffic count process is rigorous. NYSDOT looks at counts when they come in (10 to 20 counts at a time) in Excel spreadsheet formats. NYSDOT then uses a script to convert all Excel files into one file and create a shapefile. Note that the shapefile in the TDV is the most up to date.

NYSDOT has a goal to have a set of permanent sites to tell contractors where they can collect the data. NYSDOT is working with counties and MPOs on their collection program/their points for permanent sites.



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NYSDOT started developing coordinates of permanent sites in 2014 to give the contractors. Validation can occur by putting a tub down near the in-pavement site but only where there are issues.

NYSDOT used to do reports out of TCE, then they went to TRADAS, but now back to TCE. There were issues with the TRADAS reports. NYSDOT will continue to get reports out of TCE until something else becomes available that is reliable and consistent.

Quiz:

- How often does NYSDOT collect short counts? Typically every 3 year
- What do lack numbers mean? AADTs factored to 2014.
- What do points in the short count TDV layer represent? Actual data collection locations over the years. Many-to-one.

Continuous Count Data (Haynes)

Working with TCE, NYSDOT used to run all reports for quality control, and the report did not always match this number. NYSDOT then moved to TRADAS for this purpose, but NYSDOT found that TRADAS would add zeros where there were blanks. There were also various issues with directional movements (e.g., be careful if AADT is reported for one direction and not the other and the roadway total is the same as the one direction if it is not a one way road). Some segments showed negative AADT. NYSDOT notes that about 85% of reports from TRADAS are totally fine. About 10-12% of the TRADAS reports showed minor errors, and then the remaining small percentage is substantially off.

Right now NYSDOT is seeking approval to get an overarching system that communicates well. It will take from two to four years to develop to integrate into the traffic database. For now, NYSDOT is working on a temporary system that eliminates TRADAS and using TCE. This current structure has six tables that hold the following data types: volume, classification, speed, volume statistics, classification statistics, and speed statistics. TCE then aggregates this information for the HPMS submittal and will allow for the creation of a comma separated (CSV) files.

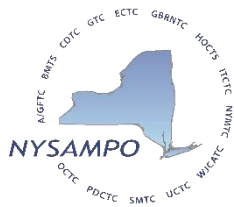
This data will be posted onto website in the next month. The data is formatted so that the user can take the data and join to shapefiles (whether point or line) using the region/county station field. This dataset will include 2010 through 2015 data (processed as of April 22, 2010).

NYSDOT is also working on taking everything they have in terms of points for and placing these into the system to get latitude/longitude. NYSDOT hopes that the percentage of latitude/longitude coded increases each year. The goal is to eventually get TCE to put the latitude/longitude point in automatically.

There are a variety of attributes for each site, including day of week, direction, lane codes, number of lanes, direction, data intervals (rather than display hours, NYSDOT uses 15-minute intervals - 1.1 up to 1.24, which relate to which interval of the day that it is. 1.1, 2.1, 3.1, etc.), directionality, functional percentages, axle correction factors, percentage heavy vehicle AADT in the peak hour, average weekday volumes by hour, 24-hour counts by direction, and total roadway counts.

Question: Are the continuous and short count datasets together? Response: No the short and continuous count datasets are not packaged together, but the average weekday shape includes both datatypes.

The Count Statistics file is a new file for NYSDOT and contains a significant amount of information. It is relatable to AADT layers. Uses an "Actual Indicator" (the actual count) and then a "Forecasted Value" is it is a current year estimate.



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On newer counts, there is the design hour volume (DHV) traffic and the Direction DHV. There are also single unit (SU) and combination unit (CU) counts by direction and by total roadway. Year X last count shows the most recent counts (up to four) going back to 2001. Class groups and speed data are also included in this file (speed limit and average speed). NYSDOT intends to publish this datafile near the end of June, as well.

NYSDOT has the installer for TCE available – Andrew Haynes can assist in a walkthrough of the minor steps if an MPO would like access.

Question: When TCE outputs CSV files for a count location, there are 6 files per count location – one for each data type. Is there a tool to put these into a single file output? Response: No, but the user could create an access template to import them all to an Access database. The user could also use Oracle to load these files. NYSDOT will update the TDV soon, too.

5. 12:00 – 12:40PM: Lunch \ Roundtable Discussion (All)

6. 12:40 – 1:30PM: Continuation of Other GIS-Related Updates from NYSDOT (Kevin Hunt, NYSDOT)

Linear Referencing (Hunt)

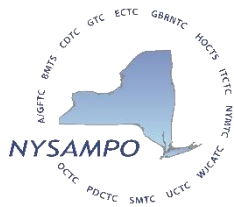
The original plan was to load the Federal aid network on R&H for linear referencing. It has been a roller coaster over the past few months because Highway Data Services is still working on the local network. NYSDOT loaded the Federal aid system and will later load the local roads.

R&H keeps track of milepoints over time, and business data on that network. Those are two major improvements. It allows the handling of business data as the user makes changes to milepoint network. NYSDOT is working on a concept of center lines (which is actually a copy of the network streets layer in the R&H geodatabase (GDB)). The centerlines serve as the geometry of the network. In this scheme, every milepoint route needed to be a street segment, which caused a struggle with segmentation in the NYS streets network. There is no attribution (date fields) to keep track of edits. ESRI does not want you to have any attributes on the data, but NYSDOT had to break up centerline feat class more than ESRI intended in R&H, which makes maintenance of milepoint routes more difficult in R&H.

