September Meeting
9/8/2021

AGENDA

1. Announcements

2. Esri Update

3. Enhancement List Priorities

4. Open Discussion

**** Please mute phones!! ****

ANNOUNCEMENTS

- GeoNet Updates
- [Survey123](#) on enhancement list

Esri Updates

Nathan Easley

Capabilities currently under development

- **Cover Behavior in Extend for concurrencies**
- **Cover Behavior in Realign for concurrencies**
- **Snap Behavior in Realign**

Support Incidents/Defects

- No new cases

Other Announcements

- **Roads and Highways patch**

Demos

Enhancement List Priorities

Patrick Whiteford

Managing data by direction

RHUG Community

HPMSBin_Data_Cy2020

FromDate *	ToDate *	RouteId *		FromMeasure	ToMeasure	HPMS_BinID		Direction
4/3/2021	<Null>	S 087		62.129591	62.229591	S 087	_613	N
4/3/2021	<Null>	S 087	0	62.132502	62.232502	S 087	0 _609	S

ThroughLane

	FromDate *	ToDate *	RouteId *	FromMeasure	ToMeasure	NumberOfLanes
	2/18/2020	<Null>	07 INDIAN SCHOOL RD	66.621416	69.121322	5

Scenario 1: Directionality per event

RouteId	FromMeasure	ToMeasure	Pavement Condition	Direction
S 010	50	60	Good	EB
S 010	50	60	Poor	WB

POOR (WB)   GOOD (EB)

Scenario 2: Directionality per route network

RouteId		FromMeasure	ToMeasure	Pavement Condition
S 010		50	60	Good
S 010	0	50	60	Poor

- Is there another scenario?
- Which scenario is preferred?
- How are other state's managing data by direction?
- What are some best practices for managing data by direction?
- How can the LRS support this need?

Upcoming Meetings / Contacts

Wednesday October 13th, 1:30-3pm

Contact Info:

Erin Lesh ealesh@ncdot.gov
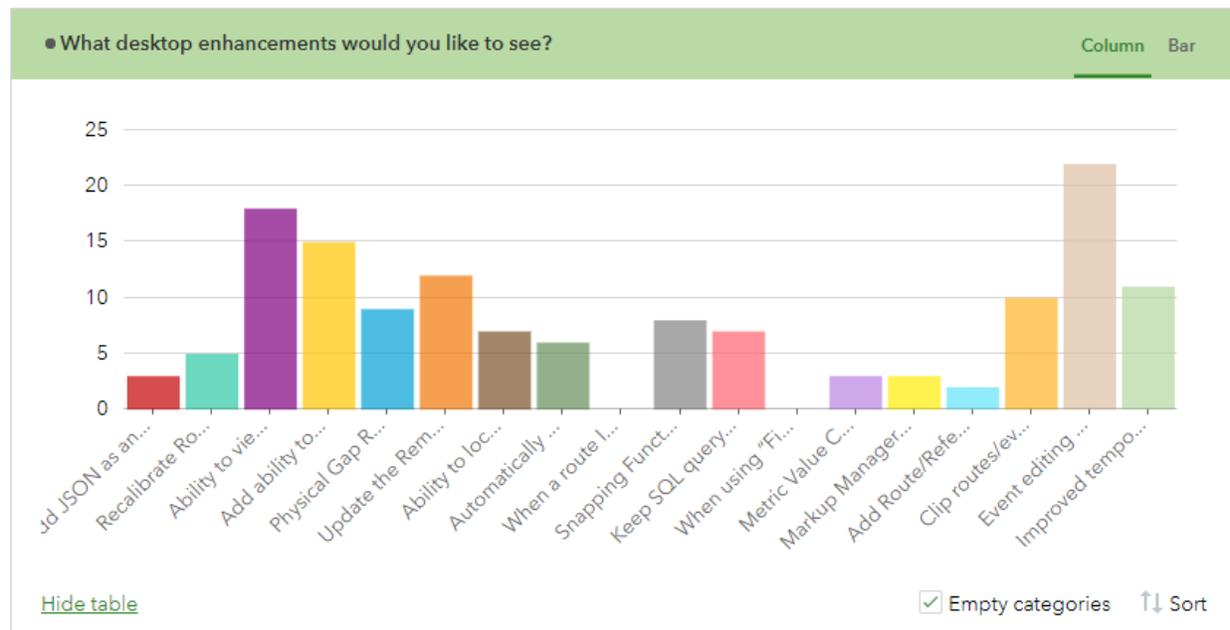
Patrick Whiteford pwhiteford@azdot.gov

What desktop enhancements would you like to see?

