# *Quarterly Progress Report (QPR)*

# *Applications of Enterprise GIS in Transportation*

**Progress Report for Quarter 9 [Oct 1st, 2021 – Dec 31st, 2021]**

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Map

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Background

The Pooled Fund Study (PFS) on Applications of Enterprise GIS in Transportation (AEGIST) was initiated by FHWA in 2018. During Phase 1 of this study a guidebook was developed for transportation agencies in the United States, with the primary objective of documenting guidance on how spatial and linear referenced data should be managed by States. Phase 2 of this PFS was initiated in October 2019. This phase will span over 5 years (October 2019 – September 2024), during which the objectives outlined below would be accomplished.

Objectives

* Establish a standard for managing and governing data in spatial and linear referencing systems at transportation agencies, including but not limited to routes, intersections, interchanges, roundabouts, road segments, roadway characteristics, infrastructure assets, model inventory of roadway elements (MIRE), HPMS data items and ARNOLD road network.
* Develop guidance for States for modeling spatial transportation data, especially linear referencing system (LRS) data. Importing, exporting & conflating road network and roadway characteristics data across DOT LRS and Federal, State and Local data systems.
* Conduct a series of webinars, workshops, peer exchange meetings and provide consulting services to the States participating in the pooled fund to develop national standards in data modeling and management; enhance existing enterprise GIS systems at these agencies.
* Update the AEGIST Guidebook that was prepared in Phase 1 by documenting best practices, patterns and similarities across agencies in managing spatial data using enterprise data systems, including but not limited to Asset Management Systems, Traffic and Safety Systems, Project Planning and Programming Systems, Design and Construction Systems, and GIS and Linear Referencing Systems (LRS).
* Collaborate with States to enhance and develop spatial data management systems, processes, platforms to establish a structured and systematic approach for management of spatial data. This would involve establishing spatial data governance systems, business rules, applications, tools and platforms for:
  + Spatial Data Modeling
  + Spatial Data Integration and Engineering
  + Spatial Data Analytics

Completion Status and Summary

Time Frame: October 1, 2019 to September 30, 2024

Total Time, months: 60

Time Expended, months: 27

Percent Calendar Time Expended: 45%

Work Accomplished This Reporting Period: Oct – Dec, 2021

**Task 1: Project Management**

**Task Objective**: Perform project management activities, which include conducting monthly status meetings, developing quarterly status reports, creating project work plan, managing project resources, schedule, deliverables and communication with all stakeholders.

**Activities**:

1. Prepared and delivered AEGIST Quarterly Report #8 along with invoice for the period (Aug – Sept, 2021). Both Base Period and Performance Period 1 activities with 11 PFS States were reported.
2. Conduct quarterly meetings with PFS States in December 2021 to share updates on AEGIST activities.
3. Task management meetings held with following PFS States: Idaho, California, Tennessee, Pennsylvania, Ohio, North Carolina, Kansas, New Mexico, Florida.

**Task 2: Technical Services**

**Task Objective:** Provide technical services associated to PFS States by completing various agency-specific and cross-agency activities identified in the work plan.

