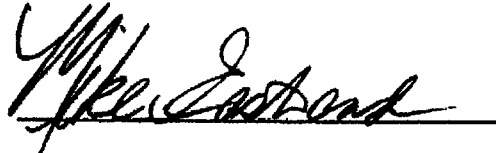**ADDENDUM**
INTERLOCAL AGREEMENT
WITH NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS
AND
Johnson County

This addendum is to extend the termination date of the interlocal Agreement with the North Central Texas Council of Governments for 9-1-1 Services initiated on September 1, 2015. This addendum will extend the current interlocal agreement.

_____
Judge Roger Harmon
County Judge

_____8/14/17_____
Date

_____
Mike Eastland, Executive Director
North Central Texas Council of Governments

_____8/16/17_____
Date

The "9-1-1 Addressing Coordinator" shall manage and facilitate all 9-1-1 GIS activities within the county, including all municipalities within the counties jurisdictional boundary, to develop and enhance the
9-1-1 GIS coverage required for mapped ALI, and Next Generation 9-1-1 (NG9-1-1) applications that are used to assist in locating 9-1-1 callers and route 9-1-1 callers to the correct Public Safety Answering Point (PSAP).

Spatial Data Layers

The 9-1-1 Addressing Coordinator must develop, compile and maintain current, seamless countywide coverage for the following layers:

I.	Address Structure Points
II.	Road Centerlines
III.	City Boundaries
IV.	County Boundaries
V.	Emergency Service Zones (ESZs)
VI.	Emergency Service Boundaries (ESBs) such as Fire, Law, EMS, and PSAP where applicable[1]
VII.	MSAG Community Boundaries
VIII.	Exchange Boundaries
IX.	Fire Hydrants
X.	Mile Markers
XI.	PSAP Point locations
XII.	Zip Code Boundaries (where possible)

The 9-1-1 Addressing Coordinator shall provide data to the NCTCOG 9-1-1 GIS Department with 100% complete attribution for all data features containing the following information:

- Road centerlines spatially accurate to within + or – 10 feet verified by GPS if possible, or digitized over spatially accurate Satellite or Aerial Imagery and drawn in the correct direction for the corresponding address range;
  - The following fields at a minimum need to be attributed:
    - Data Source
    - User ID
    - Date Modified
    - Range information (Left From, Left To, Right From, Right To, High and Low)
    - Pre-directional
    - Street Name

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[1] NCTCOG will discuss editing procedures for Emergency Service Boundaries (ESBs) with the counties. In certain cases, editing of these layers will be disabled on county datasets.

- Road Type
- Post Directional (Suffix)
- Road Full Name
- Road Class
- ESN Left and Right
- County Left and Right
- State Left and Right
- MSAG Community Left and Right
- Zip Code Left and Right
- Exchange Boundary Left and Right
- Maintenance Authority[2]

- Addressed Structure Points spatially accurate to within + or − 25 feet;
  - The following fields at a minimum need to be attributed:
    - Data Source
    - User ID
    - Date Modified
    - Structure Number
    - Address Prefix (if applicable)
    - Structure Road Name
    - Structure Name
    - Structure Type
    - Structure Suffix
    - Road Full Name
    - Structure Full Name
    - Structure Class (if applicable)
    - Structure Type (if applicable)
    - ESN Number
    - MSAG Community Name
    - Community Name
    - Postal Community Left and Right
    - Zip Code Left and Right
    - Exchange Boundary Left and Right
    - Maintenance Authority

- City Boundary polygons spatially accurate to within + or − 50 feet of their true location
  - The following fields at minimum need to be attributed:
    - Data Source
    - User ID
    - Date Modified
    - City Name
    - County Name

- County Boundary polygons spatially accurate to within + or − 50 feet of their true location[3]
  - The following fields at minimum need to be attributed:
    - Data Source

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[2] Source responsible for maintaining the data
[3] NCTCOG understands that this may not always be possible based on political decisions and surveyor error

- User ID
- Date Modified
- County Name

- Emergency Service Boundary (ESB) polygons
  - Based on the Next Generation 9-1-1 Requirements and Industry Standards[4], accuracy is paramount when editing the spatial properties of the ESB boundaries and attributing the fields.
  - NCTCOG will need to work with each county on a case-by-case basis to resolve any spatial and attribute changes to the ESB boundaries and tables.