1. Add JSON as an output option for the Export Network web service.
2. Recalibrate Route Downstream checkbox becomes configurable to be checked/unchecked by default
3. Ability to view scrolling measures along route on hover in Roads & Hwys Desktop
4. Add ability to utilize Route Dominance to move current events on non dominant routes to dominant routes where occurs.
5. Physical Gap Routes - Support Driven Distance mileage
6. Update the Remove Centerline Geometry Duplication tool to maintain attribution
7. Ability to lock fields.
8. Automatically set the width on columns in the table so text doesn't wrap
9. When a route ID is entered in "Find Route" and then you go to "Line Events" the route ID should appear. You should not have to re-enter the route ID again.
10. Snapping Functionality for DGN and DWG layers
11. Keep SQL query in Select by Attributes populated when changing the layer if the field exists in both the new and old layer
12. When using "Find Route" the route is highlighted but when you close the attribute box the highlight disappears. The highlight should be able to be toggled on and off.
13. Metric Value Conversion
14. Markup Manager Tool - Ability to place a markup pin based on a Latitude/Longitude coordinate
15. Add Route/Referent offset geocoder.
16. Clip routes/events based on polygon layers for mileage reporting in Roadway Reporter
17. Event editing within the Pro environment
18. Improved temporal capabilities (enter in routes in non-chronological

What enhancements to ESRI Event Editor would you like to see?

1. Recalculate events based on referents being changed
2. Markup Manager Tool in RCE- Zoom to Markup option
3. Spatially derive event values based on polygon layers, etc. in RCE
4. Merge coincident events changing temporality of events
5. Ability for alias names configured in MXD to be viewable while building query in Roads & Hwys - RCE
6. Add an autocomplete where we type in the name and get a list of possible matches to the Advanced Find Route tool in RCE. This would then mirror the functionality found in R&H in ArcGIS desktop.
7. RCE Markup Manager- Saved Map Markups Tables do not Automatically Refresh
8. RCE Markup Manager - Add Title to Delete and Load Markup Windows
9. RCE Markup Manager - Additional filter to loading markups
10. RCE Markup Manager - Grey Out "Delete Saved Markup" option
11. RCE Markup Manager - Ability to edit graphical elements order)
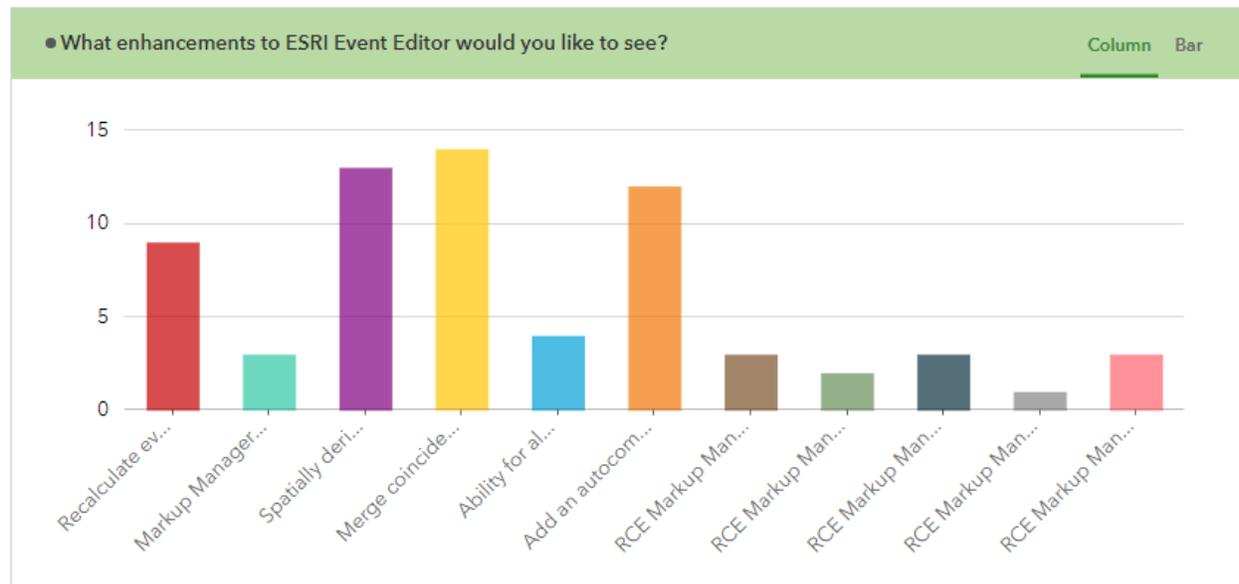
Desktop Enhancments