In February, every road was covered, and NYSDOT did a training that was intended to be a week long, but halfway through they realized that they could not continue with the large number of edits given the level of work involved in the training. In R&H, there is an editing tool called “Create Route.” The user can extend a route, retire a route, realign a route, reassign a route, and reverse a route. R&H assumes the user has good data, but NYSDOT knew this was an issue and worked with ESRI on the issues. Since February, NYSDOT scaled back to Federal aid network, and the rest of the quality control work will happen outside of R&H and be pulled in next year. NSYDOT is working with ESRI to address the correction tools and is partnering with other DOTs that have experienced similar situations.

Conflation Effort (Hunt)

In some places, the old network diverges from the new network. The amount of work that NYSDOT would have to put in to fix the segments is very high. NYSDOT made the decision to load the milepoint network as it exists today, which means that - while most of the network will align with NYS Streets - Highway Data Services is concerned with maintaining start and end points. NYSDOT will load the network as maintained to replace the network once integrated into R&H hopefully by the end of June.



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NYSDOT identified issues with the maintenance process and will work with ESRI overtime so that in a year the local network can work in this platform. There is currently only business data right now. Linear representation is used for bridges and the reference markers will be maintained in this network using milepoints in R&H.

NYSDOT has been discussing the new contract with ESRI to allow for ArcGIS Online. The new centralized contract between ESRI and NYS as put in place in March. It includes cloud-based software. ELA is established for 2017, so the GIS working group should think about what might we would be interested in doing with that.

Comment: Using ArcGIS Online as an agency, the licensing is coming from a different source. It would be helpful for MPOs to have access to it and “copy” what other people are doing. The group should vie for that capability. Follow-up Comment: SMTC has one license that they operate on their own. Staff at some point need separate logins to allow us to use ArcGIS Pro.

MPOs should each reach out to someone above Kevin’s head about licensing. Before the GIS working group meets again, there should be further discussion around planning for the next ELA. Hunt will help get that discussion started by August.

ArcGIS online could also help to sync together TIP projects to create a project viewer – something that the group has discussed in the past.

7. 1:30 – 1:45PM: Presentation of HOCTS draft Bike and Pedestrian Trail Guide (Jeff Quackenbush, HOCTS)

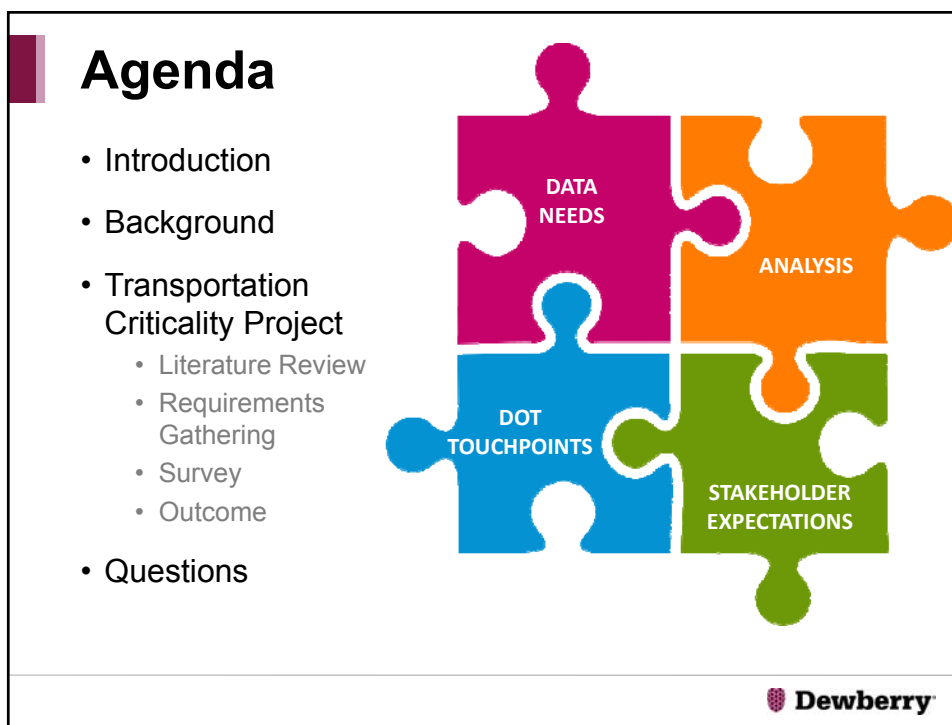
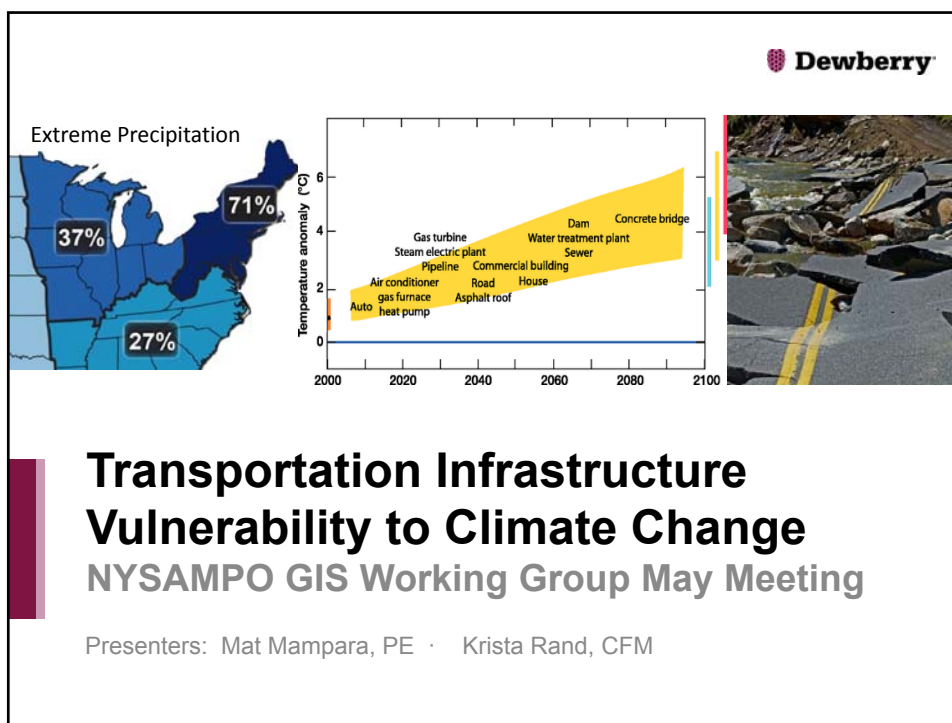
HOCTS purchased the Adobe Creative Suite – InDesign and Illustrator – to make it easy to assemble maps and create layouts for maps, reports, and other projects. It made the creation of the final report much easier and made it look much nicer.