- Emergency Service Zone (ESZ) polygons spatially accurate to within + or – 50 feet of their true location
  - The following fields at a minimum will be attributed:
    - Data Source
    - User ID
    - Date Modified
    - Emergency Service Number (ESN)
    - ESN City Name
    - ESN County Name
    - Law Responders
    - Fire Responders
    - Medical Responders
    - PSAP Name

- 9-1-1 MSAG Community polygons spatially accurate to within + or – 50 feet of their true location.
  - The following fields at a minimum will be attributed:
    - Data Source
    - User ID
    - Date Modified
    - 9-1-1 Community Name
    - County Name

- Exchange Boundary polygons spatially accurate to within + or – 50 feet of their true location.
  - The following fields at a minimum will be attributed:
    - Data Source
    - User ID
    - Date Modified
    - Exchange Telco Name
    - Exchange Name
    - Exchange Tandem Name

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[4] NENA 08-003v1 and NENA 71-501v1

Map Update Process

The 9-1-1 Addressing Coordinator shall ensure that the 9-1-1 Child Replica Database is synchronized with the NCTCOG Parent Database on a daily basis[5] using Web / Geodata Services hosted by NCTCOG. The 9-1-1 Addressing Coordinator shall be responsible for updating all GIS data in the county including municipalities within their jurisdiction as frequently as possible.

Quality Control

The 9-1-1 Addressing Coordinator shall perform Quality Control on their data prior to synchronizing the 9-1-1 Child Replica Database with the NCTCOG Parent Database. The County shall resolve conflicts and problems related to the 9-1-1 GIS data maintained by the County on a daily basis and communicate issues with each of the municipalities within its jurisdiction on a monthly basis. If any matter regarding the GIS data arises in which the County cannot resolve on its own, the County must contact NCTCOG within three business days to determine the best course of action to resolve the issue[6]. The 9-1-1 Addressing Coordinator shall adhere to the requirements outlined in the Enterprise Geospatial Data Management System (EGDMS).

Data Backup

At a minimum, the County shall: Maintain weekly backup copies of critical 9-1-1 GIS data, which shall be stored on a removable media device within a secure location[7].

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[5] NCTCOG will be providing automated processes to ensure synchronization. As of July 2017, Counties will still be required to manually synchronize the database.

[6] NCTCOG will be supplying QA/QC scripts to assist the County

[7] NCTCOG will work with each County Addressing Office to automate this backup process

GIS and Addressing Standards

The 9-1-1 Addressing Coordinator shall comply with NENA GIS and Addressing Standards, in particular, the following NENA documents can be used as a reference[8]:

- o 02-014
- o 02-015
- o 71-501
- o 08-502

The 9-1-1 Addressing Coordinator shall familiarize themselves with the following Next Generation 9-1-1 / i3 NENA Standards documentation:

- o 08-002
- o 08-751

NCTCOG will supply documentation to each County Addressing Office that will assist the County in "Workflow" processes such as Standard Operating Procedures (SOPs). This documentation will be made available to the County Addressing Office via a secure website, USB device, or email, and updated on a regular basis. The County shall review this documentation and provide changes, recommendations, or comments to NCTCOG at the end of each quarter of the Financial Year[9]. It is imperative that the aforementioned documentation is updated by the County Addressing Coordinator to ensure the success of the 9-1-1 operations in the counties and the safety of its citizens.
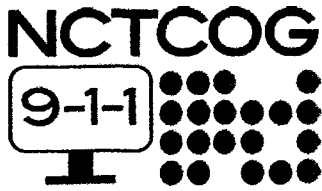
Communication and meetings

The 9-1-1 Addressing Coordinator will attend regularly scheduled meetings at NCTCOG. NCTCOG will aim to host a 9-1-1 GIS / Addressing meeting once per quarter, either at NCTCOG's location or via virtual web technology.

The 9-1-1 Addressing Coordinator shall track County Commissioner's Court and City Council meetings that relate to development and improvement of GIS implementation for emergency services delivery. If an issue arises where either the County commissioner's court or City Council takes a course of action that would interfere with or be inconsistent with the data development and maintenance procedures followed by the County, the County needs to notify NCTCOG personnel within two business days.

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[8] A full list of all NENA Standards documentation can be found here: http://www.nena.org/?page=Standards

[9] A schedule with exact dates of when to submit changes, recommendations, or comments will be sent to each County Addressing Office

NCTCOG 9-1-1

COUNTY GIS AND ADDRESSING DISBURSEMENT

County GIS & Addressing Disbursement Model	Description: Establishes a methodology by which District pays Counties for maintenance and submission of GIS/addressing databases on a performance metric and provides for an in-house transition option.
Date of Approval:	Revision History:
Effective Date: The initial date is September 1, 2017 and renews annually thereafter on September 1 of each subsequent year.	Scheduled for Review:
Topic: GIS	Administering Department: NCTCOG 9-1-1

OVERVIEW: NCTCOG 9-1-1 created a methodology by which disbursements **may** be made to participating Counties for their assistance in providing address updates and GIS database maintenance. The methodology of disbursement will include inputs that reflect the relative address activity in the Counties (i.e. growth) and accuracy in their submitted data.