What desktop enhancements would you like to see?

Column | Bar

Answers	Count	Percentage
Add JSON as an output option for the Export Network web service.	3	13.04%
Recalibrate Route Downstream checkbox becomes configurable to be checked/unchecked by default	5	21.74%
Ability to view scrolling measures along route on hover in Roads & Hwys Desktop	18	78.26%
Add ability to utilize Route Dominance to move current events on non dominant routes to dominant routes where occurs.	15	65.22%
Physical Gap Routes - Support Driven Distance mileage	9	39.13%
Update the Remove Centerline Geometry Duplication tool to maintain attribution	12	52.17%
Ability to lock fields.	7	30.43%
Automatically set the width on columns in the table so text doesn't wrap	6	26.09%

Answered: 23 Skipped: 0

Event Editor

● What enhancements to ESRI Event Editor would you like to see?

Answers	Count	Percentage
Recalculate events based on referents being changed	9	39.13%
Markup Manager Tool in RCE- Zoom to Markup option	3	13.04%
Spatially derive event values based on polygon layers, etc. in RCE	13	56.52%
Merge coincident events changing temporality of events	14	60.87%
Ability for alias names configured in MXD to be viewable while building query in Roads & Hwys - RCE	4	17.39%
Add an autocomplete where we type in the name and get a list of possible matches to the Advanced Find Route tool in RCE. This would then mirror the functionality found in R&H in ArcGIS desktop.	12	52.17%
RCE Markup Manager- Saved Map Markups Tables do not Automatically Refresh	3	13.04%
RCE Markup Manager - Add Title to Delete and Load Markup Windows	2	8.7%

Answered: 22 Skipped: 1

What functionality would you like to see in Desktop or Event Editor that is not listed?

The word cloud requires at least 20 answers to show.

Hide table   A̲A̲ Show words

Response	Count
When I run the desktop tool "Update Intersections Points" under the Location Referencing Tools, it seems to take a very long time and use up a lot of memory, especially on longer routes when I select my routes to update intersections on. Is there some way to improve the coding (i.e. add indexing) so that it improves the runtime of the tool and minimizes the memory output it takes to run the tool.	1
Event Editor: ability to review conflicts when reconciling and posting.	1
bulk loading of events using the append events tool option to load to dominant route	1
	0

Answered: 3 Skipped: 20

from Patrick Whiteford to everyone: 12:15 PM
https://survey123.arcgis.com/share/7905115f9f464e17acfb069ab76d9289
from Patrick Whiteford to everyone: 12:32 PM
https://arcg.is/0feGqD
from Bryan M to everyone: 12:33 PM
Are these meetings saved somewhere for future use?
from Ryan Koschatzky to everyone: 12:34 PM
Yes, I post to Geonet with all presentations, audio and chat in a few days after the meeting,
from Bryan M to everyone: 12:34 PM
thanks!
from Ryan Koschatzky to everyone: 12:34 PM
https://community.esri.com/t5/roads-and-highways-user-group-rhug/gh-p/roads-and-highways-user-group-rhug
from Nicole Hanson to everyone: 12:35 PM
could the link for the survey be posted in the chat (jumped on a few mins late so I don't see it if it's there already)
from Lesh, Erin A to everyone: 12:35 PM
https://arcg.is/0feGqD
from Nicole Hanson to everyone: 12:37 PM
Thanks Erin!
from Ryan Koschatzky to all panelists: 12:51 PM
https://arcg.is/0feGqD
from Clive Reece (esri) to everyone: 1:03 PM
Third option: Separate events for Inventory and Non-inventory directions. (avoids problem with overlay of overlapping event records)
from Sam Coldiron to everyone: 1:03 PM
My preference would probably option 2 where you seperate the two sides into difference routes.
from Jesse Pearson to everyone: 1:04 PM
Minnesota manages this issue with Clive's option.
from Patrick Kemble to everyone: 1:05 PM
Did you cover the scenario where you have "routes" that go from concurrent to non-concurrent? Doesn't the event scenario over wriite the pavement data on the non-dominant concurrent sction?
from Dorothy Aydelotte to everyone: 1:05 PM
We have mostly used option 1, but have discovered it complicates things like creating a collection file for the profile van.
from Patrick Kemble to everyone: 1:06 PM
Or are directional events considered seperate events all together?
from Abhishek Bhargava to everyone: 1:07 PM
Third scenario: A hybrid of scenario 1 and 2, wherein you have two separate Route IDs (two records in the LRS table), but the geometry of the two Route IDs is the same (either for the entire extent of the route, or some portion of the route - divided and undivided portions).
from Patrick Kemble to everyone: 1:09 PM
tried to talk but I'm on mute
from Abhishek Bhargava to everyone: 1:10 PM
Patrick - We can share the findings from the AEGIST PFS meetings. I will send you the few slides and survey results that can be shared with the community.
from Ryan Blum to everyone: 1:12 PM

