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The following is a report of WA-Trans activities, progress and issues since the last Status Report sent out March 12, 2009.

Communications:

Tami and Michael presented on WA-Trans at two conferences.

- American Association of State Highway and Transportation Officials (AASHTO) Subcommittee on Information Systems Conference on May 4. This presentation was mostly to IT professionals, but there were some GIS people there.
- Washington URISA Conference (WAURISA) May 5, 2009. We demonstrated several of the software tools written for WA-Trans including the Data Provider Portal and the Data User Portal. We also demonstrated a few of the QA/QC tools developed. We covered the process in some depth.

Michael also presented a four hour workshop on the project with a focus on the software and processes for maintenance and sharing to the GIS-T Conference in Oklahoma City in April. We got additional interest from Illinois and Montana as a result of this presentation.

Seven-County Implementation:

The ultimate goal is to have a production dataset that is used in an incident location component in the collision location system developed at WSDOT. WA-Trans is not responsible for that collision location system, but will assist with developing the database and assisting to make sure the state-route data provided is acceptable. Here is status with the counties we are working with on this.

- **King County** – we have started to integrate King County data with WSDOT data. This is expected to take a few months. We are waiting for a final reconciliation of Agreement Points between King and Pierce Counties.
- **Pierce County** – We are integrating Pierce County data with WSDOT data. Agreement points are being worked with Kitsap County and some rework is being done with King County. We anticipate having final completion of Pierce County data second in the Seven-County Implementation, early to mid-fall.
- **Kitsap County** – We have updated Kitsap County data, but are still waiting for Agreement Point data between Kitsap and Pierce Counties. Kitsap County is the first county we will complete for the Seven-County Implementation; its size makes it a good test county for integrating the data, reworking segmentation to follow WA-Trans segmentation rules and relating multiple providers' data into a single segment in the database.
- **Clark County** – We have their data Clark County data. We are in the process of building a transformation process.
- **Spokane County** – We have both data used for E911 and from the County. Engineers. We have used it to develop and test the Coincident Segment automated process. We are asking for updated data to test it. Both Spokane County GIS and Spokane County Engineers have agreed to add Perpetual Unique Identifiers to their data, which will greatly aid in maintaining WA-Trans with two different data providers.

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- **Thurston County** – We have met once with Thurston County. We need to set up a second meeting with them to make arrangements to review their data. They have some internal things to work out in order to be prepared to share data with the project.
- **Snohomish Counties** – we still need to make contact with them. *If anyone has a relationship with them that can help us reach them and get them to respond to our efforts it would be very helpful!*

The team working on the Incident Location System is going to begin setting up meetings with the County Engineers Office and the team. We will be participating in those meetings and providing your contact information to the team for invitation if you are on the list of counties involved. We will be starting with Kitsap County and then Pierce County and moving on from there.

Eastern Region Dataset Implementation:

The WA-Trans Project has entered into a Cooperative Agreement with the U.S. Geological Survey (USGS). This is the result of a proposal developed in conjunction with Spokane County. This will include improving/creating data for 4 (or 5 if funds permit) counties selected from Adams, Asotin, Columbia, Ferry, Garfield, Lincoln, Stevens, and Whitman Counties and putting that data into WA-Trans. Then we would also put Spokane and Pend Oreille County in WA-Trans. In late April we traveled to Spokane to begin meeting with several of the counties that we hope to work with in this effort. Here is the status thus far of each of these visits:

- **Spokane County** – Spokane County is part of the Seven-County Implementation, but they have a key role in this in terms of providing a local contact to collect data, evaluate data and support implementation of this regional dataset. They will also support Agreement Points when it is time to do them.
- **Adams County** - Adams County has a fairly recent dataset to share but no GIS Support. Spokane County has collected their data and is evaluating it. The goal will be to see if there is an agreement that can be reached to maintain their data on, possibly on an annual basis.
- **Whitman County** – Whitman County data will largely come from their E-911 data. The Public Works Office does not have the resources to maintain geospatial data. Like Adams County it is hoped that some agreement can be reached for annual maintenance of the data which the Public Works Office is interested in. No one has evaluated their data yet.
- **Lincoln County** – Lincoln County has up-to-date data which includes everything needed except for the Mobility LRS on their GIS. They would like WA-Trans to do this for them and will maintain the results. Spokane County has their data and is evaluating it right now.
- **Stevens County** – Stevens County is very interested in participating. They have some internal decisions to make regarding their data. They have some very high quality county road data developed by their County Engineers Office and they have to determine if they wish to use it as the basis for their roads data.
- **Pend Oreille County** – Pend Oreille County has several different datasets that will be used. They have had some recent reorganization that will facilitate their participation in WA-Trans. We do have some of their data.
- **Ferry County** – Ferry County has worked very hard to develop and maintain a dataset for the Emergency Response in their Sheriff's Office. They are interested in participating and have already sent us their milepost data.

