

NM911 GIS Monthly Data Upload Assessment Report

San Juan County – April, 2025

The Earth Data Analysis Center (EDAC) at the University of New Mexico (UNM) performs data acquisition and processing in support of the New Mexico 911 (NM911) Program. In collaboration with Geodata Providers, EDAC collects geospatial data for Road Centerlines, Address Points, and Boundary data such as Administrative, PSAP, and ESN/ESZ from each provider's respective jurisdiction (municipality, county, tribal entity). These datasets are standardized to NM911 State Schema, and delivered to the Public Safety Answering Points (PSAP) to support emergency response operations. If data are available, EDAC generates a monthly assessment, which details the number of features analyzed, processed, along with identified inaccuracies or discrepancies. This report serves as a feedback tool to assist the data providers to enhance the accuracy and integrity of the geospatial datasets.

The New Mexico Geodata Providers are required to upload their monthly data to the NM911 Program via NM911 data portal (<https://portal.nm911.org>) by the 15th of each month. Upon submission, EDAC conducts necessary QA processes/procedures for data verification and validation to prepare data for integration into the statewide master database. The monthly data assessment report will be made available to data providers via the NM911 Data Portal.

Note: Data that were uploaded after 15th of each month will not be processed until the next month.

Data Upload Summary

The following table shows the datasets provided by San Juan County, date uploaded, total number of features uploaded.

Feature Class	Date Uploaded	Record Count
Addresses.shp	04/15/2025	21,158
Roads.shp	04/15/2025	2,751

Road Centerlines

Schema Mapping Summary: The table below shows the schema mapping (crosswalk) between road centerline data submitted by the data provider and the NM911 state schema. Please note that if you change your schema, EDAC will automatically adjust the crosswalk/mapping to conform with your data.

State Schema	Local Schema
SEGMENT_ID	Unknown
L_ADD_LOW	ADDR_LF
L_ADD_HIGH	ADDR_LT
R_ADD_LOW	ADDR_RF
R_ADD_HIGH	ADDR_RT
STR_DIR	PRE_DIR
STR_PRETYPE	PRE_TYPE
STR_NAME	ST_NAME
STR_SUFFIX	POST_TYPE
POST_DIR	POST_DIR
STR_ALIAS	Unknown
COMNAME_L	POST_COM_L
COMNAME_R	POST_COM_R
MSAG_COM_L	MSAGCOM_L
MSAG_COM_R	MSAGCOM_R
COUNTY_L	COUNTY_L
COUNTY_R	COUNTY_R
ZIPCODE_L	POSTCODE_L
ZIPCODE_R	POSTCODE_R
ESN_L	ESN_L
ESN_R	ESN_R
STR_NAME_1	Unknown
ROAD_LABEL	Unknown
RD_CLASS	Unknown
ONE_WAY	Unknown
SPEED	Unknown
F_ELEV	Unknown
T_ELEV	Unknown
EXCEPTION	EXCEPTION
DPID	SOURCE
NO_MSAG	Unknown

Road Centerline Data Import Errors

No import errors were found.

Assessment Results: The following are the various checks performed on road centerline data to ensure data accuracy and integrity.

Error Check Type	Number of Errors
Road Centerline Left Low Address Is Greater Than Left High Address	0
Road Centerline Right Low Address Is Greater Than Right High Address	0
Road Centerline Must Be Broken And Snapped At Road Intersections	2
Road Centerline Must Not Have Right Side Overlapping Address Range	0
Road Centerline Must Not Have Left Side Overlapping Address Range	1
Road Centerline Has Invalid Geometry	0
Road Centerline Should Not Be Multipart	0
Road Centerline Length Must Not Be Less than 15 ft	0
Road Centerline Must Not Have Duplicate Geometry	0
Road Centerline Must Not Have Dangles	0

Instruction: Please note that some of these errors are interlinked i.e. correction in any of the error check types will effect other check types; also road centerline error correction may lead to error correction in address points and vice versa. If any of these discrepancies are acceptable, note as an exception in CI_Exception/C1_Exception/Exception column in your GIS data. The NM911 Program will consider these codes as exceptions and will not error check these data records. Once we have these exceptions recorded, your error totals will likely be greatly reduced.

CI_Exception/C1_Exception/Exception:

- If using MapSAG: It assigns an exception code.
- If not using MapSAG: Please mark "Y" or "1" if there is an exception and leave the column blank if no exception.

Please refer to Frequently Asked Questions (FAQ) section on the NM911 Data Portal or NM911 Website for error check types where exceptions are valid.

