



2020 Report Card Program Overview

2020 Data Call and Report Card Schedule

VITA-ISP will complete two report card cycles in 2020 for all localities. The “GIS 911 Synchronization Analysis” of the GIS address point and road centerline layers against the 9-1-1 ALI and MSAG databases will only run in Q1. The “Civic Address Layers Analysis” of GIS address point and road centerline layer attributes and geometry will run in Q1 and Q3.

- January 2020: Locality GIS Data Call and 9-1-1 ALI and MSAG requests from 9-1-1 providers
- January 2020 – June 2020: 2020Q1 GIS 911 Synchronization and Civic Address Layers analyses and report card delivery
- July 2020: Locality GIS Data Call
- July 2020 – September 2020: 2020Q3 Civic Address Layers analysis and report card delivery

Order of Report Card Runs

In the past few cycles, report cards were run by 9-1-1 selective router region based on Virginia’s NG9-1-1 deployment plan. Now that [GIS Project phases and deployments](#) are picking up, 2020Q1 report cards will start with localities scheduled for a NG9-1-1 deployment cut-over of 2020Q3, then 2020Q4 and 2021 by quarter, before returning to 2020Q1 and Q2. There are two reasons for this.

First, localities with 2020Q1 or Q2 NG9-1-1 deployments are, or will shortly be, working with the AT&T and Intrado teams to load their data into the spatial interface. The GIS quality control checks and ALI to GIS road centerline checks in the vendor’s onboarding process are what the VITA report card process prepared you for.

Second, by the time VITA-ISP is ready to run report cards for 2020Q1 and Q2 deployments, the ALI data will be migrated to the AT&T solution. Running the report cards against this ALI will reflect the changes and improvements made by localities to deploy NG9-1-1.

Report Card Points of Emphasis

If you have a NG9-1-1 deployment cut-over date in 2020, focus on [completing your PSAP and provisioning boundaries](#) and submitting them to NG911GIS@vita.virginia.gov first, then working with report card results.

VITA provides the same support in answering questions that we have with previous report cards and migration proposal conversations. There is no consistent “fix” to

resolving the different types of issues that arise and many need real world context. Issues are most commonly resolved by one or all of the following:

- Adding records to a 9-1-1 database or GIS layer
- Removing records from a 9-1-1 database or GIS layer
- Changing attribution of a record in a 9-1-1 database or GIS layer
- Updating geometry of features in a GIS layer
- Work with AT&T and Intrado during the NG9-1-1 deployment to resolve errors during transition
- Introducing or changing ETL procedures to send appropriate GIS data in appropriate format

VITA’s run of the tools is the standard by which other tool outputs will be evaluated. Certain issues will need to be resolved for NG9-1-1 to work.

VITA GIS Data Report Card Tools for NG9-1-1 Preparation

What: Optional and “as-is,” the tools give you the opportunity to run iterations of the report card analysis for yourself.

When: **Version 1.1** documentation and scripts based on the tools that VITA will run 2020Q1 will be available in February 2020. Version 1.0 was released 3/25/2019 and will be replaced.

New: The tools now include steps to export from your local schema to a NENA NG9-1-1 compliant data model. This means that all fields required for field mapping to a spatial interface are present, but not necessarily populated.

Where: User guide, tools, VGIN data, and exceptions method are available at VGIN Clearinghouse: <https://vgin.maps.arcgis.com/>

Requirements: locally sourced copy of current MSAG and ALI, ArcGIS Desktop 10.6.1 Advanced, Data ReViewer extension, and resources from VGIN.

Why: Helps you speed up the iteration clock of improving and formatting your data for NG9-1-1 deployment and management: Run → Fix in source data → Run with updated source data → Fix → Run → Fix → Run until issues are resolved or understood.

Deliverables: Output for tools contains the same information as the report card companion geodatabases, with the addition of the NENA NG9-1-1 compliant fields.

Contact

Email NG911GIS@vita.virginia.gov or your VITA-ISP regional coordinator for more information about the 2020 VITA report card program and tools.



2020 Report Card GIS 911 Synch Results

This guide documents where information on the report card sheet comes from to help you better use the results.

Name of the locality contributing the GIS data, usually in response to a VGIN bi-annual data call.

Locality: Jurisdiction Name

GIS Data Received: MM/DD/YYYY

MSAG & ALI Received: MM/DD/YYYY

Road Centerlines: #

Address Points: #

PROVIDER ALI CHECKS

Bolded Provider ALI Checks Indicate Critical Items

Check	Count	% Total
ALI Records Total	-	-
ALI Records - Usable	-	-
ALI Records - Unusable	-	-
ALI Unmatched to MSAG	-	-
ALI Matched to MSAG - Out Of High/Low Range	-	-

Usable Provider ALI To Locality GIS Data Cascade

Check	Count	% Usable ALI
ALI Matched To Address Point	-	-
ALI Matched To RCL - Unmatched Address Points	-	-
ALI Matched To RCL - Total	-	-
ALI Matched To Address Point - Street Name Mismatch	-	-
ALI Matched To RCL - Street Name Mismatch	-	-

Usable Provider ALI Unmatched To GIS Data

Check	Count	% Usable ALI
ALI Unmatched to GIS Data	-	-
ALI Unmatched to AP	-	-
ALI Unmatched to RCL	-	-
ALI Unmatched AP top 10 Addresses	-	-

Dates VGIN received the data.

Number of features in the GIS data VGIN received.

