

RITIS Frequently Asked Questions

What is the process to request adding more TMCs? How often are RITIS, TMCs and XDs networks updated and what is the coordination process?

INRIX has its own schedule for updating their basemaps and segmentation—and they have more control over their own XD network than they do for the TMC network. RITIS coordinates our platform updates with INRIX, so if INRIX makes an update to their network on X-date, RITIS makes that update on the same day. For more specific questions about the INRIX update schedule, please see below:

- Occurrence: Twice annually.
- Dates of Occurrence: First map update is March/April, Second map update is September/October.
- Map Data Release: Attribute File, OpenLR Dictionary, GeoJSON, and Shapefiles are provided four weeks prior to production release of new map (<https://map-data-downloader.inrix.com/>). A Beta environment is provided three weeks prior to production release of new map.
- Support: INRIX TAM will work closely with you to ensure a smooth transition. (1) Alias or individual emails are added to production email list. (2) Notification of map update 1.5 months before initial map deliveries (2.5 months before map update). (3) Map update webinar provided prior to beta release. (4) Continued support provided during three week beta period.
- New Roads:
 - Background: One of the main reasons for doing frequent map updates is to provide INRIX map coverage for new and upgraded roads that our map provider has added to their map data. We also recommend that you send any new construction or road openings as soon as possible. We often have to work with our map provider to ensure that these are in the map.
 - Process:
 - Provide a request no later than two weeks after the most recent map update (for example, if a map update is launched on a March 31, you must submit the road request by April 14, for it to be included in the following September map update).
 - You must be able to describe the exact location and shape of the new road. Ideally, this will be with a GIS Shapefile.
 - Note that these additions are for XD coverage only.
 - The evolution of TMC coverage is driven by the TMC location table providers and is subject to their development cycles and the approval process by TISA.
 - Send the request with the above details to your SE or support@inrix.com.
 - INRIX will respond with a confirming receipt and will put it in our queue for consideration in the next map update.

For the speed limit, what format does RITIS require? TMC or by XD? Shapefile map or csv file?

Speed Limit Data Format

Posted speed limits for your region should be provided in miles per hour (mph) for each individual TMC segment.

Speed Limit Sample Data

TMC	Posted Speed Limit (mph)
108+05158	70
108P05158	70
108+05159	70
108P05159	70
108-04817	45
108N05158	45

https://pda.ritis.org/suite/help/#data-types_providing-your-volume-data

If XD formats are needed, then the same speed limits shown above are provided for each and every XD segment.

For volume, what format does RITIS require? TMC or by XD? Shapefile map or csv file?

Similar to the speed limit data above, we document some of this within the PDA help files here:

https://pda.ritis.org/suite/help/#data-types_providing-your-volume-data

Volume Data Format

Volume should be provided per TMC and can be provided as AADT or broken down by time bins. Broken down by time bins is the preferred method, as it is a significantly more accurate measurement of hourly volume compared to AADT.

The following definitions are used:

- **AADT** (AADT provided): Annual Average Daily Traffic of the related TMC link.
- **Volume** (time bins provided): Aggregated volume at 15 minute intervals for each day of week for every year. For instance, the volume of a single TMC for every Tuesday at 5:30 p.m. for the year 2013 is 684.
- **Time Bin** (time bins provided): Represents the 15 minute interval.

Example:

Time Bin	Time
0	00:00
1	00:15
2	00:30
3	00:45

4	01:00
...	...
92	23:00
93	23:15
94	23:30
95	23:45

- **Day of Week** (time bins provided): 0 to 6 (Sunday to Saturday).
- **Year** (AADT provided): Recorded year.
- **Comm %**: Not required, but highly recommended. This is the percentage of volume made up of commercial vehicles. If none is given, we will default to 75 percent passenger, 25 percent commercial.

Volume is provided for each individual TMC as either AADT or broken down by time bins. We expect to receive data that is unidirectional per TMC. **Please contact us if you have only bidirectional data.**

AADT Sample Data

AADT	Year	TMC	Comm %
9580	2009	108-04996	28
9912	2010	108-04996	28
9544	2011	108-04996	29
29300	2009	108+04457	5
29050	2010	108+04457	5
27500	2011	108+04457	6

Time Bins Sample Data

Volume	Time Bin	Day of Week	TMC	Comm %
536	0	0	108+04918	7
578	1	0	108+04918	7
590	2	0	108+04918	7
678	3	0	108+04918	7

What is the integration timeline of volume data?

If provided in the right format, it usually just takes a couple of weeks.

What's the process to get access to INRIX real time data portal?

- INRIX sets up credentials to access speed, incident or tile APIs.
- INRIX provides ODOT with a “welcome” email outlining steps to get started.

- INRIX provides a webinar to go over the details of the API. Webinars can be repeated when needed for new users signing up.

Is speed data capped?

- Yes. INRIX does cap our real-time data. We have different caps based on FRC and geo. We work to create caps that ensure inaccurate data is not included in speed generation and to ensure the most accurate speed provision. Options are available to view historical observations of uncapped speeds (please contact support@inrix.com).

Can a local agency integrate their data into RITIS? Can they request changes in performance measures for reporting?

With respect to local agency data integration--RITIS typically deals with this on a case-by-case basis. We like to see the data first before making any estimates as to the cost (or applicability) for integration. We always take the data as-is from the agency (so long as it's machine-readable and structured), and we handle the internal formatting. Funding is definitely required as new data feeds (or changes to performance measures calculations) all require coding and architecture changes. All requests should be sent to support@ritis.org. Any email sent to this address is ticketed, triaged, and shared with the full leadership team at the CATT Lab.

Are there any changes to your data sources and/or data generation that may affect the data?

Yes – INRIX has had two major changes in 2019. Below are details on these changes:

Increased Data Sources

- Date Start: May 2019
- What roads are most affected?
 - You will see the most change on roads where there was previously less data coverage (i.e. higher percentages of Score 20's and Score 10s).
- What will we see in terms of change?
 - You will see increased quality (i.e. data that is closer to actual ground truth). However, when looking year-over-year it is important to note that a change during May 2019 may be a result of this underlying data change rather than changes on the road. All data forward of May 2019 does have this additional data source included.

Algorithmic Change

- Date Start: September 1, 2020
- What Roads are most affected?
 - You will see the most change on roads where there was previously less data coverage (i.e. higher percentages of Score 20's and Score 10s).

- What will we see in terms of change?
 - You will see increased quality (i.e. data that is closer to actual ground truth) and increased stability on roads that typically have stop and go traffic. However, when looking year-over-year it is important to note that a change during Sept 2019 may be a result of this underlying data change rather than changes on the road. All data forward of Sep 1, 2019 is utilizing this data.
- How often do you change your underlying algorithms?
 - This happens very rarely. We understand the need to keep speeds as consistent as possible for year-over-year analysis. Due to the 10x increase in data sources and the continuing increases in connected data, INRIX decided to invest in a change that would be able to better utilize this data.