8. 1:45 – 2:00PM: Training Discussion/Wrap Up/Conclusions (All)

Potential Training Ideas (Deshaies)

There is budget for a GIS training in the next year or two. The group identified that more advanced type of training would be helpful, as current members are comfortable teaching the basics to new employees. The GIS working group identified three potential areas for future trainings: ArcGIS Online training, Adobe Suite products, and ArcGIS network analyst extension training. Deshaies will take additional suggestions and ideas.

The group also mentioned that ADA infrastructure inventories development guidance training was also noted but most likely separate from the GIS Working Group.



Introduction

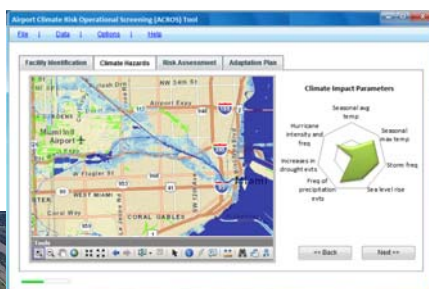
- **Team Background:** Climate resilience and transportation
- **Project Goal:** Defining criticality and developing an assessment tool at statewide scales



Project Background

Climate Change Risk at Airports-Transportation Research Board

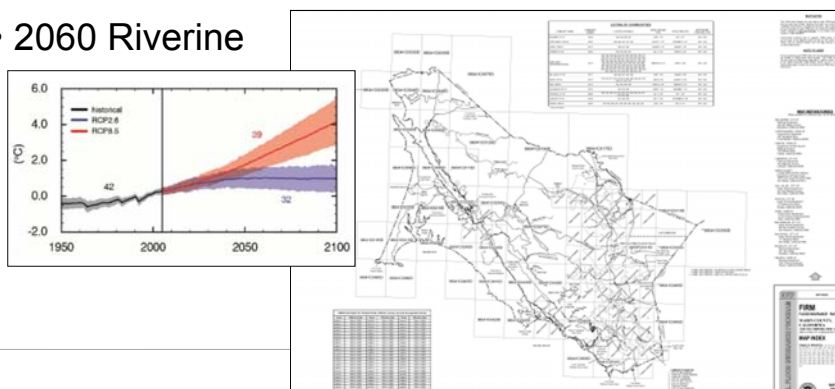
- Infrastructure focus
- Threats and Opportunities
- State of Repair
- Awareness
- Decision Support



Project Background

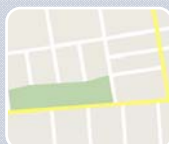
Climate Change Analysis for National Flood Insurance Program EIS

- National Scale
- Innovative Use of GCMs
- 2060 Riverine



Project Background

Flood Forecasting for State DOTs



H & H

Infrastructure &
Terrain

Threats to
Infrastructure

Communication
& Info Transfer

Updates,
Versioning,
Records

Project Background

Beyond the FHWA Criticality Framework

Very low to low				Moderate		Critical to Very Critical			
1	2	3	4	5	6	7	8	9	10
Criticality of asset									
Notice that along with the qualitative terms there is an associated scale of 1 to 10, this is to serve as a facilitation tool for some people who may find it useful to think in terms of a numerical scale – although the scoring by each individual is of course subjective. The scale is a generic scale of criticality where “1” is very low (least critical) and “10” is very critical.									
									
Typically involves: non-NHS low AADT alternate routes available				Typically involves: some NHS non-NHS low to medium AADT serves as an alternative for other state routes		Typically involves: Interstate Lifeline some NHS sole access no alternate routes			

WS DOT's critical framework, based on stakeholder elicitation with consultation by local experts.