The first two **bold** checks give the percent match, where the highest percentage is desired.

Other **bold** checks focus on mismatched records and unmatched records.

PROVIDER MSAG CHECKS

Bolded Provider MSAG Checks Indicate Critical Items

Check	Count	% Total
MSAG Records Total	-	-
MSAG Street, Community, ESN, High, Low, or OEB Fields Have <Null> or "" Values	-	-

RCL To MSAG

Comments	Edit Action needed	Count	% Total RCL
MSAG Matched	No Action: RCL MSAG And Provider MSAG Identical	-	-
MSAG Matched	No Action: RCL Segments In Center of Chain	-	-
MSAG Matched	Check MSAG: Centerline MSAG HIGH <> Provider MSAG HIGH	-	-
MSAG Matched	Check MSAG: Centerline MSAG LOW <> Provider MSAG LOW	-	-
MSAG Matched	Check MSAG: Centerline MSAG LOW AND HIGH <> Provider MSAG LOW AND HIGH	-	-
MSAG Mismatch	No Action: RCL Segments In Center of Chain	-	-
MSAG Mismatch	Check MSAG: MSAG or RCL Missing Information	-	-

MSAG TO RCL

Check	Count	% Total
MSAG Unmatched To RCL	-	-

DOWNLOAD REPORT CARD GIS DATA PACKAGE

<https://va.vtrails.com/Downloads/GIS%2011/2019%20Report%20Cards%20Program%20Overview.pdf>

REPORT CARD RESOURCES

[2019 Report Card Overview](#)

[VITA GIS Data Report Card Tools for NG9-1-1 Preparation User Guide - See Page 35-41](#)

Link to download the results in geodatabase format.

Links to documentation explaining the items in the report cards.

The results of these analyses are a snapshot in time and are valid for the data used in them. Your GIS data may have been updated since the locality data submittal. The greater the time between the GIS data submittal and the ALI and MSAG data, the more likely it is that your GIS and 9-1-1 databases will be less synchronized with recent changes. This may impact your scores. If you have done significant work since the submittal date, consider using the Report Card Tools on the VGIN Clearinghouse or contacting us at NG911GIS@VITA.Virginia.gov.

The [Virginia NG9-1-1 GIS Resources page](#) on the VGIN Clearinghouse contains additional information on these reports and optional resources to run the tools on your own.

Preparing your data for next generation 9-1-1 means having confidence that your GIS address points, GIS road centerlines, 9-1-1 ALI, and 9-1-1 MSAG accurately model your ground condition and are synchronized with each other. The ultimate decision of when GIS is ready to support GIS-driven geospatial call routing in NG9-1-1 is a mutual decision between the locality and the NG9-1-1 Core Service Provider.



2020 Report Card Civic Address Layers Results

This guide documents where information on the report card sheet comes from to help you better use the results.

Date VGIN received the data.

Name of the locality contributing the GIS data, usually in response to a VGIN bi-annual data call.

Number of features in the GIS data VGIN received.

Bold checks identify issues that impact geospatial call routing.

Data checks and the number of times each modeled rule was not met.

Link to download the results in geodatabase format.

Links to documentation explaining the items in the report cards.

Virginia Information Technologies Agency
VITA
GIS Data Report Cards 2019 Q1: Civic Address Layers Analysis

Locality: ←

GIS Data Received:

Road Centerlines:

Address Points:

CIVIC ADDRESS LAYER CHECKS

Bolded Check Numbers Indicate Critical Items For Correction

Road Centerline

Check	Data Inconsistency Description	Count
Attributes		
1	Road Centerline ID Not Unique and Persistent	-
2	Road Centerline Has Duplicate Address Ranges For Attributes <> 0	-
3	Road Centerline Numerical Address Ranges Begin Or End With 0	-
4	Road Centerline Has From Left Value Greater Than To Left Value	-
5	Road Centerline Has From Right Value Greater Than To Right Value	-
6	Road Centerline Has Left Side Overlapping Address Range	-
7	Road Centerline Has Right Side Overlapping Address Range	-
8	Road Centerline Has Odd/Even Right Side Address Parity	-
9	Road Centerline Has Odd/Even Left Side Address Parity	-
10	Road Centerline Has Street Name Attributes <> Virginia, USPS, & NENA standard	-
Geometry		
11	Road Centerline Has Invalid Geometry	-
12	Road Centerline Has Multipart Features	-
13	Road Centerline Has Duplicate Geometry	-
14	Road Centerline Not Segmented And Snapped At Road Intersections	-
15	Road Centerline Has Dangles Within 30 Feet of Another Centerline	-
16	Road Centerline Not Connected To Other Centerlines In Road Network	-
17	Road Centerline Segment Incorrect Direction Based on Address Ranges and Point	-

Address Point

Check	Data Inconsistency Description	Count
18	Site Address Point Is Duplicate, Has No Street Name, Or No Address Number	-
19	Site Address Point Does Not Geocode to Road Centerline Street Name and Address Range	-
20	Site Address Point Street Name And Road Centerline Street Name Mismatch	-
21	Site Address Point Does Not Match Street Side Based on Left and Right Address Ranges	-

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<https://file.vgins.com/Download/NG911/2019%20Report%20Card%20Program%20Overview.pdf>

REPORT CARD RESOURCES

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[VITA GIS Data Report Card Tools for NG9-1-1 Preparation User Guide – See Page 29-35](#)

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