West Virginia GIS Technical Center
West Virginia University
Department of Geology and Geography Eberly College of Arts and Sciences

March 3, 2019

MEMORANDUM OF UNDERSTANDING
**** Hardy County E-911 Addressing Project ****

SUBJECT: Hardy County Addressing Project MOU among the following partners: Atlas Geographic Data Inc., West Virginia University, and Hardy County

This Memorandum of Understanding (MOU) and Statement of Work sets forth the terms and understanding among the Vendor (Atlas Geographic Data Inc.), the State of West Virginia (West Virginia), and the local government beneficiary (Hardy County, West Virginia) of the following professional GIS services: to inventory, edit, and update E-911 road centerlines and site points for an estimated **9,685 structures** in Hardy County.

Funding
Funding for this MOU is from FEMA's Hazard Mitigation Grant Program, Statewide Multi-Hazard Risk Assessments (TEIF/TEAL), Project Number: FEMA-4273-DR-WV-0031, Performance Period: 6/20/2018 to 6/4/2021. The grant recipient is the State Hazard Mitigation Office, WV Division of Homeland Security and Emergency Management; grant sub-recipient the WV GIS Technical Center at West Virginia University. Complete and accurate E-911 Addresses are important for pinpointing and identifying structures in at-risk hazard zones.

Duration
This MOU is at-will and may be modified by mutual consent of the authorized officials listed at the end of this document. This MOU shall become effective upon signature by the authorized officials and will remain in effect until modified or terminated by any one of the partners by mutual consent.

Overview
A qualified GIS professional services company will edit, update, inventory, and re-address E-911 structure address points and road centerlines. The resulting project will yield a spatially accurate, GIS addressing dataset, identifying the correct address and location of each habitable structure within Hardy County. The final data format will be easily incorporated into the County's existing 911 Computer Aided Dispatch system.

In order to accomplish this task, Atlas Geographic Data will perform a series of tasks which are consistent with the workflows performed for the other successful West Virginia E-911 addressing projects delivered by this company. Existing GIS data will be gathered and assessed to determine current accuracy of spatial location, associated attributes, and data schema in relation to NENA addressing standards. Once data assessment is complete, work will begin to correct and modify all inaccuracies. This will include both in-office and field efforts

to achieve the desired resulting dataset. The individual tasks are outlined below. Based on Hardy County's current data it is expected to have a final address point total of approximately 9,685.

Table 1. Work Tasks, Schedule, and Costs

ADDRESSING WORK TASKS	TIME PERIOD	COST
TASK 1: [DATA INVENTORY AND ASSESSMENT] Collect and assess existing County data and determine the necessary in-office tasks to prepare data for editing task.	2/1/19 to 2/21/19	$300
TASK 2: [UPDATE OF NEW ADDRESSES] Update current addressing dataset with recent newly assigned addresses per county files. Estimated 200-300 address points. **Hardy County is responsible for adding new addresses and digitizing new roads.**	2/21/19 to 4/12/19	$0
TASK 3: [DATA SPATIAL ADJUSTMENT] Perform spatial adjustment of address points and centerlines per 2018 orthophotography including moving all address points to the appropriate structure and updating road centerline geometry where necessary. All discrepancies encountered during spatial adjustment phase will be reported upon final delivery to be resolved by Hardy County. Example of said discrepancies would include multiple address points nearby multiple structures where all available resources (parcels, aerials, etc.) do not yield a confident placement per structure.	4/15/19	$2,700
TASK 4: [QC/MSAG & TELCO RECONCILIATIONS] Perform QC and reconciliation processes on post edit data described in Task 2. This will include flagging any road centerline changes that will require MSAG updates and reconciliation report of address points to TELCO subscriber database. A report of MSAG and Telco discrepancies will be provided upon final delivery to be resolved by Hardy County.	4/15/19 to 8/2/19	$500
TASK 5: [DELIVERY OF FINAL DATA AND REPORTS] Final QC and generation of appropriate reports to be delivered to Hardy County along with final GIS database. **It will be the responsibility of Hardy County to coordinate with the current E-911 Computer Aided Dispatch vendor to load completed GIS dataset into dispatch.**	8/5/19 to 8/23/19	$0
Total project funding paid by FEMA Hazard Mitigation Grant to Hardy County		**3,500**