**Activities**:

1. **Idaho:** 
   * Task 2.ID.2: Presentations to additional stakeholders at ITD and discussion on opening access to data governance artifacts to additional stakeholders at the DOT; Development of additional data governance dashboards and tools. Present spatial data governance system and artifacts at the Idaho’s Data Summit in October.
2. **California**
   * Task 2.CA.1: Development of flyer and presentation material for California Roads Sharing (CaRS) program. Meetings with stakeholders and presentation to GIS Council. Presentation to State GIO, Caltrans, CalOES on next steps and tools/data/applications architecture requirements.
3. **Pennsylvania**
   * Provide technical services related to:
     + Task 2.PA.1: AEGIST work planning
     + Task 2.PA.7: Speed Limit Data extraction from PDF and Excel files using Artificial Intelligence and Natural Language Processing techniques.
     + Task 2.PA.11: LRS Systems Demonstration in November to PennDOT stakeholders on Nov 10th.
     + Task 2.PA.10: Roads Data Modeling – NG911, PennDOT RMS & National Road Network Presentation to PEMA NG911 group on Dec 7th.
4. **Ohio**
   * Task 2.OH.2: Continue development of strategic roadmap by identifying activities that need to be carried out corresponding to the following areas:
     + 2.OH.1.1: HPMS, MIRE and ARNOLD
     + 2.OH.1.8: LRS Data Architecture Management & Administration Workflows
     + 2.OH.1.4: Roadway Inventory: Bike lanes, Turn lanes, Conflation of Assets to LRS/GIS
     + 2.OH.1.6: BIM Design and Construction Data to Asset Management (As-Builts Handoff)
5. **North Carolina**
   * Task 2.NC.1: Perform following Intersection modeling activities
     + Create Nodes and Edges (Road Segments) from NCDOT LRS Routes data, NC NG911 data
     + Automatically create intersection and junction features from the nodes data engineered from NCDOT LRS, NG911 routes and Open Street Map Roads.
     + Publish web map with intersection data model on ArcGIS Online.
6. **Kansas**
   * Task 2.KS.1: Perform following Intersection modeling activities
     + Create Intersection Feature Class from Safety Unit’s Intersection Excel Spreadsheets
     + Create Nodes and Edges (Road Segments) from Kansas LRS Routes data, Kansas NG911 data
     + Extract Ways and Nodes information from NC Open Street Maps and integrate with NC Nodes and Edges created from NCDOT LRS Routes and NG911 datasets.
     + Automatically create intersection and junction features from the nodes data engineered from Kansas LRS and Open Street Map Roads.
     + Develop web map for publishing intersection modeling data. Post on Kansas ArcGIS Online.

**Task 3: Marketing and Communication**

**Task Objective:** Webinars and Workshops will be held, and Articles will be presented in conferences and other industry forums to communicate information about the activities of the project, especially the technical work products developed as part of the project.

**Activities**:

1. **Task 3.1.x – AEGIST Articles**
   * **Task 3.1.1 - Article 1**: Based on technical services activities in North Carolina, Kansas, Florida and New Mexico, and, comments received from State DOTs on AEGIST Task 5 Interim Report on Roads Modeling, update the draft Article 1 on “Road Network Publication Data Model with Topology, Temporality, Routable Network Rules”. Reflect the multiple centerline and one centerline practices in various States.
   * **Task 3.1.2 - Article 2:** Update content for AEGIST Article 2 on ***“****Enterprise GIS Application for Spatial Safety Performance Functions Calibration and HSM-based Safety Analysis”.*
   * **Task 3.1.3 - Article 3:** Prepare AEGIST Article 3 on ***“****Engineering, processing and integrating spatial Traffic and Safety Data using Cloud”.* Add content on use cases such as: Optimal Location of Traffic Monitoring Sites based on Enterprise Needs, snow plow data processing and integration.
   * **Task 3.1.4 - Article 4:** Update content for AEGIST Article 4 on **“***Enterprise GIS Application for**Modeling and Conflating Federal Lands Management Agency, DOT LRS and Local Agency Roads data*”
   * **Task 3.1.5 - Article 5:** Prepare content for AEGIST Article 5 on **“***LRS Administration Levels and Maturity Model”*.
2. **Task 3.2.x – AEGIST Workshops & Presentations**
   * **Task 3.2.4:** Prepare and deliver presentations; or submit presentation abstracts for
     + Presented on November 9th to Federal Land Management Agency on AEGIST activities in Idaho corresponding to conflation of Federal Lands and State DOT LRS Roads.
     + Prepared and submit presentation abstract for GIS-T 2022 on “AEGIST Activities in PFS States”, and, for the “AEGIST Workshop on Roads and Intersection Data Modeling”
     + Prepared for TRB 2022 presentation on: Highway Safety Analysis using MIRE Compliant Intersection and Road Segment Data Modeling, using the content developed for AEGIST Article 2 on ***“****Enterprise GIS Application for Spatial Safety Performance Functions Calibration and HSM-based Safety Analysis”.*
     + Prepared AEGIST One-Page Flyer that justifies investment in AEGIST
     + Prepared slides for FHWA Safety presentation on AEGIST activities related to MIRE and submit by Aug 30th.
     + Develop and Submit Abstract for NATMEC presentation in 2022.

