

Arizona Partnerships: For an all Public Road Network State Driven, Locally Owned



Hopi Nation
Monday, December 08, 2014

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Background



- The National States Geographic Information Council (NSGIC) which is constituted from a representatives from each state, started an initiative called "Transportation for the Nation" or (TFTN).
- It has long been recognized that a complete highway network was lacking in the US. The Strategic Plan that was created from TFTN identified the Highway Performance Monitoring System (HPMS) as the current best hope to accomplish a successful development of the initiative.

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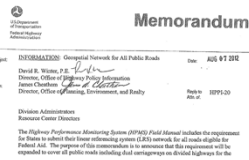


Background



Federal Highway Administration:

- Sent a memorandum to the state DOT's requiring an all public road network to be submitted to FHWA by June of 2014.



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Background



Federal Highway Administration:

- In early 2013 FHWA started calling the All-Public-Road Network project ARNOLD (All Roads Network of Linear referenced Data)
- The TFTN calls for the ability to support addressing. FHWA is partnering with the US Census Bureau to capitalize on the hard work to produce the TIGER Line.
- Although there is no requirement for a State to report Address or address ranges in HPMS, it is anticipated that ARNOLD will be capable of supporting address data.

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Challenges



- Availability of Resources
 - State DOT does not have sufficient staff to support this work and does not have enough knowledge of local roads
- Statewide Coordination
 - Many local agencies contribute data, how is this coordinated
- Sustainability
 - We want to assure this is not a one time proposition

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Availability of Resources



- Arizona DOT
 - Has only 1-2 staff dedicated to centerline/LRS
 - Limited time and effort to research and validate every road in the state
- County, City, Tribal E911
 - Local staff are primarily focused on their areas only
 - Limited time and resources to connect response areas to State and other local jurisdictions

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Statewide Coordination



- ❑ Arizona DOT
 - ❑ Developing a system of Demarcations points delineating jurisdictional edges
 - ❑ Conducting a dedicated project to edge-match centerlines from around the state
 - ❑ Bringing funding such as HSIP/SPR to aid in the creation of local centerlines and support coordinating technology
 - ❑ Providing a common standard for statewide coordination

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Statewide Coordination



- ❑ County/City E911
 - ❑ Brings dedicated focus on the local region
 - ❑ The E911 system relies on very accurate data
 - ❑ Has a business requirement to keep data current
 - ❑ Next Generation E911 will improve an already capable system

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Statewide Coordination



- ❑ Combine State and Local efforts
 - ❑ Arizona DOT coordinating with State Cartographer's Office, State 9-1-1 Office and Broadband Project
 - ❑ Arizona DOT providing the drive to bring the road centerlines together with projects, guidance, and funding.
 - ❑ County, City, Tribal E911 own the local road and therefore have a high degree of focus on quality and accurate data.

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Statewide Coordination



Benefits

- ❑ Local roads data provided by Local sources results in increased data ownership and higher quality data
- ❑ Robust Linear Referencing for All-Public-Roads
- ❑ Common All Roads Network for all Arizona public roads
- ❑ Leveraging resources from other projects and stakeholders

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Sustainability



- ❑ Sustaining this effort can only be achieved through partnerships
- ❑ Partnerships between State and local governments combine resources to address common issues
- ❑ Work together to improve the overall data quality and improve coordination
- ❑ Partnerships build trust, trust builds sustainability

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Questions

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Multimodal Planning

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Arizona Partnerships: Arizona 9-1-1

VOICE

PICTURE

VIDEO

TEXT

SOCIAL NETWORKING

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Statewide Network Partnerships

- ADOT
 - All Public Roads Network (federal)
- Arizona Broadband
 - American Recovery and Rehabilitation Act – ARRA (federal)
- Arizona State Land and the Arizona Geographic Information Council (AGIC)
 - Arizona Geospatial Clearinghouse – AZGEO (state)
- Arizona 9-1-1
 - Completed road network for remaining 9-1-1 systems and assists with preparation for Next Generation 9-1-1 (public)



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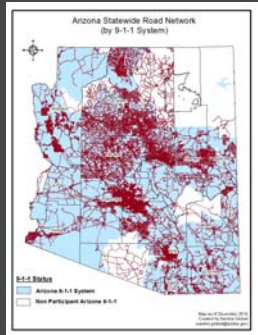
Next Generation 9-1-1

- What is Next Generation 9-1-1 (NG911)?
 - Migrates the 9-1-1 system from the existing analog network to an IP based digital network.
 - Will support new types of emergency 9-1-1 requests for assistance to include voice, text, apps and other emerging technologies.
 - Utilizes GIS to provide caller location information and for emergency call routing.

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Arizona Road Network: NG911 Preparation

- Completes road network to support 9-1-1
 - ✓ Today and Future
- Allows for QA/QC reporting and maintenance:
 - ✓ Gaps
 - ✓ Overlaps
 - ✓ Duplicates
 - ✓ Parity
 - ✓ Edgemark



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AZGEO

<https://azgeo.az.gov>

Arizona State Land
<https://land.az.gov>

Arizona Geographic Information Council
AGIC
<https://arcgis2.geo.az.gov/agic/welcome-agic>

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Questions

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