

DDOT Roadway Centerlines

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Introduction

Welcome to the Roadway Centerline wiki page! This is an exhaustive 'deep-dive' of the inner workings of the DDOT GIS team's main reason for existence: the centerline.

GIS Centerlines

We maintain centerline-based roadway data for all roads and alleys open to traffic within the District of Columbia. DDOT uses a linear referencing system (or LRS) to maintain both the centerline/road GIS as well as the various attributes and characteristics about that roadway. There are 3 major components of our LRS-based centerline GIS:

- [Routes](#)
- [Intersections](#)
- Roadway Characteristics of the Roadway

From these 3 components, we derive a multitude of other data and products for many uses. Some of the more popular ones are:

- Street Segment Centerlines - used by the Master Address Repository
- Roadway Segment Centerlines - will eventually be used as the common base routing network layer.
- Intersection Approaches - used by Safety Data team for MIRE (see below)
- [Cross-section Data](#) - complete view of our roadway elements as a cross-section.
- Network Analysis Layer - (coming soon)

How We Update the Centerline and Other Data

- Construction updates from Protrack+
- Notifications from the public/other agencies

How We Check our Centerline and Other Data

- Checks on Centerline
- Checks on Cross-sections
- Checks on Parking Data

History

In the years since its inception, the simple centerline has changed quite a lot. Read a bit more about the origins of the DDOT centerline: from paper-based engineering drawings and ROW cards in the DC Office of the Survey all the way to our modern-day LRS. We've come a long way and it's interesting to understand where we've been. Visit the [DDOT Centerline Legacy](#) page for more.