**Task 5: HPMS Remodeling Support Services**

**Task Objective:** HPMS 9.0 Remodeling Support services

**Activities:** Identified updates that will need to be made to the report in the next quarter, before requesting FHWA to publish the report. These updates were identified based on the upcoming HPMS 9.0 specifications.

Work Planned for Next Reporting Period: Jan – Mar 2022

**Task 1: Project Management**

**Task Objective**: Perform project management activities, which include conducting monthly status meetings, developing quarterly status reports, creating project work plan, managing project resources, schedule, deliverables and communication with all stakeholders.

**Activities**:

1. Prepare and Deliver AEGIST Quarterly Report #8 for the period (October –December 2021) for Base Period and Performance Period 1
2. Task management meetings held with following PFS States: Idaho, California, Tennessee, Pennsylvania, Ohio, Connecticut, North Carolina, Kansas, New Mexico, Florida.
3. Prepare for PFS States Quarterly Meetings #9 in March 2022.
4. Updates to AEGIST Outreach website <https://gisintransportation.com/> to publish events and AEGIST presentation material.

**Task 2: Technical Services**

**Task Objective:** Provide technical services associated to PFS States by completing various agency-specific and cross-agency activities identified in the work plan.

**Activities**:

1. **Idaho:** 
   * Task 2.ID.2: Data Governance System Development: Updates to Data Catalog, Application Portfolio, Application Communication Diagram. Presentations to stakeholders regarding use of data governance framework.
   * Task 2.ID.3: Demonstrate draft of the roads data conflation process and tools being created for Idaho LRS and Federal Lands data conflation, to stakeholders such as Federal Lands Management Agency, FHWA and ITD. Discuss next steps.
2. **California**
   * Task 2.CA.1: Develop data and application architecture report to document information about the California Roads Sharing (CaRS) program, especially information about data schema, data rules, data use and applications that will support exchange of data across stakeholders. Also, document information about comparison of Caltrans All Roads and Merced County roads datasets.
3. **Connecticut** 
   * Task 2.CT.1: Update FME workspace for data quality assessment rules. Create output feature classes and imported into a database for publication of data quality results to ArcGIS Online and for development of Data Quality Analysis dashboards (using Operations Dashboards).
4. **Tennessee**
   * Task 2.TN.1:Review/update plan for publishing the Strategic Roadmap based on discussion with Tennessee
   * Task 2.TN.2:Prepare work plan for conducting a pilot to extract data from design data files for migration to GIS
5. **Pennsylvania**
   * Provide technical services related to:
     + Task 2.PA.1: AEGIST work planning. Discuss PennDOT Digital Delivery plan and identify opportunities for AEGIST support in the 5-year strategic plan, especially the activities outlined in the roadmap for the year 2022.
     + Task 2.PA.6: BIM Digital Delivery – Pilot to migrating data from design to GIS
     + Task 2.PA.7: Speed Limit Data extraction from PDF and Excel files using Artificial Intelligence and Natural Language Processing techniques. Migrate extracted data from the PDFs (in the previous quarter) to GIS system.
     + Task 2.PA.10: Discussions with PennDOT and NG911 Office to plan workshop on PennDOT and NG911 Roads data modeling, integration and management
     + Task 2.PA.12: Data Governance System setup at Pennsylvania DOT – LRS Capability/Administration Levels
6. **Ohio**
   * Task 2.OH.2: Continue development of strategic roadmap by identifying activities that need to be carried out corresponding to the following areas:
     + 2.OH.1.1: HPMS, MIRE and ARNOLD
     + 2.OH.1.8: LRS Data Architecture Management & Administration Workflows
     + 2.OH.1.4: Roadway Inventory: Bike lanes, Turn lanes, Conflation of Assets to LRS/GIS