Address Points

Schema Mapping Summary: The table below shows the schema mapping between address point data submitted by the data provider and the NM911 state schema.

State Schema	Local Schema
STRUCT_ID	Unknown
ADD_NUMBER	NEW_ADD
ADD_SUFFIX	Alpha
STR_DIR	Unknown
STR_PRETYPE	Unknown
STR_NAME	ROAD_NAME
STR_SUFFIX	Unknown
POST_DIR	Unknown
STR_NAME_1	Unknown
MSAG_COM	Unknown
COMNAME	CITY
STR_ALIAS	Unknown
ESN	Unknown
ZIPCODE	ZIP
DPID	Unknown
EXCEPTION	C1_EXCEPTI
ROAD_LABEL	RDNAME

Address Points Data Import Errors

No import errors were found.

Assessment Results: The following are the various checks performed on address point data to ensure data accuracy and integrity.

Error Check Type	Number of Errors
Address Point Address Number Cannot Be 0, Negative, NULL Or Blank	0
Address Point Street Name Cannot Be Blank Or NULL	0
Address Point Full Road Name Must Match Road Centerline Full Road Name	3
Address Point Address Number Should Be Within Road Centerline Address Range	9
Address Point Has Invalid Geometry	0
Address Point Must Not Have Duplicate Geometry	2
NM911 Topology Checks	15

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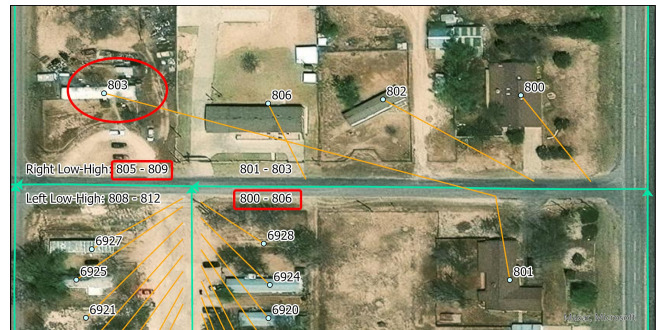
Fishbone Analysis

The Fishbone Analysis will assist NM911 Geodata Providers to improve the quality and accuracy of their data.

Analysis: Fishbone map lines visually represent a straight-line comparison between the address point locations and their interpolated locations along a road centerline address range. This analysis highlights discrepancies in address placement within the range, allowing geodata providers to QA their data to improve the quality and integrity.

Interpretation: Fishbone line intersections represent a series of addresses within a range that match the attributes on a centerline, but the arc directionality is modeled against the standard convention. This may have caused by centerline arcs that were digitized opposite to the actual address point ranges or incorrect address ranges. If fishbone lines intersects with road centerlines, then address range sides may have incorrect parity or the address points that were not able to geocode.

Error Detection: The Length field in the fishbone feature class can be used to identify potential errors. If the fishbone line segments appear longer than expected, it may indicate inaccurately placed address points that do not fall with the corresponding road centerline address range. These discrepancies can highlight areas where further review or correction is needed. See image below for more information.



Example: Fishbone Lines - Correct (Left); Fishbone Lines - Error, due to incorrect street address range (Right)

Geodatabase Contents

The accompanying zip file contains a file geodatabase with data provided by the local agency that was imported into the state schema. Also included are the results of data integrity checks run by EDAC. These results can assist local agency to improve data quality.

Source Geodatabase: [SJ_CO_202504.gdb](#)

NM911 Feature Dataset: Contains following feature classes

- AddressPoints – Data provided by the local agency, imported into State Schema
- AdministrativeBoundary – Boundary of local agency jurisdiction. Ex: County, City/Town, Village, and Tribe
- RoadCenterline – Data provided by the local agency, imported into State Schema
- NM911_Topology – Topology Errors found in the data provided by the local agency.
- Fishbone – Lines created between actual address point location and their interpolated positions along the corresponding road centerline.

NM911_ERRORS Feature Dataset: Contains error/discrepancy data after data validation

- Address_Point_Import_Errors – Data provided by the local agency that were not imported into State Schema due to error/mismatch. More detailed explanation can be found under ERROR column inside the attribute table. The table also includes ORIGINAL FID to identify records in data provided by local agency.
- Road_Centerline_Import_Errors – Data provided by the local agency that were not imported into State Schema due to error/mismatch. More detailed explanation can be found under ERROR column inside the attribute table. The table also includes ORIGINAL FID to identify records in data provided by local agency.
- Other Error feature classes – These are categorized by the error check type. The name of the feature class defines the error type. They vary from provider depending on the data quality.

Contact Information

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