

Cowley County, Kansas



Cowley County Emergency 911 Address
Issuance and GIS Layer Maintenance
Policy Manual

Ver. 5.01; December 2019

Purpose

The primary purpose of this policy manual is to provide a uniform set of standards and guidelines to the MIS/GIS Department of Cowley County, Kansas. This policy manual will serve to aid the MIS/GIS Department in creating, updating, maintaining, and issuing proper and authoritative 911 addresses within Cowley County. In addition to serving in this capacity, this manual will set forth best management practices in creation and modification to the street centerline layer. The street centerline layer, in conjunction with the 911 address point layer will serve as the keystone in 911 dispatch services and the precipice of protection for the citizens of Cowley County and their safety in any and all emergency events. This policy manual is geared towards creating an efficient workflow for the emergency responders in Cowley County by creating useful and effectual map amenities. The safety and protection of the citizens of Cowley County is our ultimate and definitive goal.

Secondarily, this policy manual will serve as a guidebook in the maintenance of other emergency and non-emergency GIS layers that can be beneficial to non-emergency departments. These layers will be created and maintained to the same standards.

Finally, this policy manual will serve as the guide for maintaining Cowley County's Emergency 911 layers and will serve as a dynamic guide to conduct Cowley County through ever changing standards that adjust with advancements in data and technology. This policy manual is redefined *ad hoc* whereupon amendments are needed to correct anomalies not anticipated by the original inception of this document. This policy manual will ease the transition into Next Generation 911 as those standards are determined (Federal Communications Commission, 2012). The standards and practices outlined in this policy manual are adopted from the National Emergency Number Association (NENA) and from the U.S. Department of Transportation's (USDOT) Research and Innovative Technology Administration (RITA), as well as best management practices in GIS as advised by ESRI.



COWLEY COUNTY
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Cowley County Emergency 911 Address Issuance and GIS Layer Maintenance Policy Manual
Version 5.01; December 2019
Cowley County, Kansas 911 Committee Approval Date: December 12, 2013
Cowley County, Kansas Board of Commissioners Approval Date: December 17, 2013
Prepared by:
Cowley County, Kansas MIS/GIS Department



Policy Manual Revision History

The following is the documented history of any policy manual additions, deletion, or modifications since the manuals inception and approval by the Cowley County, Kansas Board of County Commissioners on December 17, 2013.

Significant changes, such as additions, deletions, and technical phraseology modifications will be recorded chronologically. Grammatical and/or punctuation corrections will not be recorded.

- 1) Version 1.01 Cowley County, Kansas 911 Committee Approval Date: December 12, 2013
- 2) Version 1.02, July 2014
 - a) Removed *'as it is approved by the Cowley County Commissioners'* from paragraph one of the purpose statement.
 - b) Add *'This policy manual is redefined ad hoc whereupon amendments are needed to correct anomalies not anticipated by the original inception of this document.'* to purpose statement.
 - c) Corrected *'fire districts'* to *'EMS zones'* in Article IV, Section 4.03, sub-section (a).
 - d) Added Article I, Section 1.02 *'Jurisdictional Responsibilities'*
 - e) Renumbered subsequent sections to reflect addition of Section 1.02
 - f) Corrected references to said subsequent citations.
 - g) Added detail in Article I, Section 1.03, sub-section (b).
 - h) Added the paragraph *'If two of more address points are occupying the same parcel...'* in Article I, Section 1.05, sub-section (a(ii)).
 - i) Added *'and ultimately, the landowner'* to the last sentence in Article I, Section 1.06
 - j) Added *'Landowner'* to definitions in Article VIII, Section 8.01, sub-section (g).
 - k) Renumbered subsequent definitions in Article VIII, Section 8.01, sub-sections (h-m).
- 3) Version 2.01, January 2015
 - a) Added Section 1.07 Address Conveyance
 - b) Added *'RMS'* to acronyms in Article VIII, Section 8.02, sub-section(v)
 - c) Renumbered subsequent definitions in Article VIII, Section 8.02, sub-sections (w-y).
- 4) Version 3.01, December 2016
 - a) Added *'of Winfield or Arkansas City'* to Article I, Section 1.02.
 - b) Changed *'must'* to *'may'* in Article III, Section 3.01 sub-section (a).
 - c) Added Article I, Section 1.05, sub-section (c).
 - d) Added *'At least'* to Article I, Section 1.05, sub-section (b).
 - e) Added Article X, Appendix A – Address Request Form
- 5) Version 4.01, June 2017
 - a) Changed *'MISGIS Director'* to *'CCEC Director'* in Article I, Section 1.06, sub-sections (b-d).
 - b) Added *'CCEC'* as Article VIII, Section 8.02, sub-section (c) and renumbered.



- 6) Version 5.01, December 2019
 - a) Added language to Article I, Section 1.03, sub-section (b) regarding the definition of primary access to property.
 - b) Added Article I, Section 1.06, sub-section (e) Appealing an Address Change.



Cowley County Emergency 911 Address Issuance and GIS Layer Maintenance Policy Manual

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Article I. Addresses

Section 1.01 Importance of Proper Addressing

Cowley County is dedicated to the safety of its citizens. Because of this, the need for proper addressing of residences, businesses, and occupied structures is key in locating citizens in times of emergency. In accordance with Cowley County Resolution 98-14 (Cowley County, Kansas, 1998), this policy manual is to serve as a guide in creating, issuing, maintaining, and modifying addresses within Cowley County.

