

Transportation Data Model

Data Model User Group

Join the [data model user group](#) if you are an existing ArcGIS customer and want to learn more about design and architecture of personal or enterprise Geodatabase and become a part of Esri's growing data model community.

The Transportation Data Model is based on *Designing Geodatabases for Transportation* by J. Alison Butler. The ESRI Trans Model implements best practices from the transportation industry, building upon and updating previous transportation models such as NCHRP 20-27, FGDC data exchange standard, and UNETRANS. The goal is to define an "essential data model" for ArcGIS user organizations within the transportation industry, and in particular for roadway management organizations (e.g., DOTs), as well as for Railroads, Transit, and Waterway Authorities. Central areas for the group include road and rail network topology, linear referencing systems, dynamic event representation and asset location and management.

For a data models that are oriented towards local/state government needs for roads and addressing, please refer to the [GIS for the Nation](#) and [Address](#) data models.

User Forums

Visit the [Esri data model discussion forum](#) to share your ideas, thoughts, and questions with other users.

Downloads - Case Studies

These Case Studies are a good starting point to learn about best practices for this discipline. These project examples include sample geodatabases, map documents, and documentation.

- [NY DOT Design Poster](#) ArcGIS Transportation DataModel.pdf - zip format, 4868 kb
- [Transportation Data Model Geocoding for ArcGIS 9.1](#) trans_dm.mat, ESRI Transportation Data Model.lot, and ReadMe.txt files - zip format, 4 kb
- [Transportation data model webcast](#) wmv live video recording - zip format, 12460 kb
- [Transportation Data Model Geocoding for ArcGIS 9.2](#) trans_dm.mat, ESRI Transportation Data Model_92.lot, and ReadMe.txt files - zip format, 4 kb

Downloads - Design Templates

The Design Templates are the result of the community-based design process. The general concepts and terms for this discipline are described here. Tools and examples to create a template data model are also included for advanced users.

- [Tips and Tricks for Data Models](#) - URL format
- [Transportation Design Templates](#) .gdb, .vsd, .html, .txt, .xml, and .dtd - zip format, 3960 kb

User Community

We are working on a Case Study with Natural Resources Canada to describe their National Road Network Program. You can get the current materials from the [Canadian National Road Network FTP](#) site.

Please note that new [Resource Center \(beta\)](#) will have transportation user community page, where you will find more information about transportation, template gallery, forum, help, blog, and videos about this community. Stay tuned!