Project Literature Review

- Criticality frameworks
- Unique challenges of rural and exurban infrastructure
- Data, methods and models for assigning criticality
- Metrics for capturing dependencies within the regional transportation network



New York State Route 22



Project Literature Review

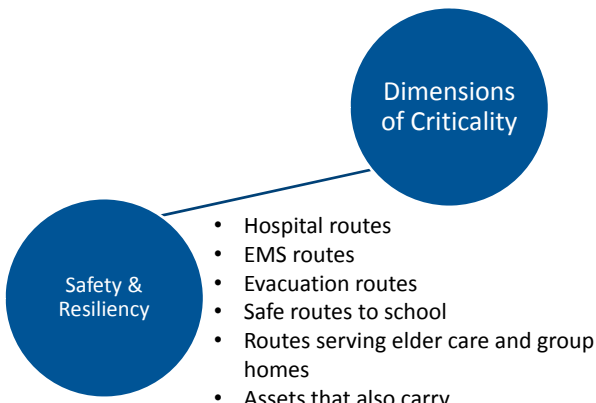


Dimensions of Criticality

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 **Dewberry**

Project Literature Review



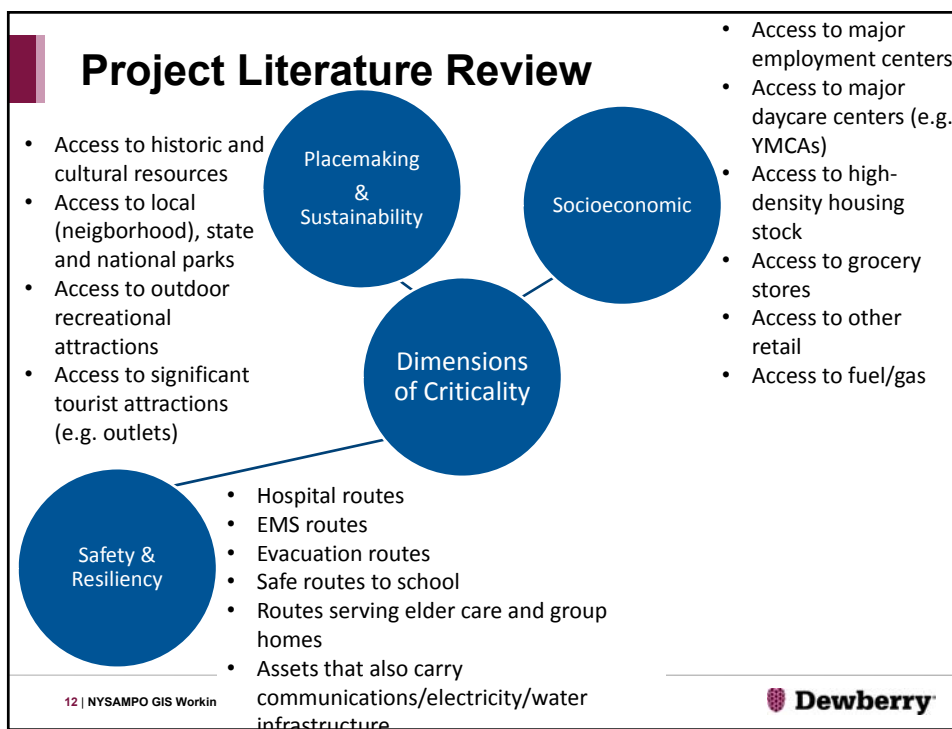
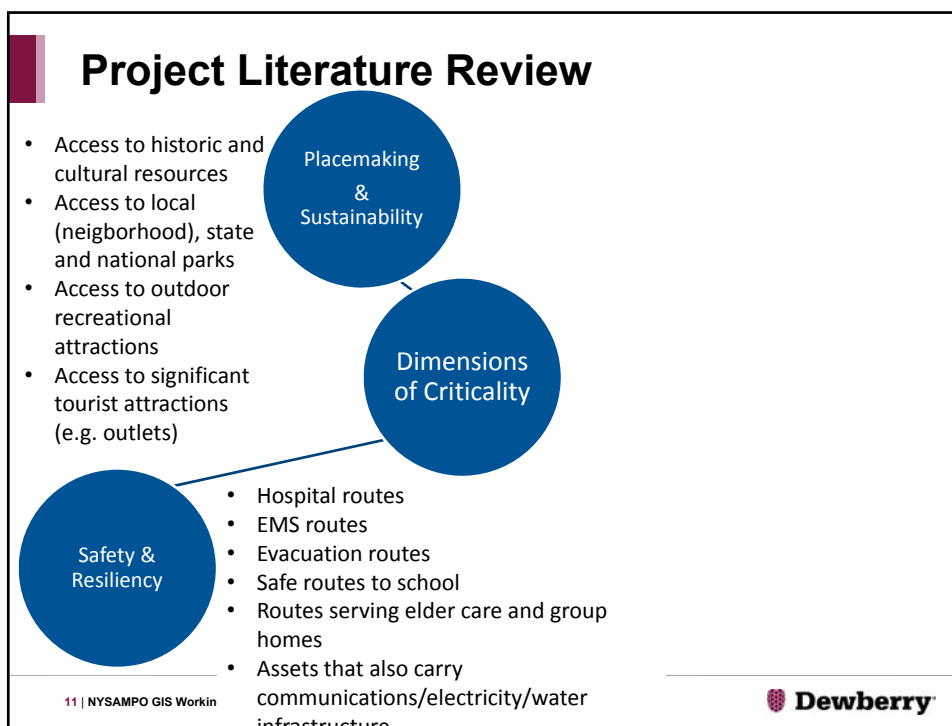
Dimensions of Criticality