Section 1.02 Jurisdictional Responsibility

The criteria and guidelines as described in Article I, Section 1.03-1.06 are the official policies of Cowley County and will be used in addressing outside of the city limits of Winfield and/or Arkansas City and within the County limits. Any and all addressing inquiries regarding addresses within the city limits of Winfield or Arkansas City should be brought to the attention of the proper city.

Section 1.03 Criteria of a Proper 911 Address

The following is the criteria for a properly assigned 911 address for Cowley County, Kansas.

(a) The Address Number is within Range for the Street Centerline Segment

This criterion is held accountable in respect to the street centerline segment that the residence or structure is claiming as primary access. In general, most county roads will have the odd numbers on the West/South side of the segment, and the even numbers on the East/North side. However, because of variations in sub-divisions, and platted areas, this may not hold true. This is why it is important to regard the individual number in terms of the street centerline segment it is affiliated with for primary access. To meet these criteria, the address must also fall within an acceptable tolerance of the segment range.

(b) The Address Claims the Correct Primary Access

The address must be using the same street as the primary access to the property. Primary access to the property shall be construed to mean the driveway entrance to the property. This street centerline must be a recognized street centerline segment that meets the street centerline maintenance requirements as outlined in Article II, Section 2.01, sub-sections (a-d). This street centerline segment must also be recognized in accordance to Article III.

(c) The Address Claims the Correct Zip Code

The address must utilize the zip code assigned as per the location of the structure within the zip code polygon layer provided by the USPS.

Section 1.04 Standard Addressing Format

In accordance with NENA standards, the addressing format as outlined in the USPS Postal Addressing Standards shall be followed (USPS, 2013) (NENA, 2012). Any questions about

acceptable format and/or abbreviations will be judged based on the criteria of this document or subsequent updated publications in replacement or supplication to this document.

Section 1.05 Address Issuance

Cowley County MIS/GIS will be the responsible party for the issuance, creation, maintenance, and modification of 911 addresses within Cowley County, KS.

(a) Normal Addressing Situations

Under normal addressing circumstances, the following procedure will be followed to ensure a correct 911 address is provided in a timely fashion. A normal circumstance is defined as; a time that a landowner or a proxy of a landowner requests an address for a new structure in order to obtain services to the structure, or, the CCHD Sanitarian needs a 911 address in order to complete a Health Department issued building permit.

(i) Non-addressed Parcel

If a landowner, proxy of the landowner, or CCHD Sanitarian requests a 911 address from GIS personnel, the MIS/GIS Department has 3 business days (24 business hours) to provide the address. If the landowner or proxy is not immediately and personally available to demonstrate to the GIS personnel the location of the entryway or the structure in need of the address, the GIS personnel must physically locate the entryway and collect a GPS point using a commercial grade GPS unit and NENA data collection standards will be followed as referenced in Article I, Section 1.05, sub-section (b).

Upon collection, the GIS personnel will then upload the GPS point into a map document and use the appropriate address locator as described in Article II, Section 2.04 to identify and assign a proper 911 address. The address point will be spatially located on the facility or structure. This address will be loaded into the Cowley County GIS 911 Address Database. This newly assigned 911 address will become the property address for the parcel as recognized by the Cowley County Appraiser's Department.

The GIS personnel will issue an appropriate 911 address to the facility and notify the corresponding parties. Corresponding parties include, but are not limited to:

- The landowner, resident, or proxy making the request
- The Cowley County Appraiser's Department
- The appropriate electrical utility provider
- Address Management of the USPS
- Local USPS via the zip code
- Cowley County Emergency Management

Of the corresponding parties, the landowner, resident, or proxy making the request must be notified via a written letter and a corresponding map document sent via the USPS. The



remaining corresponding parties may be e-mailed.

(ii) Previously Addressed Parcel

If a landowner, proxy of the landowner, or CCHD Sanitarian requests a 911 address from the GIS personnel, the MIS/GIS Department has 3 business days (24 business hours) to provide the address. If the landowner or proxy is not immediately and personally available to demonstrate to the GIS personnel the location of the entryway or the structure in need of the address, the GIS personnel must physically locate the entryway and collect a GPS point using a commercial grade GPS unit and NENA data collection standards will be followed as referenced in Article I, Section 1.05, sub-section (b).

Upon collection, the GIS personnel will then upload the GPS point into a map document and use the appropriate address locator as described in Article II, Section 2.04 to identify and assign a proper 911 address. The address point will be spatially located on the facility or structure. This address will be loaded into the Cowley County GIS 911 Address Database. This newly assigned 911 address will be recognized by the Cowley County Appraiser’s Department, but will not override the existing 911 address on the parcel as the property address.

The GIS personnel will issue an appropriate 911 address to the facility and notify the corresponding parties. Corresponding parties include, but are not limited to:

- The landowner, resident, or proxy making the request
- The Cowley County Appraiser’s Department
- The appropriate electrical utility provider
- Address Management of the USPS
- Local USPS via the zip code
- Cowley County Emergency Management

Of the corresponding parties, the landowner, resident, or proxy making the request must be notified via a written letter and a corresponding map document sent via the USPS. The remaining corresponding parties may be e-mailed.