Table 2. Partner Responsibilities

RESPONSIBILITIES
VENDOR: [ATLAS GEOGRAPHIC DATA INC.] • Lead technical unit for coordinating and completing all deliverables • Complete addressing work tasks, training, and deliverables in accordance with **WVU State Contract U19Atlas** dated January 14, 2019. Follow pricing schedules in accordance with same contract. Adhere to national and state E-911 standards and specifications.   o http://data.wvgis.wvu.edu/pub/temp/FEMA/FRA/Contracts/Digital_Tax_Maps_and_Addresses-Contract_20190114_(U19ATLAS).pdf • Submit monthly progress reports to State and County • Submit invoices that follow a file naming convention associated with project name and completed tasks (e.g., Hardy_County_Addresses-1_Tasks_1-3_20190415) • Provide technical support and training during the mapping activity. Continue technical support to jurisdiction for one year after delivery of product deliverables. • Provide completed deliverables to State and County including metadata • Warrant data quality and mapping for 18 months after contract completion
STATE: [WVU AND WVDHSEM] • Assist with the Memorandum of Understanding/Statement of Work • Review completed work tasks and deliverables prior to authorizing payments • Communicate to grant sponsors regarding work progress and deliverables

LOCAL: [HARDY COUNTY]
• Review and approve MOU that lists specifications, timelines, and deliverables
• Identify a technical point of contact for the project
• Provide best available addressing data and GIS files
• Provide in-kind support for field mapping of addresses and uploading addressing files into Computer Aided Dispatch
• After project completion:
  o Continuously maintain digital E-911 addresses and submit updated address files annually to the Statewide Addressing and Mapping System (SAMS). Specifically, every year during the month of January, Hardy County shall provide its updated street and site address files to the SAMS in accordance with the standardized address exchange format set forth by the WV Division of Homeland Security and Emergency Management. The point of contact is Nuvia E. Villamizar, GIS Manager / SAMS Program Leader, WV Division of Homeland Security and Emergency Management, (304) 558-5380, Nuvia.E.Villamizar@wv.gov
  o Enact or maintain an addressing ordinance that provides statutory authority for county or municipal addressing, clearly states addressing standards, describes the process for assigning new road names and property numbers, and directs that updated addresses be submitted to the Statewide Addressing and Mapping System (SAMS).
  o Send a Letter of Appreciation to grant sponsors using a letter template provided by the State
  o Complete an online survey on client satisfaction regarding overall project implementation and deliverables

Table 3. Project Goal and Deliverables

OBJECTIVE AND DELIVERABLES
OBJECTIVE: To inventory, edit, and update E-911 road centerlines and site points for an estimated 9,685 structures in Hardy County, West Virginia.
DELIVERABLES: Spatially accurate site and street addresses, Master Street Address Guide (MSAG), all to be updated in the County's Computer Aided Dispatch (CAD) system and Statewide Addressing and Mapping System (SAMS).
COST: Total estimated cost is **$3,500**

Table 4. Partner Signatures

Partner	Authorized Representative	Signature and Date
Vendor	Hays Lambert President Atlas Geographic Data Inc. (910) 256-9892 hlambert@atlasgeodata.com	Hays Lambert Digitally signed by Hays Lambert DN: cn=Hays Lambert, o=Atlas Geographic Data, Inc., ou, email=hlambert@atlasgeodata.com, c=US Date: 2019.03.05 16:25:22 -05'00'
State	Kurt Donaldson Manager WV GIS Technical Center West Virginia University (304) 293-9467 kdonalds@wvu.edu	Kurt Donaldson Digitally signed by Kurt Donaldson DN: cn=Kurt Donaldson, o=West Virginia University, ou=WV GIS Technical Center, email=kdonalds@wvu.edu, c=US Date: 2019.03.05 14:26:36 -05'00'
County	Melissa Scott Hardy County Planner / Floodplain Manager (304) 530-0257 mscott.hardyplanner@gmail.com	Melissa Scott
County	Paul Lewis Hardy County E-911 Director (304) 530-0291 hardyeoc@hardynet.com	Paul R Lewis