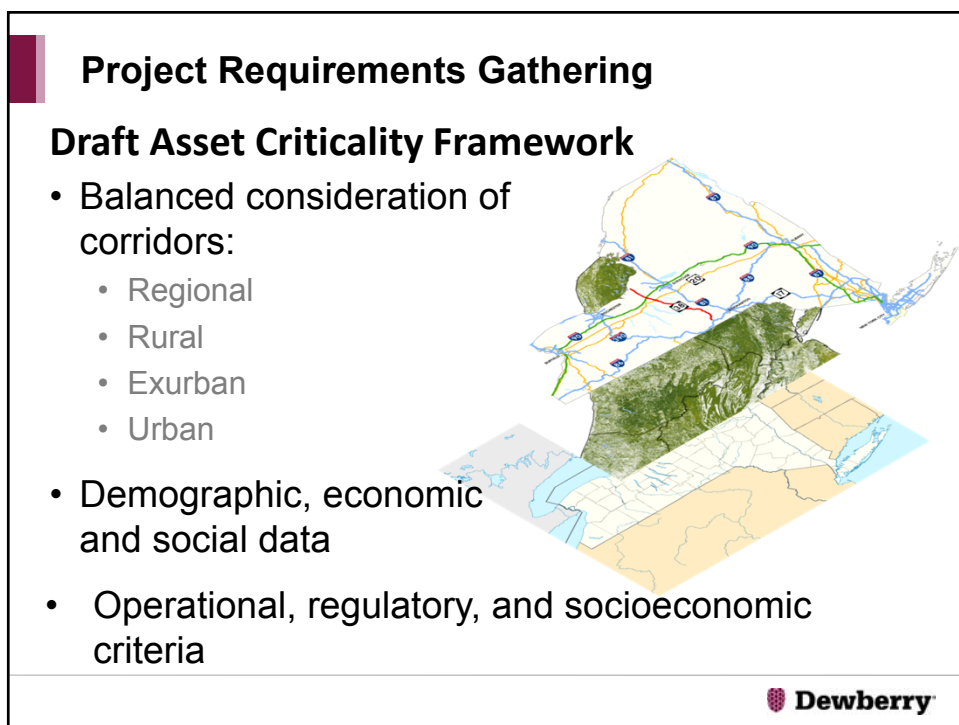
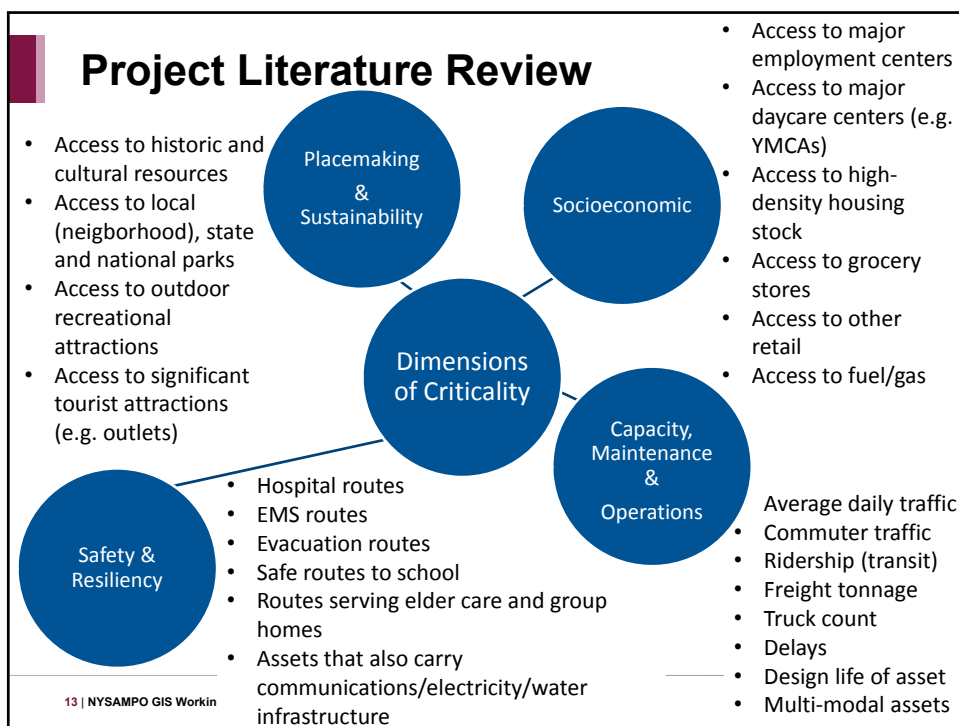
Safety & Resiliency

- Hospital routes
- EMS routes
- Evacuation routes
- Safe routes to school
- Routes serving elder care and group homes
- Assets that also carry communications/electricity/water infrastructure

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 **Dewberry**





Project Requirements Gathering

Identify key NYSDOT, EM and stakeholders

Survey and conduct follow-up interviews

Document current challenges and local needs



Attachment 1. PON 2941 Transportation Criticality Survey Definitions and Questions

We request your response about transportation infrastructure criticality in your region. For the purposes of this survey, please see the following definitions.