If two or more address points are occupying the same parcel, it is the responsibility of the landowner to manage the occupancy of the address points. Cowley County is only responsible for the address points to meet proper addressing standards as outlined in Article I, Section 1.03, sub-sections (a-c). This situation primarily deals with RV parks, mobile home parks, or campgrounds with electrical hook-ups. Because we do not authenticate or maintain occupancy records for emergency 911 address point records, we will only recognize the landowner as the grantee on the most current deed of record (Article VIII, Section 8.01, sub-section(g)).

(b) GPS of Address Point

In accordance to NENA guidelines and practice standards, all 911 address points will be collected with accuracy of 10 feet or less 95% of the time with a PDOP of 6.0 or less. At least



thirty positions will be collected at 1 second intervals and averaged for the median spatial location (NENA, 2007).

(c) Address Request Form

Prior to the dissemination of the address to the corresponding parties, an address request form must be completed, signed, and dated by the requesting party. The signed original will be filed with the GIS Coordinator and copies will be provided to the corresponding parties along with the other e-mailed documentation. The current address request form can be found in Article X as Appendix A.

Section 1.06 Address Change

Upon the occasion that an address discrepancy is found, it is the responsibility of the MIS/GIS Department to determine the validity of such claims and ultimately decide if the address fails to meet the criteria of a properly assigned 911 address as outlined in Article I, Section 1.03, sub-sections (a-c).

If deemed necessary, situations may arise where adjustment of a 911 address is needed. Such situations include, but are not limited to:

- Address is out of range.
- Address is incorrectly labeled
- Address poses difficulty to emergency responders
- Address poses difficulty to USPS

Each address change is a unique situation. However, these guidelines are established to alleviate disputes between the MIS/GIS Department, applicable agencies, and ultimately, the landowner.

Upon the determination an address change is needed, the landowner shall be notified of the address change via certified mail. The address change letter shall be accompanied by an appeals form, should the citizen be unhappy with their address change. Upon receipt of the certified address change letter, the landowner shall have 10 business days to respond with any concerns and approximately 20 business days to work out an agreeable solution. In addition, the appropriate utility company and the USPS shall be notified of the address change no later than 5 business days prior to the effective address change date.

(a) Resident Request

Under the situation that the resident, of the address in question, has found their address to be unsuitable, the resident may request for their address to be modified. The GIS personnel will confirm the address in question using the GIS databases and maps at their disposal. At which point, the GIS personnel will make arrangements to visit the location of the address and verify the difficulty of locating the address per the current address.



If the GIS personnel find the structure would be better suited with a corrected 911 address, the GIS personnel will issue an appropriate 911 address to the facility and notify the corresponding parties of the change. Corresponding parties include, but are not limited to:

- The landowner, resident, or proxy making the request
- The Cowley County Appraiser's Department
- The appropriate electrical utility provider
- Address Management of the USPS
- Local USPS via the zip code
- Cowley County Emergency Management
- Cowley County Clerk

Of the corresponding parties, the landowner, resident, or proxy making the request must be notified via a written letter and a corresponding map document sent via the USPS. The remaining corresponding parties may be e-mailed. Other county or municipal departments may request notification of an address modification, but must do so in an e-mail to the MIS/GIS Department. The landowner, resident, or proxy making the request is responsible for following up with the corresponding parties to verify proper address correction within the respective databases. However, any difficulty arising within the corresponding parties will be addressed by MIS/GIS Department if notified by the landowner, resident, or proxy making the request.

(b) Emergency Situation Location Difficulty

In the situation that an emergency responder(s) have sufficient difficulty in locating an address, it will be brought to the attention of GIS personnel. At such time, the address in question will be evaluated to find if it is a suitable 911 address. It will be judged using the criteria of a proper 911 address point located in Article I, Section 1.03, sub-sections (a-c).

If the 911 address is found to meet the criteria of a proper 911 address, the emergency responder(s) will be notified of the situation and a solution for location will be worked at that time.

However, if the 911 address fails to meet the criteria of a proper 911 address, the 911 address point must be rectified. At which point, GIS personnel will make arrangements to visit the location of the address and verify the difficulty of locating the address per the current address and situation as outlined by the emergency responder(s).

If the GIS personnel find the structure would be better suited with a corrected 911 address, the CCEC Director will issue an appropriate 911 address to the landowner.

Of the corresponding parties, the landowner must be notified via a written letter and a corresponding map document sent via the USPS. The remaining corresponding parties may be e-mailed.

The landowner and/or current resident will be notified of the change no less than 30 days prior to the change occurring in the databases. A letter will be mailed via the USPS to show the correction and the effective start date of the corrected 911 address. Then, no later than 5 business days prior to the date of change indicated on the documentation, the corresponding parties. Corresponding parties include, but are not limited to:

- The landowner
- The Cowley County Appraiser's Department
- The appropriate electrical utility provider
- Address Management of the USPS
- Local USPS via the zip code
- Cowley County Emergency Management
- Cowley County Clerk

Of the corresponding parties, the landowner must be notified via a written letter and a corresponding map document sent via the USPS. The remaining corresponding parties may be e-mailed. Other county or municipal departments may request notification of an address modification, but must do so in an e-mail to the MIS/GIS Department. The landowner, resident, or proxy making the request is responsible for following up with the corresponding parties to verify proper address correction within the respective databases. However, any difficulty arising within the corresponding parties will be addressed by the GIS personnel if notified by the landowner, resident, or proxy making the request.

