

NAD State Address Point Data Workflow Process v. 1.4

Matt Zimolzak, Chair Address Workflow Subgroup

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General Description and Purpose

Companion documentation for the NAD State Address Point Data Workflow diagram, textually describing the workflow visually depicted in the diagram.

Swim Lanes

Horizontal rows depicted on the diagram and identified on the left hand side. These identify the actors and areas where specific workflow activities occur. These include:

- Local or Regional Address Authority - Provider of address data to its secondary state.
- State - Aggregator of Local Address Authority (LAA) address data.
- System - Automated processes environment.
- Federal - National Address Database, terminal public address database resource.

State Address Point Data Workflow

1. Address Data Layer
2. Validate Address Data Extract - Local validates their address data to ensure it contains required content and the format is consistent.
3. Submit to State Address Repository - Local submits their address dataset into state address repository.
4. System response receipt – System generated acknowledgement of new data for ingestion.
5. Conduct Geospatial Data Load Test - State and System Validates provider data against provider schema.
6. Process Condition Report - System creates report of validation tests and specific results.
7. Report Evaluation - State evaluates results of Condition Report.
8. Errors Detected? - Inclusive Gateway, dependent on error types found which may be addressed by state and/or LAA.
9. LAA Repairs Data Based on Condition Report - LAA fixes errors discovered during State's provider ingest, extracts, transforms and loads (ETL) validation and/or aggregation phases.
10. State Repairs Selected Errors - State determined, non-anomaly errors (e.g., address parsing errors).
11. Re-validate State repaired errors.
12. Normalize to State Schema - State and System extracts, transforms and loads (ETL) and validates LAA source data to state schema.
13. Process Condition Report - System creates report of ETL and validation processing and specific results.
14. Report Evaluation - State evaluates results of Condition Report.

15. Errors Detected? - Inclusive Gateway, dependent on error types found which may be addressed by state and/or LAA.
16. State Repairs Selected Errors - State determined, non-anomaly errors (e.g., check records for domain values when present, not null, mandatory elements).
17. Re-validate State repaired errors.
18. Validation - State and System perform validation checks for domain and range, legal values.
19. Process Condition Report - System creates report of Validation checks and specific results.
20. Report Evaluation - State evaluates results of Condition Report.
21. Errors Detected? - Inclusive Gateway, dependent on error types found which may be addressed by state and/or LAA.
22. State Repairs Selected Errors - State determined, non-anomaly errors (e.g., street name exists, compare to road centerline address ranges and/or MSAG).
23. Aggregate - State and System aggregate provider address data into State Address Repository.
24. Process Condition Report - System creates report of Aggregation processing and specific results.
25. Report Evaluation - State evaluates results of Condition Report.
26. Errors Detected? - Inclusive Gateway, dependent on error types found which may be addressed by state and/or LAA.
27. State Repairs Selected Errors - State determined, non-anomaly errors (e.g., address appears in the correct jurisdiction).
28. Re-validate State repaired errors.
29. State Address Extract Delivered to NAD - State delivers their address extract to Federal partners for NAD.
30. State NAD Submission Federal Workflow Processing - Placeholder for Federal NAD Address Workflow Processing.
31. Process Condition Report - System creates report of Federal Address Workflow processing and specific results.
32. Report Evaluation - Federal evaluates results of Condition Report.
33. Errors Detected? - Exclusive Gateway concerning presence or absence of errors (binary) in the Federal Address Workflow processing, communicated back to State provider.
34. Errors Detected? - Inclusive Gateway, dependent on error types found by Federal Address Workflow processing and confirmed or denied by State aggregator. Errors confirmed by the State aggregator are shared with the LAA, down the aggregation chain.
35. LAA Consultation - LAA considers State confirmed errors from Federal Address Workflow processing and may take action to correct, or inform the State aggregator of valid anomalies, at their discretion.
36. State Repairs Selected Errors - State determined, non-anomaly errors identified by Federal Address Workflow processing (e.g., minimum content, duplicates, invalid values, spatial errors, etc.).
37. Re-validate State repaired errors
38. Provide Address Data to Other Systems and External Partners - The data from this process will be reused/repurposed for other stakeholders and use cases.