- **Criticality** is the importance of a route. Typical quantitative measures include passenger volume and commercial usage, but these may not fully capture or rank assets of importance and this survey is interested in understanding how you define what routes are critical in terms of serving the unique economic, landscape, cultural and other characteristics that distinguish your region.
- **Resilience** is the ability to recover quickly after a stressor event. Transportation system resilience can be a factor of characteristics such as asset design and post-event condition, ability to support emergency response and recovery activities, and the ability to resume normal operations and performance. Understanding which routes are critical can help inform priorities for resilience improvements.

***1. What is your first name?**

Please enter first name here.

***2. What is your last name?**

Please enter last name here.

***3. What is your position title?**

Please enter title here.

***4. What area(s) of transportation are you responsible for on a day-to-day basis? Please select all that apply.**

- ☐ Traffic Operations
- ☐ Transportation Planning
- ☐ Maintenance
- ☐ Construction
- ☐ Research and Innovation
- ☐ Project Management
- ☐ Environmental Analysis
- ☐ Engineering and Design Services
- ☐ Transportation Systems Information
- ☐ Other (please specify)

[Click here to enter text.](#)



***5. In your opinion, which of the following criteria best define a critical route? Please select all that apply.**

☐ ADT (Average Daily Traffic)
☐ Primary routing option for the area
☐ Emergency access (emergency services- police, fire, EMS, hospitals)
☐ Evacuation route
☐ Market access for commercial agriculture, forestry, and fisheries
☐ Economic access (commerce and commuting)
☐ Access to cultural or tourist attractions
☐ Access to recreation and hunting opportunities
☐ Other (please specify)
[Click here to enter text.](#)

***6. Rank, in order of importance, the improvements that would most increase the resilience of the transportation network you are responsible for, with a rank of 1 indicating "Most Important."**

Choose a rank. Route capacity improvement

Choose a rank. Detour availability

Choose a rank. Rural highway safety improvements

Choose a rank. Intersection safety improvements

Choose a rank. Intelligent Transportation Systems (ITS), e.g. Road Weather Information Systems (RWIS) and dynamic signage

Choose a rank. Traffic Incident Management (TIM) capabilities

Choose a rank. Improved asset management capabilities

***7. Rank, in order of importance, the improvements that would most increase the economic resilience of the communities served by the transportation network you are responsible for, with a rank of 1 indicating "Most Important."**

Choose a rank. Improve emergency access (emergency services- police, fire, EMS, hospitals)

Choose a rank. Improved market access for commercial agriculture, forestry, and fisheries

Choose a rank. Improved economic access (commerce and commuting)

Choose a rank. Improved accessibility to schools, daycare centers, elder care

Choose a rank. Improved access to cultural and tourist attractions

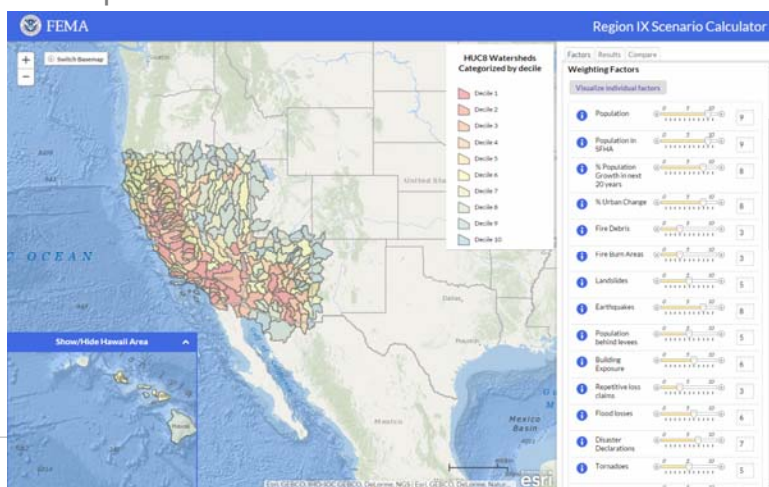
Choose a rank. Improved access to recreation and hunting opportunities

8. Please provide any additional comments you might have.
[Click here to enter text.](#)

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Outcome

- What could the asset criticality tool look like?
 - Watershed Prioritization Tool
 - <http://r9watersheds.com>



Questions & Discussion



2016 Status Updates

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NYSAMPO GIS Working Group
May 12, 2016 - Utica, NY

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2016
Status Update

Introduction

- ❖ Line Work and Point Files
- ❖ Short Count Scheduling
- ❖ GPS Coordinates through Short Counts



2016
Status Update

Shape Files (ArcMap)

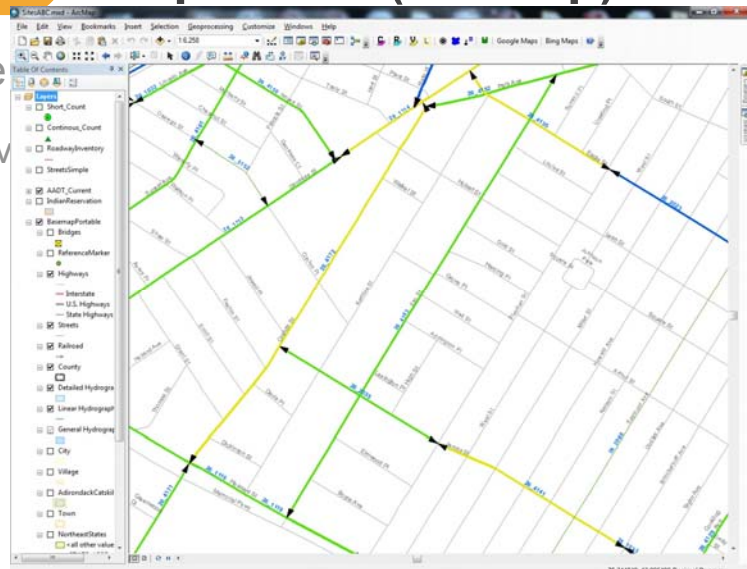
- ❖ Line Work and Point Files
- ❖ Average Daily Traffic (Line Work)