(c) Non-Emergency Department Discrepancy Notification

Upon occasion that the MIS/GIS Department is notified by a non-emergency department of an address discrepancy, it is the responsibility of GIS personnel to investigate the claim and determine the validity of the notification and to assess the accuracy of address. The address will be held to the standards as outlined in Article I, Section 1.03, sub-sections (a-c). If it is determined the address is properly assigned, the informing department or party will be notified of the MIS/GIS Department's decision in writing via e-mail.

However, if the address fails to properly meet the 911 address criteria, the CCEC Director will issue an appropriate 911 address to the landowner as prescribed by GIS personnel.

The landowner and/or current resident will be notified of the change no less than 30 days prior to the change occurring in the databases. A letter will be mailed via the USPS to show the correction and the effective start date of the correct 911 address. Then, no later than 5 business days prior to the date of change indicated on the documentation, the corresponding parties. Corresponding parties include, but are not limited to:

- The landowner
- The Cowley County Appraiser's Department



- The appropriate electrical utility provider
- Address Management of the USPS
- Local USPS via the zip code
- Cowley County Emergency Management
- The informing non-emergency department
- Cowley County Clerk

Of the corresponding parties, the landowner must be notified via a written letter and a corresponding map document sent via the USPS. The remaining corresponding parties may be e-mailed. Other county or municipal departments may request notification of an address modification, but must do so in an e-mail to either the MIS/GIS Department. The landowner, resident, or proxy making the request is responsible for following up with the corresponding parties to verify proper address correction within the respective databases. However, any difficulty arising within the corresponding parties will be addressed by the GIS personnel if notified by the landowner, resident, or proxy making the request.

(d) Citizen Notified Address Discrepancy Notification

Upon occasion that the MIS/GIS Department is notified by a Cowley County citizen of an address discrepancy, it is the responsibility of the GIS personnel to investigate the claim and determine the validity of the notification and to assess the accuracy of address. The address will be held to the standards as outlined in Article I, Section 1.03, sub-sections (a-c). If it is determined the address is properly assigned no action will be taken.

However, if the address fails to properly meet the 911 address criteria, the CCEC Director will issue an appropriate 911 address to the landowner as prescribed by the GIS personnel.

The landowner and/or current resident will be notified of the change no less than 30 days prior to the change occurring in the databases. A letter will be mailed via the USPS to show the correction and the effective start date of the correct 911 address. Then, no later than 5 business days prior to the date of change indicated on the documentation, the corresponding parties. Corresponding parties include, but are not limited to:

- The landowner
- The Cowley County Appraiser’s Department
- The appropriate electrical utility provider
- Address Management of the USPS
- Local USPS via the zip code
- Cowley County Emergency Management
- Cowley County Clerk

Of the corresponding parties, the landowner must be notified via a written letter and a corresponding map document sent via the USPS. The remaining corresponding parties may be



e-mailed. Other county or municipal departments may request notification of an address modification, but must do so in an e-mail to the MIS/GIS Department. The landowner, resident, or proxy making the request is responsible for following up with the corresponding parties to verify proper address correction within the respective databases. However, any difficulty arising within the corresponding parties will be addressed by GIS personnel if notified by the landowner, resident, or proxy making the request.

(e) Appealing an Address Change

In the event an address is changed contrary to the citizen’s wishes, the citizen may appeal the address change by submitting a completed address appeals form to Cowley County Emergency Communications (CCEC) within 10 business days of receipt of the certified address change letter. Upon submission of the completed appeals form, the CCEC Director shall notify the MIS/GIS Department and the County Administrator of the appeal in a timely manner. The CCEC Director shall work with the MIS/GIS Department to determine if there is a better solution to accommodate the citizen appealing the address change within 20 business days of receipt of the completed appeals form. At which point, the citizen shall be notified via certified mail of the final decision regarding the address change.

Section 1.07 Address Conveyance

Addresses are assigned to the geographic location of the structure(s). Because of this, addresses do not transfer per ownership change, but can only be modified to better fit addressing standards Article I, Section 1.03, sub-sections (a-c). The address is sent to the Cowley County Appraiser’s Department and at such time that department will update the property (situs) address within their RMS software. If a valid address already exists for the parcel, it is the discretion of the Appraiser’s department, in communication with the landowner, as to which address (existing or new) will be used.

However, if an address change is made as per Article I, Section 1.06, the corrected address will override any incorrect property (situs) addresses within the RMS software. But, ultimately, it is the Appraiser’s Department’s decision on how to maintain any and all situs addresses within the RMS.



Article II. Street Centerlines

Section 2.01 Maintenance

(a) Segmentation

Within the street centerline database, the geometry will consist of street centerline segments. Each segment will have a minimum of two vertices; an initial vertex and a terminal vertex. If the centerline segment is topologically designated to a section line, there will be only 2 vertices needed. However, if the centerline is found to be an exception to this topology rule (Article II, Section 2.05), there will be as many vertices needed to illustrate the ground representation of the street segment.

