Federal
Owned by public authority – including instrumentalities
Open to public travel
State

Similar to Feds

Restrict it to:
Define it as through traffic.
And for purposes of our LHI – we limit ownership to NYS forms of government and some instrumentalities

This may be excluding schools, libraries, municipally owned non-through roadways.
State Universities and Prisons are pretty well covered with HPMS Code “21 – Other State Agencies”

Stony Brook down on Long Island

We have NO HPMS Coded “40 - Other Public Instrumentality (i.e., Airport)” in our network
Local School District excluded from our Public Roads Network.
Local Municipal Complex, Town Hall
Public Library
Large County Fire Training Centers

Westchester Co in Valhalla

Should we add these for the Feds, but exclude them for the locals?
Routable network is way off in the future. At best we call the “Streets” layer a routable network. If needed I would just conflate the “streets” layer and remove the overlaps and present it with no attributes.

Streets is currently 144,430 miles
ELRS is 126,314 miles – 18,000 mile delta? Why is CLEAR claiming to need 21K?

At grade Ramps and interchanges may get picked up for CLEAR and Assets

We may pick up some turn movements on the State system with the addition of turning lanes, but this would not include restrictions? Not sure if CLEAR will be capturing this with their Intersection Manager Tool.
Highway Data Section - Data

Data and GIS
  What have we done because of GIS
  Gaps +/-
  What has GIS done to the Data
  “True” Overlaps
Attributes Added
Attributes Removed
Attributes Needed/Unknown SOR
Gaps
We removed all gapped sections from roadway type “Roads.”
All gapped “Routes” have remained, and some additional ones are on their way (Alpha Routes)
Roads and Highways allows for gaps with a calibration point, this does not allow for MP updates down stream of the calibration Point
It also allows for gapped routes using the Euclidean (as the crow flies) distance to determine the MP and the start of the second part
Blue section on Cemetery Road and Game Farm Road was equal to 1.98 miles, so there was a gap in DOT ID of 1.98 miles, covered by town and city roads.
Place a Calibration Point of 2.78, any network edits would not update the MP north of MP 2.78
With no Calibration Point, using the Euclidean distance, the MP=2.62, why not just split the roadway into 2 DOT IDs?
Alpha Routes – any time a route self intersect we will be introducing a small gap
Gap will be on the underside portion of the polyline so that the structure can be carried without interruption.
Different kind of Gap
When we mapped our data to the network you had gaps everywhere due to precision levels of RIS vs GIS
This will no longer appear in R&H
1:1 relationship
Overlaps in RIS vs Overlaps in GIS
R&H creates the overlaps based on the roadways sharing the same sections of Center Line
Well, we took some liberties on some of the overlaps as constructed in RIS and others just don’t line up due to rounding

This example shows the HPMS Sample event on 2 dominant routes because the overlap in the migration of the data showed an overlap that did not exist fully in GIS.
Minute overruns at every overlap

Still need to discuss ways to correct.
Minor Arterials – Named East 3rd Street in the City of Mount Vernon becomes Boulevard West in the Town of Pelham
Treated as 2 GIS ID and get 2 Stations – therefore two traffic counts at an imaginary line
Not saying we may not use the same count for two stations, but that’s for the traffic guys to answer
Looking to merge some of these
Treated as 2 GIS ID and get 2 Stations – therefore two traffic counts at an imaginary line
Not saying we may not use the same count for two stations, but that’s for the traffic
guys to answer
Looking to merge some of these unnecessary ID’s
Attributes Added

Reminder that this is supposed to be a program level data model, not a map. You want the true numbers, go map it.

Misc. Pavement Type LOV is TBD
In the Past NY Route 5 had 2 lanes in each direction and NY 155 had 1 lane in Each Direction
4 Lanes @ 12’ *528’ on each side of the intersection = 4*12*528*2 = 50,688sf of pavement
2 Lanes @ 12’ *528’ on each side of the intersection = 2*12*528*2 = 25,344sf of pavement
76k SF Asphalt

2 turning (rt/lt) lanes on 155 P = 2*12*528 = 12672
1 divider 155 P = 1*144*12 = 1728

1 left turn on 5R = 1*12*250 =3000

1 right turn on 5P = 1*12*500 =7500
1 left turn on 5P = 1*12*160 = 1920
1 bus lane on 5P = 1*12*160 = 1920

1 short left on 155R = 1*12*80 = 960
1 lt turn =1*12*240=2880
1 rt turn = 1*12*400=4800
37k SF additional Asphalt

An increase of 49% at a single intersection
*May lead to some issues on interstates / large arterials where the right lane may be wider for truck traffic to stay away from the shoulder joints"
As far as the Vendors vehicle is driven
Reference markers are being removed from RIS but still available through the Office of Traffic and Safety.
The ramp information can be reported from GIS intersections information.
Some are still to be decided.
Unknown SOR
Direction of Traffic
MIRE - Predominate compass direction (North, South, East, West) for both ways of a dual-carriageway
Both directions – if inventoried in only one direction (e.g. the inventory applies to both directions of a single-carriageway roadway).

Unknown SOR
Would probably makes sense as a roadway level attribute in R&H
Odd/Even not the same as compass direction.
Route spurs don’t follow this logic.
Highway Data Section

Runs up and down the East Coast
Obvious N/S Route
Follows the Odd/Even Assumption
Signs in NY call it N/S
Predominate Compass Direction in
NY is E/W (15 miles E vs. 10 miles N)
Highway Data Section

Appears to be an E/W route from NY to NH
Does not follow the Odd/Even Assumption of E/W in NY - Signs in NY call it N/S
Predominate Compass Direction in NY is N/S
But Vermont Says E/W
NY Routes appear to have no rhyme or Reason
If in doubt, hide the direction with some trees if you’re not sure?
Ok, so NY Route 28 makes a big old C in the state. So we’ll see how “easy” the decision on direction will be. We’ll have to look into the manuals for the right answer.
Multiple new extracts to be created with the new data warehouse
Highway Data Section

RIS data is also “currently” available through the GIS clearing house as a yearly snap shot.
https://gis.ny.gov/gisdata/inventories/details.cfm?DSID=1302

<table>
<thead>
<tr>
<th>Data Set Name</th>
<th>Description</th>
<th>Theme</th>
<th>Metadata</th>
</tr>
</thead>
<tbody>
<tr>
<td>NYS Roadway Inventory System</td>
<td>Developed by the NYSDOT, this layer provides comprehensive highway data for New York State.</td>
<td>Transportation</td>
<td>Metadata</td>
</tr>
</tbody>
</table>

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Highway Data Section

With RIS 2.0 (SEE & R&H) being stored in GIS it is expected that each event will be available as a layer on a much more regular basis. No longer need to filter the data items you want and dissolve them. Segment Analyzer will be used to create dynamically segmented layers of specific data sets.
Interactive Straight Line Diagramming
Visible attribution for any event connected to the ELRS
User can define which attributes they want to look at.
Regional Guide Rail Jobs
Reginal sign inventory
Integrated with our Photolog pictures from I-Vision
Highway Data Section

Functional Class Viewer (Google – NYSDOT Viewers)
Highway Data Section

NHS Viewer
Highway Data Section

Questions?

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