     + 2.OH.1.6: BIM Design and Construction Data to Asset Management (As-Builts Handoff)
     + 2.OH.1.7: Data Quality Framework Development
7. **North Carolina**
   * Task 2.NC.1: Perform following Intersection modeling activities
     + Create Nodes and Edges (Road Segments) from NCDOT LRS Routes using ArcGIS Intersection Class tool in ArcGIS Pro 2.9
     + Use Overpy API to extract ways and nodes information from NC Open Street Maps and integrate with NC Nodes and Edges created from NCDOT LRS Routes and NG911 datasets. Identify Turn Lane and Median Crossover locations in Open Street Maps data, especially locations where these features are not represented in NC LRS.
     + Setup Intersection feature class with coded value domains to hold MIRE data. Integrate data from ‘Traffic Signals’ DOT database and Open Street Maps.
     + Update web map of intersection modeling data based on data model updates.
8. **New Mexico**
   * Task 2.NM.1: Perform following Intersection modeling activities by modifying scripts/tools created for Intersection Modeling as part of the North Carolina pilot
     + Create Nodes and Edges (Road Segments) from NMDOT LRS Routes data using ArcGIS Intersection Class tool in ArcGIS Pro 2.9
     + Extract Ways and Nodes information from NM Open Street Maps and integrate with NM Nodes and Edges created from LRS Routes
     + Automatically create intersection and junction features from the nodes data engineered from NM LRS and Open Street Map Roads.
9. **Florida**
   * Task 2.FL.1: Dual Carriageway Modeling.
     + Identify routes and locations that would need to be setup as dual carriageways based on Open Street Maps data and HPMS dual carriageway modeling requirements
   * Task 2.FL.2: Intersection Modeling
     + Add intersection and junction domains, and, MIRE attributes for intersections.
10. **Kansas**
    * Task 2.KS.1: Perform following Intersection modeling activities
      + Updates to automated process for creating Intersection Feature Class from Safety Unit’s Intersection Excel Spreadsheets
      + Use Overpy API to extract Ways and Nodes information from NC Open Street Maps and integrate with NC Nodes and Edges created from NCDOT LRS Routes and NG911 datasets.
      + Automatically create intersection and junction features from the nodes data engineered from Kansas LRS and Open Street Map Roads.
      + Develop web map for publishing intersection modeling data. Post on Kansas ArcGIS Online.

**Task 3: Marketing and Communication**

**Task Objective:** Webinars and Workshops will be held, and Articles will be presented in conferences and other industry forums to communicate information about the activities of the project, especially the technical work products developed as part of the project.

**Activities**:

1. **Task 3.1.x – AEGIST Articles**
   * **Task 3.1.5 - Article 5:** Prepare content for AEGIST Article 5 on **“***LRS Administration Levels and Maturity Model”*.
2. **Task 3.2.x – AEGIST Workshops & Presentations**
   * **Task 3.2.4:** Prepare and deliver presentations; or submit presentation abstracts for
     + Deliver presentation on AEGIST activities update on following forums
       - TRB Annual Meeting – AED 40 Committee Meeting in Washington DC (Jan 11th)
       - TRB Annual Meeting – AED 40 Committee Meeting - Virtual (Jan 28th)
       - USDOT Mobility Data Plan Meeting (Feb 1st)
       - AASHTO GIS-T Conference (April 21st)
     + Prepare and submit presentation abstract to GIS-T 2022 for Special Interest Group (SIG) Presentation on AEGIST activities associated with BIM-GIS Integration. Collaborate with buildingSMART to conduct the SIG meeting.
     + Deliver TRB 2022 presentation on: Highway Safety Analysis using MIRE Compliant Intersection and Road Segment Data Modeling, using the content developed for AEGIST Article 2 on ***“****Enterprise GIS Application for Spatial Safety Performance Functions Calibration and HSM-based Safety Analysis”.*
     + Update/Finalize AEGIST One-Page Flyer that justifies investment in AEGIST