NCTCOG 9-1-1 staff will prepare quarterly reports that demonstrate the Counties' activity and performance throughout the year. The disbursement rates will be set annually for the upcoming budget year, in sufficient time for the Counties to include in their next budget cycle. Any major changes in the disbursement method will be communicated to the Counties and to the Regional Advisory Committee for input and feedback.

NCTCOG 9-1-1 further establishes a transition option to take GIS database maintenance in-house in such instances where the County requests the transition, or in situations where performance standards are not met. The disbursement rate would be adjusted accordingly.

NCTCOG 9-1-1 is not bound by law nor contract to make these disbursements, but chooses to assist counties with its funding, in an effort to provide adequate support for a highly accurate and efficient database system.

1

DEFINITIONS AND AUTHORIZATIONS:

Interlocal Agreements (ILAs) between NCTCOG 9-1-1 and the Counties provide for minimum expectations of the County and outline roles and responsibilities of each agency, including GIS and performance expectations. In addition, through the State Commission on Emergency Communications (CSEC), the state requires database performance standards of NCTCOG 9-1-1.

Within the remaining document, the following definitions apply:

- **Growth Rates** means the number of new addresses added to the database in a given period.
- **Index** is a relative measure assigned by GIS Project Coordinator that groups Counties into categories based on the activity in their area.
- **Error Improvement** is the percent change in performance (as defined by number of errors) to the prior period.

ACTIONS REQUIRED:

1. GIS Model Preparations

Area of Responsibility - Each county within the NCTCOG 9-1-1 region is ultimately responsible for the 9-1-1 addressing and GIS maintenance within its borders. Exceptions include cities that maintain their own addressing and GIS data, non-participating 9-1-1 entities within the county, or border encroachments from neighboring counties. The NCTCOG 9-1-1 Program maintains a digital representation of the county geographic jurisdiction and this representation is referred to as the *Area of Responsibility*.

Growth Rates – Growth rates are measured utilizing GIS software to extract new address data within the *Area of Responsibility*. The extractions are tracked monthly.

Performance – GIS errors are distributed to the NCTCOG 9-1-1 Program from CSEC as a function of the Enterprise Geospatial Data Management System (EGDMS) process. The process identifies these errors from within the *Area of Responsibility*. Performance is then measured by reviewing the level of error corrections. The results are tracked monthly.

2. Data Cycle Periods

The *Data Cycle Period* begins April 1st and ends the following year on March 31st. *Growth Rates* and *Performance* statistics extracted and tracked during the *Data Cycle Period* are utilized in the GIS Disbursement Model corresponding to the next *annual effective* date.

3. Notification Dates

Annual Reports - Each year or before the 31st of May the NCTCOG 9-1-1 Program will notify the counties of the *Total Annual Disbursements* applicable for the next fiscal year beginning September 1st. Notification will include the *GIS Disbursement Model and Data Cycle Period* statistics.

Quarterly Reports - Quarterly performance reports are issued during each current *Data Cycle Period:*

- July - September period to be reported on or before October 31st
- October - December period to be reported on or before January 31st
- January - March period to be reported on or before April 30th
- April - June to be reported on or before July 31st

NCTCOG 9-1-1

4. Model Stages and Descriptions

Total Budget – Annual financial budgeting distribution to NCTCOG 9-1-1 Program from CSEC.

Step 1:
Addressing Allowance - An annual *Addressing Allowance* is assigned for distribution to each County, as the addressing authority with addressing maintenance responsibilities. Addressing data is to be delivered to the NCTCOG 9-1-1 Program via agreed upon methods and technology.

Step 2:
Distribution Potential – Counties are grouped and indexed based upon *Growth Rates* (Fig.1). The remaining budget (Total Budget less *Address Allowance)* is then distributed in accordance with this indexing.

Growth Rates	Index
0	1
59	1
154	1
217	2
254	2
355	2
397	2
587	2
697	2
1262	3
2942	3
3364	4
3750	4

Figure 1.

* Index will vary based on a relative scale of the new addresses added during each annual Data Cycle Period.