Under normal circumstances, a segment will consist of the portion of a roadway between two intersections. However, exceptions do occur, and segments may adjoin at a common vertex that is not a designated street intersection.

(b) Directionality

The street centerline geometry will dictate the direction of the roadway and will be either North-to-South or West-to-East. An exception to this may occur if roadways in subdivisions and/or plats dictate otherwise. Directionality of the centerline segment will serve as directive to ranging attributes.

(c) Ranging

Street centerline ranges within Cowley County, but outside the city limits of Winfield and Arkansas City are primarily county roads on a 1-mile by 1-mile section grid. These roads are ranged according to their geographic location in the county. Odd-numbered county roads that run in a North-to-South direction will have identical or nearly identical ranges to roads on the direct East or West sides. These ranges, beginning in the North at 1000, will increase by 1000 heading south. The East, or 'left', side of the road will contain the even addresses. The west, or 'right', side of the road will contain the odd addresses.

Even-numbered county roads that run in a West-to-East direction will have identical or nearly identical ranges to roads on the direct North or South sides. These ranges, beginning in the West at 1000, will increase by 1000 heading east. The North, or 'left', side of the road will contain the even addresses. The South, or 'right', side of the road will contain the odd addresses.

Exceptions may occur, but will be designated by geographic location within the county, ranges of near-and-similar centerlines following Tobler's First Law of Geography, or plat records.

(d) Jurisdictional Responsibility

All street centerline segments outside of the city limits of Winfield and Arkansas City will fall under the maintenance of Cowley County MIS/GIS. If any part of a street segment lies within a

city limit, the city of coincidence will be responsible for the maintenance of such segment extending past the city limits and terminating at the initial or terminal vertex of the segment.

Section 2.02 Creation

Before the creation of a street centerline segment, at least one of the following criteria must be met:

- Three or more 911 addresses are utilizing the same primary access.
- The private drive to 2 or less 911 addresses is greater than 1,000 feet in length.

(a) Segmentation

Upon the necessary creation of a new street centerline segment, or series of segments, the standards of maintenance as described in Article II, Section 2.01, sub-section (a) shall be followed.

(b) Directionality

Upon the necessary creation of a new street centerline segment, or series of segments, the standards of maintenance as described in Article II, Section 2.01, sub-section (b) shall be followed.

(c) Ranging

Upon the necessary creation of a new street centerline segment, or series of segments, the standards of maintenance as described in Article II, Section 2.01, sub-section (c) shall be followed.

(d) Jurisdictional Responsibility

The creation of any additional street centerline segments outside of the city limits of Winfield and Arkansas City will fall under the jurisdiction of Cowley County MIS/GIS. However, any street centerline segment that falls entirely within, begins within, or terminates within the city limits of Winfield or Arkansas City, will be the responsibility of the respective city.

Section 2.03 Modification

The modification of street centerlines will be implemented when the conditions of segmentation, directionality and/or ranging are not met. With such modifications, the additions, changes, or deletions will be notified to the proper authorities in regards to jurisdictional responsibility. Any and all modifications to the street centerlines will be for adjustment to better meet the criteria of proper street centerlines as outlined in Article II, Section 2.01, sub-sections (a-d).

Section 2.04 Address Locator

In order to assign an appropriate address locator, an address locator will be constructed using the most updated street centerline data. This address locator will follow the address locator description from Section 3 of the Spillman Geobase Administration Manual (Spillman Public Safety Software, 2011). This address locator will be rebuilt with the creation or



modification of any and all street centerline segments as outlined in Article II, Section 2.01-2.02.

Section 2.05 Topology Rules

The topology rules for the street centerline segments will follow topology standards as outlined by NENA (NENA, 2007). The topology rules created must be at least as definitive as outlined by NENA.

However, any topology rules that add to the accuracy and stringency of the layer may be applied if the rule does not negate an already established rule. The additional rule must also not violate any procedures as outlined in Article II, Section 2.01-2.02. Likewise, the modification or creation of a street centerline must not violate any rules as set forth by NENA standards (NENA, 2009).

Article III. Master Street Address Guide (MSAG)

The GIS Coordinator is responsible for the maintenance of the AT&T Master Street Address Guide (MSAG). The GIS Coordinator and the MIS Director will, at all times, maintain a valid username and password to obtain access to the MSAG. Any creation or modification of records to the MSAG will be in accordance to the NENA standardization and quality control as outlined in section 3.1.1 of the NENA 71-501 (NENA, 2009).

Any discrepancy between the street centerline segment layer and the MSAG may result in routing and/or dispatching problems. The following are workflows in order to maintain an accurate MSAG in relation to the GIS street centerline segment layer.

Section 3.01 MSAG Change Request (CR)

Upon the identification of any modifications necessary to the MSAG so that the MSAG will match to the current street centerline segment layer, the GIS Coordinator will be responsible to instigate a MSAG Change Request (CR). The CR will be implemented per the instructions of the most current version of the 9-1-1 Information Manager AT&T Customer Support Guide (AT&T, 2008).