**Task 5: HPMS Remodeling Support Services**

**Task Objective:** HPMS 9.0 Remodeling Support services

**Activities:** Coordinate with FHWA to determine next steps for review and updates to report. Align with Task 3.1.1.

**Complete List of AEGIST Deliverables**

**Note:** Deliverables on which work is complete (in green) and work is in progress (in light yellow).

| Task | D# | Deliverable Name | Due Date | Status |
| --- | --- | --- | --- | --- |
| Task 1 | 1.1.0 | Kick-off Meeting | 10/30/19 | Completed. |
| Task 1 | 1.2.0 | Work Plan Version 1: Cross-Agency Tasks, Deliverables & Schedule | 4/30/20 | Completed. Submitted to FHWA and PFS States. |
| Task 1 | 1.3.1 | Quarterly Progress Report - 1 (incl. 3 monthly reports and quarterly meetings) | 12/31/19 | Completed. Submitted to FHWA. Email sent to PFS States. |
| Task 1 | 1.3.2 | Quarterly Progress Report - 2 (incl. 3 monthly reports and quarterly meetings) | 3/31/20 | Completed. Submitted to FHWA.  Email sent to PFS States. |
| Task 1 | 1.3.3 | Quarterly Progress Report - 3 (incl. 3 monthly reports and quarterly meetings) | 6/30/20 | MPR for April, May, June published.  QPR-3 (April-June) published. |
| Task 1 | 1.3.4 | Quarterly Progress Report - 4 (incl. 3 monthly reports and quarterly meetings) | 9/30/20 | MPR for July and August prepared. QPR-4 Prepared. |
| Task 1 | 1.3.5 | Quarterly Progress Report - 5 (incl. quarterly meetings) | 12/31/20 | QPR-5 prepared. QTR Meeting (Dec 2020) |
| Task 1 | 1.3.6 | Progress Report 6: Jan-Apr 2021 (incl. quarterly meet) | 4/31/21 | QPR-6 prepared. QTR Meeting (Mar 2021) |
| Task 1 | 1.3.7 | Progress Report 7: May-July 2021 (incl. quarterly meet) | 8/30/21 | Completed and Submitted. |
| Task 1 | 1.3.8 | Progress Report 8: Aug-Sept 2021 (incl. quarterly meet) | 8/30/21 | Completed and Submitted. |
| Task 2 | 2.1 | TASK 2 Base Period Technical Services (incl. Work Plan v1.1 with State Tasks) - MONTH 8 - MAY 2020 | 5/30/20 | Work Plan v1.1 has Caltrans Tasks.  May 29th PFS States Presentation. |
| Task 2 | 2.2 | TASK 2 Base Period Technical Services (incl. Work Plan v1.2 with State Tasks) - MONTH 9 - JUN 2020 | 6/30/20 | Work Plan v1.2 has CA, GA, ID Tasks.  June 16th PFS States Presentation. |
| Task 2 | 2.3 | TASK 2 Base Period Technical Services (incl. Work Plan v1.3 with State Tasks) - MONTH 10 - JUL 2020 | 7/30/20 | Work Plan v1.3 with ID Task updates. Weekly work planning with Idaho. |
| Task 2 | 2.4 | TASK 2 Base Period Technical Services (incl. Work Plan v1.4 with State Tasks) - MONTH 11 - AUG 2020 | 8/30/20 | Work Plan v1.4. Tasks 2.1, 2.2, 2.ID.1 |
| Task 2 | 2.5 | TASK 2 Base Period Technical Services (incl. Work Plan v1.5 with State Tasks) - MONTH 12 - SEP 2020 | 9/30/20 | Work Plan v1.5 with ID Task updates.  Tasks 2.1, 2.2, 2.ID.2 and 2.ID.3 |