All scenarios have advantages/disadvantages. Scenario #1 limitations really come into the lack of simple Overlap/Gap/Topology checks with geoprocessing tools, etc.   Scenario #2 main issues are with more route maintenance and harder to "summarize data by corridor". Scenario #3 major limitation would be in the increased management overhead of events. I think the proper answer would be dependent on the needs of each user. I think the LRS of RI will be largely different than AZ will be largely different than CA.

from Patrick Kemble to everyone: 1:13 PM
Thanks Abhishek

from Patrick Kemble to everyone: 1:14 PM
We are trying our best to align with the AEGIST ideas, but seem to be moving ahead faster with our business needs then the ideas are coming out.

from Ryan Blum to everyone: 1:15 PM
Do we know if HPMS or AEGIST is going to give guidance on this soon?

from Patrick Kemble to everyone: 1:16 PM
I had thought ESRI had mentioned we should keep the number of events on a route to a certain number. Does PRO support an expaneded number of events per Route_ID?

from Nathan Easley to everyone: 1:16 PM
There is no limit to the number of event records on a route.

from Nicole Hanson to everyone: 1:16 PM
How many events do you have on a route Patrick K? Idaho has over 80 now

from Kevin Hunt to everyone: 1:17 PM
Agree with Ryan.   When I get frustrated with our current approach, I just spend a couple of minutes thinking about the other options and they always seem to come with different challenges that are no more appealing.   Really good discussion and I look forward to additional AEGIST recommendations.

from Abhishek Bhargava to everyone: 1:17 PM
AEGIST Finding Summary:: For locations with curbed raised medians, 13 States voted for the Scenario 2. And, 5 States voted for Scenario 1. Four (4) States responded as 'it depends and presented various sub-scenarios". This is for locations with curbed raised medians. I willl share more information about factors that were recommeded for dividing highways (eg.. number of lanes).

from Kevin Hunt to everyone: 1:19 PM
Nathan E - could you remind us what the outstanding functionality for equivalency is after the upcoming release of Pro?

from Patrick Kemble to everyone: 1:20 PM
Nicole Hansen - We are sitting at over 90 and have not placed al the secondary assets in R&H yet.

from Nicole Hanson to everyone: 1:21 PM
Ok, I think upi

from Nicole Hanson to everyone: 1:21 PM
Dang keyboard! LOL I think you'll be fine!

from Patrick Kemble to everyone: 1:21 PM
Perhaps it was the segmantation of the Routes that we were advised to limit.

from Nicole Hanson to everyone: 1:22 PM
Amit has said that with Pro it'll allow with segmentation of the routes

from Kevin Hunt to everyone: 1:22 PM
Thank you Nathan.

from Clive Reece (esri) to everyone: 1:23 PM
Thank you Patrick and Erin

from Yueming Wu to everyone: 1:23 PM
Thank you

from Sam Coldiron to everyone: 1:23 PM
Thank you!
from Shaun Perfect to everyone: 1:23 PM
Thanks!
from Kevin Hunt to everyone: 1:23 PM
Thanks!