It is also the GIS Coordinator's responsibility to monitor the CR log on the MSAG database and create any and all adjustments necessary to ensure proper accuracy and relations between the MSAG and the GIS street centerline layer.

The standardization of the MSAG as outlined by NENA (NENA, 2009) shall be used to maintain the new MSAG record as it corresponds with the street centerline segment layer. As recommended by NENA, the street centerline segments within the MSAG will correspond with the potential address ranges instead of the actual address ranges (NENA, 2009).

(a) Segment/Range Creation

If any the criterion for street centerline segment creation is met, as outlined in Article II, Section 2.02, the MSAG may be updated. The CR will be implemented per the instructions of the most current version of the 9-1-1 Information Manager AT&T Customer Support Guide (AT&T, 2008).

The standardization of the MSAG as outlined by NENA (NENA, 2009) shall be used to create the new MSAG record as it corresponds with the street centerline segment layer. As recommended by NENA, the street centerline segments within the MSAG will correspond with the potential address ranges instead of the actual address ranges (NENA, 2009).

Section 3.02 ALI Discrepancy Reports (DR)

Upon the notification of any anomalies within the MSAG, the GIS Coordinator will be responsible to instigate a MSAG Discrepancy Report (DR). The DR will be implemented per the instructions of the most current version of the 9-1-1 Information Manager AT&T Customer



Support Guide (AT&T, 2008).

It is also the GIS Coordinator's responsibility to monitor the DR log on the MSAG database and create any and all adjustments necessary to ensure proper accuracy and relations between the MSAG and the ALI.

Section 3.03 Reports

(a) Required

Monthly PSAP reports will be scheduled to automatically generate within the MSAG on the first day of the month. It is the GIS Coordinator's responsibility to export the reports in an MS Excel format. The monthly PSAP report will be sent via e-mail to the E911 Dispatch Director and the MIS Director.

(b) Requests

The E911 Dispatch Director or the MIS Director may request, via e-mail, the generation of more specialized data reports from the MSAG. If such reports are available for creation and export, the reports will be created as outlined in the most current version of the 9-1-1 Information Manager AT&T Customer Support Guide (AT&T, 2008).

Article IV. Emergency Response Layers

Section 4.01 Fire Districts

(a) Responsibility

The responsibility of dictating changes of the fire district layer will rest upon the respective Fire District Fire Chief. If a discrepancy of a district or zone polygon within the fire district layer resulting in the necessity of geographic adjustment, the respective Fire District Fire Chief must be notified in writing. If the discrepancy is first notified to either the MIS Director or GIS Coordinator in written or verbal means, by the public or another department, the MIS Director or GIS Coordinator must first discuss the matter with the respective Fire District Fire Chief prior to beginning any modification process. It is ultimately the responsibility of the respective Fire District Fire Chief to determine if such a claim warrants further modifications to the fire district layer.

(b) Topology Dependencies

Fire District polygons are topologically dependent upon the following layers:

- County Boundary
- Parcels
- Street Centerlines
- City Limits

Section 4.02 Law Zones

(a) Responsibility

The responsibility of dictating changes of the law zone layer will rest upon the respective police chief if the zones are within the city limits of Winfield or Arkansas City. If a discrepancy of a zone polygon within the law zone layer resulting in the necessity of geographic adjustment, the respective police chief must be notified in writing. If the discrepancy is first notified to either the MIS Director or GIS Coordinator in written or verbal means, by the public or another department, the MIS Director or GIS Coordinator must first discuss the matter with the respective police chief prior to beginning any modification process. It is ultimately the responsibility of the respective police chief to determine if such a claim warrants further modifications to the fire district layer.

However, it is the responsibility of the sheriff to dictate any changes of the law zone layer outside of the city limits of Winfield or Arkansas City. If a discrepancy of a zone polygon within the law zone layer, outside of the city limits of Winfield or Arkansas City, resulting in the necessity of geographic adjustment, the sheriff must be notified in writing. If the discrepancy is first notified to either the MIS Director or GIS Coordinator in written or verbal means, by the public or another department, the MIS Director or GIS Coordinator must first discuss the matter



with the sheriff prior to beginning any modification process. It is ultimately the responsibility of the sheriff to determine if such a claim warrants further modifications to the county's law zone layer.

(b) Topology Dependencies

Law Zone polygons are topologically dependent upon the following layers:

- County Boundary
- Parcels
- Street Centerlines
- City Limits

Section 4.03 EMS Zones

(a) Responsibility

The responsibility of dictating changes of the fire district layer will rest upon the respective EMS Director. If a discrepancy of a district or zone polygon within the EMS zone resulting in the necessity of geographic adjustment, the respective EMS Director must be notified in writing. If the discrepancy is first notified to either the MIS Director or GIS Coordinator in written or verbal means, by the public or another department, the MIS Director or GIS Coordinator must first discuss the matter with the respective EMS Director prior to beginning any modification process. It is ultimately the responsibility of the respective EMS Director to determine if such a claim warrants further modifications to the EMS layer.