2016
Status Update

Shape Files (ArcMap)

- ❖ Line
- ❖ Av



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2016
Status Update

Shape Files (ArcMap)

- ❖ Line Work and Point Files
 - ❖ Average Daily Traffic (Line Work)
 - ❖ Continuous Counts (Triangle Points)



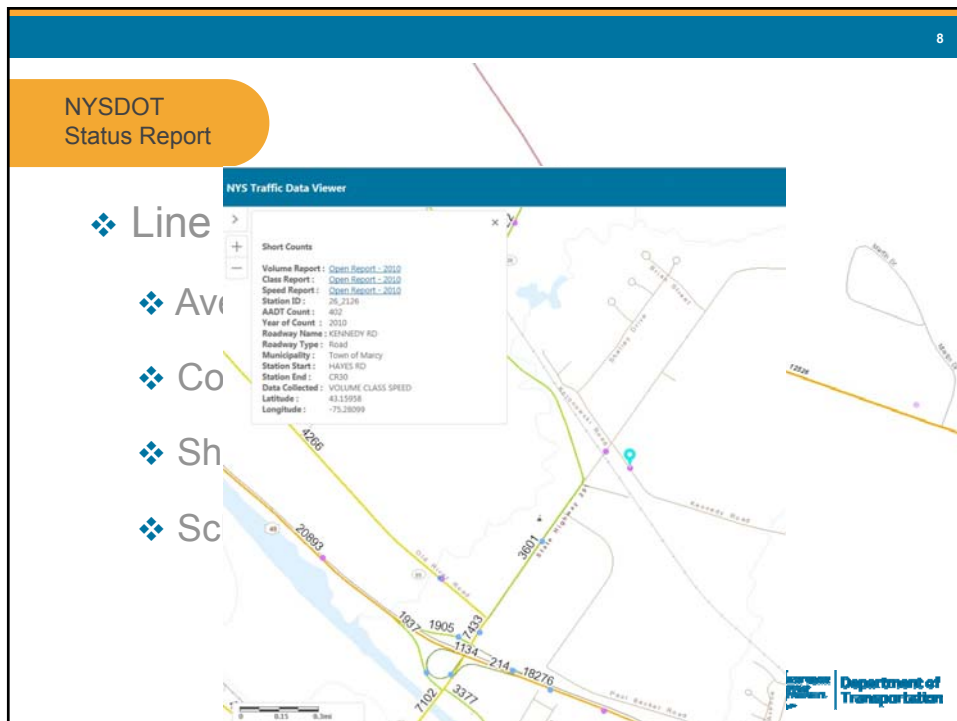
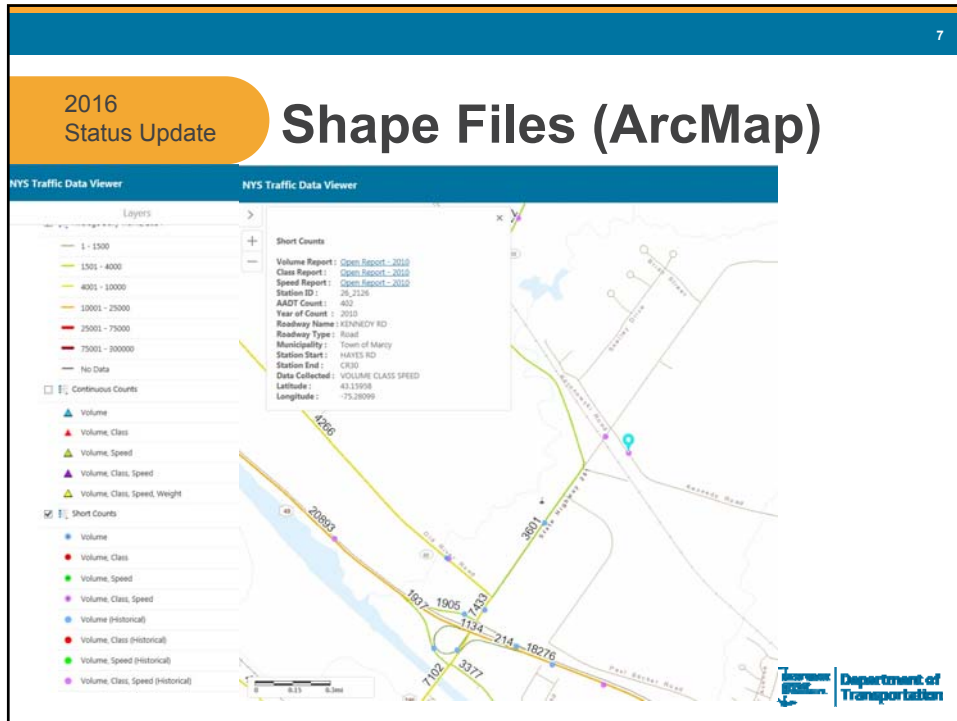
6