| Task 2 | 2.6 | TASK 2 Base Period Technical Services - MONTH 13 - OCT 2020 | 10/30/20 | Work plan activities at ID, TN, CA and Tasks 2.1 and 2.2. |
| Task 2 | 2.7 | TASK 2 Base Period Technical Services - MONTH 14 - NOV 2020 | 11/30/20 | Work plan activities at ID, TN, CA and Tasks 2.1 and 2.2. |
| Task 2 | 2.8 | TASK 2 Base Period Technical Services (incl. Work Plan v1.6 with State Tasks) - MONTH 15 - DEC 2020 | 12/30/20 | Work Plan v1.6 with updates for ID, CT, TN and CA. Continued Tasks 2.1 and 2.2 |
| Task 2 | 2.9 | TASK 2 Base Period Technical Services - MONTH 16 - JAN 2021 | 1/20/21 | Technical Services to ID, TN, CA, PA, CT, OH and Cross-agency Tasks 2.1 & 2.2. |
| Task 2 | 2.10 | TASK 2 Base Period Technical Services - MONTH 17 - FEB 2021 | 2/28/21 | Technical Services to ID, TN, CA, PA, CT, OH and Cross-agency Tasks 2.1 & 2.2. |
| Task 2 | 2.11 | TASK 2 Base Period Technical Services - MONTH 18 - MAR 2021 | 3/20/21 | Technical Services to ID, TN, CA, PA, CT, OH and Cross-agency Tasks 2.1 & 2.2. |
| Task 2 | 2.12 | TASK 2 Base Period Technical Services - MONTH 19 - APR 2021 | 4/30/21 | Technical Services to ID, TN, CA, PA, CT, OH and Cross-agency Tasks 2.1 & 2.2. |
| Task 2 | 2.13 | TASK 2 Base Period Technical Services - MONTH 20 - MAY 2021 | 5/30/21 | Technical services to 11 States and for Cross-agency Tasks 2.1 & 2.2. |
| Task 2 | 2.14 | TASK 2 Base Period Technical Services - MONTH 21 - JUN 2021 | 6/30/21 | Technical services to 11 States and for Cross-agency Tasks 2.1 & 2.2. |
| Task 2 | 2.15 | TASK 2 Base Period Technical Services - MONTH 22 - JUL 2021 | 7/30/21 | Technical services to 11 States and for Cross-agency Tasks 2.1 & 2.2. |
| Task 2 | 2.16 | TASK 2 Base Period Technical Services - MONTH 23 - AUG 2021 | 8/30/21 | Technical Services to 8 States as listed in the quarterly report. |
| Task 2 | 2.17 | TASK 2 Base Period Technical Services - MONTH 24 - SEP 2021 | 9/30/21 | Technical Services to 8 States as listed in the quarterly report. |
| Task 2 | 2.18 | TASK 2 Base Period Technical Services - MONTH 25 - OCT 2021 | 10/30/21 | Technical Services to ID, PA, CA, NC, KS and OH, as summarized in this report. |
| Task 2 | 2.19 | TASK 2 Base Period Technical Services - MONTH 26 - NOV 2021 | 11/30/21 | Technical Services to ID, PA, CA, NC, KS and OH, as summarized in this report. |
| Task 2 | 2.20 | TASK 2 Base Period Technical Services - MONTH 27 - DEC 2021 | 12/30/21 | Technical Services to ID, PA, CA, NC, KS and OH, as summarized in this report. |
| Task 2 | 2.21 | TASK 2 Base Period Technical Services - MONTH 28 - JAN2022 | 1/30/22 | Started |
| Task 2 | 2.22 | TASK 2 Base Period Technical Services - MONTH 29 - FEB 2022 | 2/30/22 | Not Started |
| Task 2 | 2.23 | TASK 2 Base Period Technical Services - MONTH 30 - MAR 2022 | 3/30/22 | Not Started |