(b) Topology Dependencies

EMS Zone Polygons are topologically dependent upon the following layers:

- County Boundary
- Parcels
- Street Centerlines
- City Limits



Article V. Dependent (Emergency) Layers

Section 5.01 Street Intersections

Street intersections will be re-evaluated and updated as needed due to any modifications or creations within the street centerline layer. Street intersections shall be in the following format: Street 1 / Street 2. The intersections shall follow the topology rules as set forth by NENA standards (NENA, 2007) (NENA, 2009).

Section 5.02 Street/Railroad Intersections

Railroad/Street Intersections will be re-evaluated and updated as needed due to any modifications or creations within the street centerline or railroad layers. The Railroad/street intersection layer shall be in the following format: Street / RAILROAD. Although NENA does not explicitly describe street/railroad intersections, similar standards as set forth by NENA will be used.

Section 5.03 Points of Interest (POI)

Points of Interest are address points that will usually be referred to in ways other than the official 911 address. These places will include, but are not limited to, stores, restaurants, businesses, public commons, and local establishments. POI's have a known 911 location, but will often be referred to as the name instead of the known address in times of emergency response. The POI addresses within the address table will follow the same NENA standards as resident addresses per NENA standards (NENA, 2009).

Section 5.04 Common Places

Common places are known locations within the county that have a geographic location, but have not been assigned a 911 address. These places are located based on the common place name and/or description that has been assigned by the GIS Coordinator, the MIS Director, EM Director, or the PSAP agency and recognized by the general community. The common places layer is only for points with no discernable address and no way of obtaining a regulatory 911 standard address. If such a common place receives standard address, the point will be removed from the common places layer and placed in the Points of Interest layer and follow all of the NENA standards as outlined in Article V, Section 5.03.

Article VI. Data Provision

Section 6.01 Freedom of Information Act Request

Any and all data requested from the MIS/GIS Department of Cowley County, KS will be subject to The Kansas open Records Act (Kansas, 2002).

Section 6.02 Disclaimer

Any and all data, both spatial and tabular, will have the MIS/GIS Department disclaimer attached or embedded in a fashion that informs the consumer of the data of the purpose, expectations, and limitations of the data. The disclaimer will be as follows:

This data has been prepared from information obtained from federal, state, and local sources. Cowley County cannot be responsible for the accuracy of the information obtained from these sources and certain information contained in this data may have been changed since such information was compiled. Therefore, no warranties or representations whatsoever, expressed or implied, including warranties of fitness, are made by Cowley County with respect to this data. Under no circumstances shall Cowley County be responsible to any party for the costs, expenses, or damages to any person or property arising from the use, misuse, sale, or reliance upon this data.

(a) Hard-copy/Printed Data

Any and all printed data will have the disclaimer as outlined in Article VI, Section 6.02, paragraph 2 visibly printed on at least the cover page of the materials provided.

(b) Digital Data

Any and all digital data will have the disclaimer as outlined in Article VI, Section 6.02, paragraph 2 embedded in the metadata of the file or as a DISCLAIMER pdf located with the data.

Article VII. Alternate Name Exclusion List

This list of terms and symbols serves as an exclusionary list to reduce the number of alternate names. This list is deemed unimportant, impertinent, or too common to serve as necessity for location for dispatchers. This is the current list as of this policy manual's revision date.

/	LLC
ACADEMY	LN
AND	LOCATIONS
APT	LOOP
AREA	MAIN
AT	MD
AVE	MIDDLE
BLVD	MULTIPLE
BLVD	MULTIPLE LOCATIONS
BOAT	N
BY	OF
BYPAS	ON
BYPASS	OR
CENTER	PARKING
CIR	PHD
CITY	PK
COLLEGE	PKWY
DR	PL
E	RAMP
ELEM	RUN
ELEMENTARY	S
FARM	SCHOOL
FOR	ST
FULL	ST,
HIGH	TERR
HOOKUPS	THE
HWY	US
HWY	USD
IN	USD 470
INC	W
INT.	WAY
JR-SR	WILDLIFE
K	



Article VIII. Definitions and Acronyms

Section 8.01 Definitions

(a) Address

A designation of the location of a person's residence or workplace, an organization, or a building, consisting of numerical and text elements such as a street number, street name, and city arranged in a particular format (ESRI, 2006).

(b) Address Locator

A dataset in ArcGIS that stores the address attributes, associated indexes, and rules that define the process for translating nonspatial descriptions of places, such as street addresses, into spatial data that can be displayed as features on a map. An address locator contains a snapshot of the reference data used for geocoding, and parameters for standardizing addresses, searching for match locations, and creating output (ESRI, 2006).

(c) Address Style

A set of guidelines that define the format of addresses and methods of matching that can be used for a specific application (ESRI, 2006).

(d) Domain Value

The range of valid values for a particular metadata element (ESRI, 2006).

(e) Freedom of Information Act Request

Enacted on July 4, 1966, and taking effect one year later, the Freedom of Information Act (FOIA) provides that any person has a right, enforceable in court, to obtain access to federal agency records, except to the extent that such records (or portions of them) are protected from public disclosure by one of nine exemptions or by one of three special law enforcement record exclusions (United States Department of Justice, 2011).

(f) Geocoding

A GIS operation for converting street addresses into spatial data that can be displayed as features on a map, usually by referencing address information from a street segment data layer (ESRI, 2006).