Step 3:
Performance Distribution - The actual percentage of the *Distribution Potential* allocation is based upon GIS *Performance* and error improvement rates. A payment ratio tier system (Fig.2) is established to determine the performance distribution.

Tier	% Error Improvement	% Distribution Potential
I	90-100	100
II	80-89	90
III	70-79	80
IV	60-69	70
V	<60	0

Figure 2.

* Ratio will vary based on a relative scale of error improvement rates during annual Data Cycle Period.
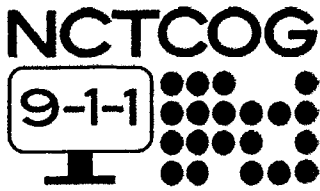
Total Annual Disbursement - The *Total Annual Disbursement* is obtained by adding the *Address Allowance* and *Performance Distribution.*

5. Requirements of County Maintained 9-1-1 GIS Data

Requirements - GIS plays a critical role in 9-1-1, therefore, the NCTCOG 9-1-1 Program requires the highest GIS standards. To maintain the 9-1-1 GIS data and continue receiving the *Performance Distribution* portion of the *Total Annual Disbursement,* the county must:

- Consistently maintain GIS *Performance* rates at a minimum of 90% (Tier I), based upon *Quarterly performance reports*
  - GIS *Performance Rates* below 90 to 100% (Tier I) may result in decreased *Performance Distribution* within the current *Data Cycle Period*
- Consistently maintain a 98% ALI / MSAG match rate as reported quarterly
- Abide by all Inter-local Agreement (ILA) requirements
- GIS contractual agreements between counties and vendors must reflect the "GIS Requirements" portion of the ILA.

6. Transition of County 9-1-1 GIS Data Maintenance In-house

In-House Transition - The responsibility of the 9-1-1 GIS data maintenance may be transitioned from a county entity to NCTCOG 9-1-1. *In-House Transition* may be *voluntary* or *involuntary.* Once an *In-House Transition* occurs NCTCOG 9-1-1 will permanently assume the responsibility of that data.

Voluntary Transition - Counties have the option to voluntarily relinquish the responsibility of the 9-1-1 GIS data maintenance to NCTCOG 9-1-1. Under *Voluntarily Transition* the county agrees to the following:
- Allow time for the NCTCOG 9-1-1 Program to determine resources required and if necessary obtain additional resources
- Counties, as the addressing authority, will continue to maintain addressing responsibilities and deliver addressing data to NCTCOG 9-1-1 via replication
- County will continue to effectively and openly communicate with NCTCOG 9-1-1 all data pertaining to or associated with 9-1-1 Response
  - Including but not limited to new roads, road work, addresses, subdivisions, buildings, construction
- County will continue to receive the *Addressing Allowance* portion of the *Total Annual Disbursement*
- Counties will forfeit the *Performance Distribution* portion of the *Total Annual Disbursement*
- NCTCOG 9-1-1 will maintain the GIS data, error corrections, Automatic Location Information (ALI) and Master Street Address Guide (MSAG) updates In-House
- Once a *Voluntary Transition* occurs NCTCOG 9-1-1 will permanently assume the responsibility of that data.

Involuntary Transition – NCTCOG 9-1-1, under extenuating circumstances, may transition the responsibility of the 9-1-1 GIS data maintenance to *In-House Transition.* Counties unable to fulfill the obligations of the *Requirement* section in this document and consistently exhibit GIS *Performance* rates of less than 60% (Tier 5) are subject to *Non-Voluntary Transition.* Under *Non-Voluntarily Transition* the county agrees to the following:
- Counties, as the addressing authority, will continue to maintain addressing responsibilities and deliver addressing data to NCTCOG 9-1-1 via replication
- County will continue to effectively and openly communicate with NCTCOG 9-1-1 all data pertaining to or associated with 9-1-1 Response

- o Including but not limited to new roads, road work, addresses, subdivisions, buildings, construction
- County will continue to receive the *Addressing Allowance* portion of the *Total Annual Disbursement*
- Counties will forfeit the *Performance Distribution* portion of the *Total Annual Disbursement*
- NCTCOG 9-1-1 will maintain the GIS data, error corrections and ALI / MSAG updates In-House
- Once a Non-*Voluntary Transition* occurs NCTCOG 9-1-1 will permanently assume the responsibility of that data.

INQUIRIES:

Please contact
9-1-1 GIS Project Coordinator
David Dean, *DDean@NCTCOG.org*
(817) 704-5688