Utah's State Geographic Information Database (SGID): Transportation & Addressing Efforts

- **GIS Data Layers**
  - **Street Centerlines**
    - **Functional Uses**
      - Base Map Layer
      - Address Location (Range-Based Geocoding)
      - Linear Referencing (UDOT Route/Milepost)
      - Vehicle Routing/Directions
      - Road System Physical Inventory
    - **Users (partial list)**
      - **Blue Stakes of Utah**
        - Call Before You Dig
        - Utility Marking
      - **State Tax Commission**
        - Mobile Phone Sales Tax Collection
        - Proposed Streamlined Sales Tax
      - **Emergency Dispatch**
        - Caller Address Location
        - Jurisdiction
        - Response Routing
      - **Disaster Response**
        - Planning
        - Situational Awareness
      - **Public Safety**
        - Crash Analysis
        - Incident Reporting
      - **Infrastructure Inventory and Maintenance**
        - UDOT
          - System Inventory and FHWA Reporting
          - Federal Funding for State & Locals
          - Traffic Modeling
          - Pavement and Lane Inventory
          - Structures Inventory
        - Local Govt
          - Surface Type
          - Jurisdiction
          - Restrictions
      - **Economic Development**
        - Site Selection
        - Business Location Analysis
        - Tourism
      - **Health**
        - Epidemiology
      - **Environmental Quality**
        - Public Information
        - Regulatory Response
      - **Legislature**
        - Redistricting
        - Policy Analysis
      - **Governor's Office**
        - Registered Voter Database
      - **Public Lands Coordination Council**
        - RS2477 Road Claims
        - Resource Management Planning
      - **Federal Partners, TFTN**
      - **Private Sector**
        - Local
        - Regional
        - National & Global
  - **Address Points**
    - **Functional Uses**
      - Address Location (Range-Based Geocoding)
      - Base Map Layer
    - **Users (partial list)**
      - **Blue Stakes of Utah**
      - **State Tax Commission**
        - Mobile Phone Sales Tax Collection
        - Proposed Streamlined Sales Tax
      - **Emergency Dispatch**
        - Caller Address Location
        - Jurisdiction
      - **Disaster Response**
        - Planning
        - Situational Awareness
      - **Economic Development**
        - Site Selection
        - Business Location Analysis
      - **Health**
        - Epidemiology
      - **Environmental Quality**
        - Public Information
        - Regulatory Response
      - **Legislature**
        - Policy Analysis
      - **Governor's Office**
        - Registered Voter Database
      - **Federal Partners, TFTN**
      - **Private Sector**
        - Local
        - Regional
        - National & Global
- **Related AGRC Projects**
  - **AGRC Key Project Staff**
    - Spencer Jenkins, Incoming AGRC Director
    - Bert Granberg, SGID Group Manager
    - Kelly Green, Statewide Road Centerline Database Coordinator
    - David Buell, Data Analyst (Public Safety Liaison)
    - Hussein Yazdani, Data Analyst (Local Government Liaison)
  - **USGS CAP Planning Grant**
    - **Steering Committee Members**
      - Joe Borgione, Alpine Geographic
      - Scott Davis, Sandy City Public Utilities
      - Bert Granberg, AGRC
      - Craig Hancock, UDOT
      - Nancy Luchetti, Washington County
      - Dave Vincent, USGS
      - James Wingate, Blue Stakes of Utah
      - Don Wood, Wasatch County
    - **Project Specifications**
      - **Project Goals**
        - Create a Transportation/Addressing Users Group
        - Refine Current Data Standards
        - Refine Data Sharing & Aggregation Processes
        - Formalize Data Sharing Agreements
      - **Expected Outputs**
        - Best Practices Data Standards and 'How-To' Documentation
        - Quality Assessment/Control Processes & Tools
        - Tools for Deriving Related Data Products
        - Statewide Address Coordinate System Definitions
        - Improved Functional Capability
          - Base Map Layer
          - Address Location (Range-Based Geocoding)
          - Linear Referencing (UDOT Route/Milepost)
          - Vehicle Routing/Directions
          - Road System Physical Inventory
        - Data Sharing Agreements
  - **Broadband Mapping Project**
    - **Data Collection & Verification**
      - Address-level Analysis of BB Provider's Subscriber Database
      - Community Anchor Institution BB Mapping
        - Data Elements
          - Institution Name
          - Institution Type
          - Geographic Point Location
          - Address
          - Broadband Service Type
          - Broadband Speed
        - Sources
          - Association of Counties (UAC)
          - League of Cities and Towns (ULCT)
          - Utah 911 Committee
          - Utah Hospital & Health Assoc
          - Utah TeleHealth Network
          - Workforce Services
          - GOPB, Voting, Polling Locations
          - UEN Higher Ed Affiliates
          - State Office of Education
          - Private Colleges
    - **Address Point Data Development**
      - Partnership with Local Government
        - Develop Standards
        - Year 1: $200K
- **Data Challenges**
  - **State Stewardship or Local Stewardship?**
    - State Data Administrators
      - Concern for Standards/Interoperability
      - Requirements Knowledge for Enterprise-level Data Uses
      - Knowledge of Aggregation Issues
      - Emphasis on Coordination and Capacity Building
      - Acknowledgement of the Need for Local Contributions
    - Local Data Administrators
      - Closest to Issues/Geography
      - Knowledge of Local Exceptions
      - Frequent Use of Data
      - Can Make Updates Quickly
  - **Balancing Data Aggregation Process**
    - Updates from Locals
    - Need for Statewide Data Cohesion Across 5 Functional Use Areas
  - **Keeping Data Current**
    - Discovery of Physical Changes (Pre-Build Desirable)
    - Propogating Change Notices
    - Local Capacity/Comittment/Resources
    - Build Data History: Period Archiving or Edit Timestamping
  - **Efficiencies**
    - Minimize Redundancies
      - Where Possible, Integrate Related Map Layers
      - Collect Field Data Once, Only Where Necessary
      - Make Data Edit/Update Once and Share Laterally, Vertically
    - Maximize Awareness and Utilization of this Data Resource
  - **Meet User Needs**
    - Build Data Right the First Time
    - Goal: Lower Costs, Less Work
    - Plan for Both Short and Long Term Success
    - When in Doubt, KISS