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When we speak of evaluating the data, this is the process of determining, to the best of our ability, what must be done with the data in order to put it into WA-Trans data integrate the data. We have a long way to go with this implementation so we will be asking the USGS for an extension.

One-Road Pilot Phase II:

The One-Road Pilot Phase II is underway and making progress. It is dependant upon Pooled Funds being made available and we need to find new partners or get more funds from existing partners to continue much past FY '10. Interested states include: North Carolina, South Carolina, Texas, and Illinois.

- **Clark County** – Refer to the Seven-County Implementation for more details. We will need to work with OR-Trans and Portland Metro to develop Agreement Points for Clark County.
- **Cowlitz County** – We have met with the people from Cowlitz County. They have given us their data and we are working with Central Washington University to conflate the LRS data for them. They are prepared to maintain that data.
- Please refer to WA-Trans Processes and Software for more work which is funded under the One-Road Pilot.
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Additional Funded Counties:

- Whatcom – we have had contact and meetings with them. They are looking to create one centerline and maintain it and would like our help.
- Lewis – we still have to make contact with them.
- Skagit – we have been notified of some additional funding we will be getting during the next federal fiscal year which we will use to fund implementation of Skagit County. This will give us the whole I-5 corridor.
- We are considering using the funds also to do the unfunded counties in the eastern regional dataset. However we need to make sure these are the top priorities for our contributors and that we have all the funds we need to complete our current priorities first.

Resources

Central Washington University has been an important resource for us and is going to continue to work on conflation for us. We anticipate working with them more closely due to the hiring freeze in State Government now and because of their research focus. If they are unable to continue to support us at the level we need we will be approaching other universities to participate.

Participation

Because of our work on the Eastern Regional Dataset we can add more participants from Whitman, Ferry, and Stevens Counties.

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WA-Trans Processes and Software:

Please refer to the diagram at the end of this report regarding the steps described in this report:

- **New Provider / Changed Data Initiation Process** was sent out for first draft review last week. Any feedback you can provide is appreciated.
- The **Data Provider Portal** is 95% complete in a test environment. There is some funding to move it to a production environment. Some functionality will have to be added to the FME Server side to complete that. It has been tested and there is a couple of features the vendor is fixing for us.
- The **Transform and Load process** has had the most work done on it. We have been able to improve the time it takes to build a data provider transformation from 200 hours to between 20 and 40 hours. We have discovered some address range anomalies that require that we make some changes to our database and the transformation process to be able to document and handle these issues. We are building transformers for our implementations as needed.
- The **Initial QA/QC** process is 90% complete. The report back to data providers has been tested and is working well. The only thing left are adjustment we might make as we make minor changes to the database.
- The **Change Detection** process is 95% complete. Barring unforeseen database changes it is complete. This is developing from a combination of FME against the spatial tables registered with the geodatabase and SQL stored procedures against the SQL tables.
- **Change Management** is the promotion of new and modified data from the WA-Trans Loading database into the Staging database. This has been implemented using FME and SQL and is 90% complete at this time.
- **QA/QC Processes** (see diagram): We are around 85% complete with the **Pre-processing QA/QC**. We have discovered that there are some additional checks for special address handling and some segmentation issues we need to add to this. We are around 30% complete with **Post-processing QA/QC** for conflation and integration in the staging database. We really have to determine how these processes will work in implementation to be able to automate them for maintenance.
- **Coincident Comparison Process'** function is to determine what road segments are the same between different datasets. The process needs to determine candidates for an automated process to manage. The goal is to reduce the data that need to be viewed by a human as much as possible. This will be used for several issues as we start adding WSDOT data to WA-Trans.
- We still have a great deal to work on in the integration, conflation and segmentation processes. Right now this is where most of our effort is going. We are working closely with CWU on business rules in support of this.
- The **Data User Portal** has been tested. We are waiting for the vendor to fix a couple of things that are not working correctly. In a prototype mode it is 95% complete. We anticipate having to get funding to set it up in a production mode and support for a production environment.

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- ***Extraction Query and Transformation Out*** - Related to the Data User Portal and it becomes more important as we look to providing data to the Incident Location Tool. We will be exploring how to do this in some depth in the next several months.
- The ***Loading Database*** is 90% complete as it is now. Some minor changes may take place as we work out the addressing situation. The ***Staging Database*** is being changed as we develop more of the integration processes. The ***Production Database*** is pretty stable at this time.

Next Meeting

The next WA-Trans Steering Committee meeting will be:

Wednesday October 7, 2009
1:00 p.m. – 3:00 p.m.
Transportation Building
310 Maple Park SE
Olympia, WA

With video-conferencing in Spokane and Seattle (Shoreline). Details will be sent out in advance for sign-up for video-conferencing.

Please reserve this data on your calendar.

For more information please visit:

<http://www.wsdot.wa.gov/mapsdata/transframework/default.htm>

Or contact Tami Griffin at 360.596.8926.

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WA-Trans Conceptual Architecture 10-2008