(g) Landowner

The grantee on the most current deed of record as recorded in the Cowley County Register of Deeds.

(h) Metadata

Information that describes the content, quality, condition, origin, and other characteristics of data or other pieces of information. Metadata for spatial data may describe and document its subject matter; how, when, where, and by whom the data was collected; availability and distribution

information; its projection, scale, resolution, and accuracy; and its reliability with regard to some standard (ESRI, 2006).

(i) Next Generation 911

An initiative aimed at updating the current emergency 911 service infrastructure within the United States and Canada to better facilitate wireless communication to PSAP's (United States Department of Transportation, 2013).

(j) Plat

A survey diagram, drawn to scale, of the legal boundaries and divisions of a tract of land.

(k) Tobler's First Law of Geography

A formulation of the concept of spatial autocorrelation by the geographer Waldo Tobler (1930-), which states "Everything is related to everything else, but near things are more related than distant things." (ESRI, 2006)

(l) Topology

In geodatabases, the arrangement that constrains how point, line, and polygon features share geometry. For example, street centerlines and census blocks share geometry, and adjacent soil polygons share geometry. Topology defines and enforces data integrity rules (for example, there should be no gaps between polygons). It supports topological relationship queries and navigation (for example, navigating feature adjacency or connectivity), supports sophisticated editing tools, and allows feature construction from unstructured geometry (for example, constructing polygons from lines) (ESRI, 2006).

(m) Topology Rule

An instruction to the geodatabase defining the permissible relationships of features within a given feature class or between features in two different feature classes (ESRI, 2006).

Section 8.02 Acronyms

(a) ALI – Automatic Location Identification

Provides the call taker with an address for the caller which enables the responding agency to find the location even if the caller cannot speak. The ALI screen also indicates the type of service (whether residential, business, or coin) and the appropriate emergency service providers (AT&T, 2008).



- (b) CAD – Computer Aided Dispatch**
- (c) CCEC – Cowley County Emergency Communication**
- (d) CCHD – City-County Health Department**
- (e) EM – Emergency Management**
- (f) EMS – Emergency Medical Service**
- (g) ESRI – Environmental Systems Research Institute**
- (h) FGDC – Federal Geographic Data Committee**
- (i) GIS – Geographic Information System**

An integrated collection of computer software and data used to view and manage information about geographic places, analyze spatial relationships, and model spatial processes. A GIS provides a framework for gathering and organizing spatial data and related information so that it can be displayed and analyzed (ESRI, 2006).

- (j) GPS – Geographic Positioning System**

A system of radio-emitting-and-receiving satellites used for determining positions on the earth. The orbiting satellites transmit signals that allow a GPS receiver anywhere on earth to calculate its own location through trilateration. Developed and operated by the U.S. Department of Defense, the system is used in navigation, mapping, surveying, and other applications in which precise positioning is necessary (ESRI, 2006).

- (k) KDOT – Kansas Department of Transportation**

- (l) MIS – Management Information System**

- (m) MOU – Memorandums of Understanding**

- (n) MS – Microsoft® Corporation**

- (o) MSAG – Master Street Address Guide**

(AT&T, 2008) (NENA, 2013)

- (p) NENA – National Emergency Number Association**

- (q) NG911 – Next Generation 911**

Refer to Article VIII, Section 8.01, sub-section (h).



(r) PDF – Portable Document Format

(s) PDOP – Positional Dilution of Precision

An indicator of satellite geometry for a constellation of satellites used to determine a position. Positions with a lower DOP value generally constitute better measurement results than those with higher PDOP (ESRI, 2006).

(t) POI – Point of Interest

(u) PSAP – Public Safety Answering Point

(v) RITA – Research and Innovative Technology Administration

A division of the U.S. Department of Transportation.

(w) RMS – Records Management System

(x) TN – Telephone Number

(AT&T, 2008)

(y) U.S. DOT – United States Department of Transportation

(z) USPS – United State Postal Service



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Article X. Appendix A – Address Request Form



COWLEY COUNTY • 311 E. 9th Ave. • Winfield, KS 67156
Geographic Information Systems

Cowley County E-911



Address Request

*Requesting Name: _____

*Mailing Address: _____

Contact Telephone: _____ home cell business (circle one)

*Relationship to landowner: (check all that apply)

- Landowner from current Deed of Record
- Proxy of landowner

Type:

- Doing Business for Landowner: _____
- Attorney
- Construction Contractor
- Other (Please specify): _____

Purpose of address request:

*Approximate location of address request:

By signing this form you guarantee you are supplying all information as correctly to your best ability and acknowledge that the information provided will be forwarded to the United States Postal Service (USPS), the Cowley Emergency Consolidated Communications (CECC), the Cowley County Appraiser's Department, Cowley County Emergency Management, and the local electric provider for their internal use and records.

*Signature

*Date

Internal Use Only

Address Assigned: _____	PN: _____
E-mailed to the following agencies on : _____	by: _____
USPS, CECC, Appraiser's Department, Emergency Management Electric Provider: <input type="checkbox"/> Butler Rural <input type="checkbox"/> Caney Valley <input type="checkbox"/> City of Winfield <input type="checkbox"/> KGE Westar <input type="checkbox"/> Summer-Cowley	

*Required field