| Task 2 | 2.24 | TASK 2 Base Period Technical Services - MONTH 31 - APR 2022 | 4/30/22 | Not Started |
| Task 2 | 2.25 | TASK 2 Base Period Technical Services - MONTH 32 - MAY 2022 | 5/30/22 | Not Started |
| Task 3 | 3.1.1 | **Article 1**: Road Network Publication Data Model with Topology, Temporality, Routable Network Rule | 5/30/21 | In-Progress |
| Task 3 | 3.1.2 | **Article 2:** Enterprise GIS Application for Spatial Safety Performance Functions Calibration and HSM-based Safety Analysis | 5/30/22 | In-Progress |
| Task 3 | 3.1.3 | **Article 3:** Engineering, processing and integrating spatial Traffic and Safety Data using Cloud | 12/30/22 | In-Progress |
| Task 3 | 3.1.4 | **Article 4:** Enterprise GIS Application forModeling and Conflating Federal Lands Management Agency, DOT LRS and Local Agency Roads data | 12/30/23 | In-Progress |
| Task 3 | 3.1.5 | **Article 5:** LRS Administration Levels and Maturity Mode | 9/30/24 | In-Progress |
| Task 3 | 3.2.1 | Workshop 1 - GIS-T 2021 | 4/30/21 | GIS-T Workshop 2021 Delivered |
| Task 3 | 3.2.2 | AEGIST Presentations (2020) | 12/30/20 | **Following Presentations Delivered:**  NY (Apr); TRF (Aug); KS (Jun); National Roads Symposium (Sep); Esri RHUG (Oct), AEGIST Modeling & Standards (Dec). |
| Task 3 | 3.2.3 | Workshop 3 – GIS-T 2022 | 1/30/21 | Prepare Abstract and Presentations for the Workshop |
| Task 3 | 3.2.4 | AEGIST Presentations (2021) | 12/30/21 | Completed delivery of following 2021 Presentations:   1. USDOT Presentation on April 2nd. 2. Presentations to new PFS States: WV, DC 3. Provided AEGIST Overview to Colorado.Presentation at NaTMEC on Jun 23rd. FHWA NRN Presentation on Aug 31st. 4. Presentation Slides for FHWA Safety Group on AEGIST-MIRE activities. 5. FLMA Presentation on Nov 9th. |
| Task 3 | 3.2.4 | AEGIST Presentations (2022) | 12/30/22 | Following presentations have been delivered in 2022, as of this quarter:   1. TRB AEGIST Update at AED40 Committee Meetings 2. USDOT Mobility Plan Business Group Update |
| Task 3 | 3.3.1 | Webinar 1: Data Governance | 2/11/21 | Webinar delivered on Feb 11th, 2021 |
| Task 3 | 3.3.2 | Webinar 2: AEGIST Activities associated with Spatial Data Modeling, Integration and Analysis | TBD | TBD |
| Task 4 | 4.1.0 | Peer-Exchange 1 - 2019 | 12/30/19 | Completed. |
| Task 4 | 4.2.0 | Peer-Exchange 2 - 2020 | 12/30/20 | Aug 25th-26th Peer Exchange Conducted. |
| Task 4 | 4.3.0 | Peer-Exchange 3 – 2021 | TBD | Not Started. Likely to be moved to 2022. |
| Task 5 | 5.0 | HPMS 9.0 Remodeling Report/Article Database Design | 5/30/21 | Delivered report on Road Network Publication Data Model for FHWA and PFS States Review completed between July-Sept. Comments Addressed.  Coordinate with FHWA to determine next Steps on publication to be determined. |