2016
Status Update

Shape Files (ArcMap)

- ❖ Line Work and Point Files
 - ❖ Average Daily Traffic (Line Work)
 - ❖ Continuous Counts (Triangle Points)
 - ❖ Short Counts (Circle Points)





[illegible]

2016
Status Update

PDF Reports

- ❖ Reports (Adobe® PDF)
- ❖ Reports are not Data

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2016
Status Update

PDF Reports

- ❖ Reports (Adobe® PDF)
 - ❖ Reports are not Data
 - ❖ Report Generation History
 - ❖ TRADAS Reports Issues



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2016
Status Update

PDF Reports

- ❖ Reports (Adobe® PDF)
 - ❖ Reports are not Data
 - ❖ Report Generation History
 - ❖ TRADAS Reports Issues
 - ❖ Moving on with Reports



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2016
Status Update

Database Systems

- ❖ Replacing TRADAS
 - ❖ TRADAS is Failing
 - ❖ Temporary System
 - ❖ How it works
 - ❖ Available Extracts

 Department of
Transportation

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2016
Status Update

Questions?

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2016
Status Update

Questions 4 U

- ❖ Questions for you:
 - ❖ How *often* does NYSDOT collect Short Counts?
 - ❖ What do the **Black** numbers on the Lines in the Traffic Data Viewer (TDV) mean?
 - ❖ What do the Points (circles) in the Short Counts layer of the TDV represent?



2016
Status Update

Questions 4 U

- ❖ Questions for you:
 - ❖ **Answers**
 - ❖ How *often* does NYSDOT collect Short Counts?
 - ❖ **Typically every three (3) years (with exceptions)**
 - ❖ What do the **Black** numbers on the Lines in the Traffic Data Viewer (TDV) mean?
 - ❖ **These are AADTs (actual or factored up to the Year shown in the Average Daily Traffic layer)**
 - ❖ What do the Points (circles) in the Short Counts layer of the TDV represent?
 - ❖ **Actual locations of data collection over the years. Many-to-One**



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2016
Status Update

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TRADAS Status Spring 2015

Andrew Haynes
NYSDOT Traffic Monitoring
3/31/15

Last Year's Status



What we have tried

- ITIR in July 2014 – Major Points
 - Repair Directional AADTs
 - Add ability to remove improperly loaded counts
 - Change HPMS truck percentage calculations
 - Change K & D factor calculations
 - Some minor report fixes

What worked!

- We can now delete erroneous counts from TRADAS
- Truck percentages and their averages are calculated correctly

Spring 2015 Status



Why are we doing this?

- Published Reports
- Data Accessibility
- AADTs
- HPMS Statistics

Reports

STATION: 071413		Roadway Traffic Count Hourly Report																											
STATION: 210013		Roadway Traffic Count Hourly Report																											
ROUTE ROAD: NY67		FROM: NEW TURNPIKE				TO: RT 334 W OF JOHNSTOWN				REGION-COUNTY: 2-FULTON																			
FED DIR CODE: 3,7		REF. MARKER:				FUNC. CLASS: 7 - R Major Collector				MUNI: Johnstown-Town-0432																			
ST DIR CODE: 7		END MILEPOST: 9.2				FACTOR GROUP: 40				BN:																			
DOT ID: 100457		LANES BY DIR: 1 East 1 West				CC STN:				RR CROSSING:																			
BEGIN DATE: 6/2/2014		WEEK OF YEAR: 22				ADDL DATA:				HPMS SAMPLE:																			
NOTES 1: WB TRAVEL LANE		PLACEMENT: 1050 E of Oakford Rd i				JURISDICTION: 01-NYSDOT				1 WAY CODE:																			
NOTES 2:										COUNT TYPE: Axle																			
TAKEN BY: TST-AJW		PROCESSED BY: DOT-med				BATCH ID: DOT-R02R2 WW2				SPEED LIMIT: 55																			
DATE		00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	DAILY TOTAL	HIGH COUNT	HIGH HOUR	
6/02, Mon												166	180	181	196	222	231	258	204	151	119	91	56	34	15	2104			
6/03, Tue		17	12	9	18	38	110	138	237	180	167	188	179	159	0	0	0	0	0	113	91	81	49	33	14	1833	237	07-08	
6/04, Wed									207	170	145	142	159	156	205	195	264	222	226	126	126	85	67	29	27	2551			
6/05, Thu		22	8	12	15	33	106	139	202	187	156	161	184													1225			
		AVERAGE WEEKDAY HOURS (Axle Factored, Mon 6 AM to Fri Noon)																								AWDT			
		19	10	10	16	34	105	134	209	174	151	159	170	160	130	135	160	155	139	126	109	83	56	31	18	2493			

Directional AADTs

AADTs

- Overwriting directions cause a small percentage of AADTs to be off by ~50%
- Another ~7-12% AADTs are off by 5-20%
- The remaining AADTs are within 1%

What we are doing now!

- Reports are run from TCE again
- We are building a new table structure for short count data
- CC data will still be loaded to TRADAS
- Stations/Scheduling still managed in TRADAS

Full TRADAS Replacement

- Working on a Business Case since November 2014
- Gathering requirements for a new system
- 3-4 years away from a new system

TRADAS Status Spring 2015

Questions???

Andrew Haynes

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518-485-2018