

GeoMedia® Transportation Manager



The transportation industry's job is to move people and products without delay. With an efficient management system in place, supervising agencies can build and maintain the transportation infrastructure required to get travelers and products to their destinations safely and on schedule, place repair and construction teams in the right place at the right time, and determine where agency funds should be spent. Intergraph's GeoMedia Transportation Manager provides the key geospatial technology to help professionals in departments of transportation (DOTs), rail companies, waterway agencies, and pipeline operations to efficiently analyze and maintain the transportation infrastructure. Functionalities are included for building a linear network model that will support both linear referencing system (LRS) and vehicle routing applications.

ANALYZE DATA – QUICKLY AND EASILY

A linear referencing system defines a feature or location by its linear distance from known points on a linear network. Using GeoMedia Transportation Manager's LRS Analysis, you can determine, for example, the location of dangerous traffic conditions, analyze the root cause, and make appropriate improvements.

Rail transportation providers can use LRS Analysis to highlight track segments that need priority maintenance. A county road division can take advantage of GeoMedia's dynamic pipe technology to see a combined result from two or more sets of data – often maintained in disparate formats by separate divisions. In this way, they can determine the surface condition of a section of highway and see whether any pavement repair projects are scheduled for the near future.

Dynamic segmentation, a powerful tool for analyzing tabular data referenced to linear features on a map, is one of the capabilities provided by GeoMedia Transportation Manager. Dynamic segmentation allows you to see a row of data from a spreadsheet plotted as a dot or line on a map. You can then employ this map data – depicting assets, incidents, and activities – as you would any other geospatial data.

Routing analysis provides previously unavailable flexibility and efficiency in the use of mobile assets. You can optimize the value of vehicles and personnel in the field, plan contingencies for problems such as damaged pipelines, assure proper coverage for emergency response services, and find the most efficient route to the facility you are looking for. Capabilities include finding best path and closest facility, analyzing coverage of emergency services for a portion of the network, and creating navigation directions between stops.

MULTILEVEL LINEAR REFERENCING SYSTEM

Intergraph meets the challenge transportation agencies face when using different linear referencing methods and geometric representations with the industry's first off-the-shelf multilevel linear referencing system (MLRS). GeoMedia Transportation Manager provides a cohesive LRS that has capabilities far beyond those offered by a traditional, single-level LRS. Often, the sub departments of a transportation agency each collect data using different measurement methods and even different road-naming conventions. For example, if accidents are located by distance and direction from intersections and guardrail inventory is located by milepost, you would need to be able to use these different location methods together in order to locate run-off-the-road accidents that occurred where there is no guardrail. Intergraph's Multilevel LRS makes this simple.

With the added functionality of MLRS, you will have the ability to perform analysis with data collected using multiple linear referencing methods, to view analyses using your choice of geometric representation, and perform temporal analysis when used in conjunction with GeoMedia Transaction Manager.

DEFINE NETWORK CHARACTERISTICS

LRS Data Maintenance provides tools for developing consistent attributes for the transportation network. LRS Validation

performs an in-depth review of a transportation network to find errors and unusable information. Anomalies are queued for review and are automatically deleted once they are corrected. LRS correction tools handle difficult problems such as incorrectly ordered segments in a geometry collection.

LRS Calibration automates the population of measure and routename attribution – a capability critical to the operation of an LRS. This command can save time and effort in projects when, for example, a state DOT incorporates local roads in the state system. If the sources for the local roads are without measurement attribution, the LRS Calibration command can calibrate the entire feature or query class in a matter of seconds.

INTEGRATE DATA WITHOUT TRANSLATION

Transportation network and asset data can come from a variety of sources, in a variety of formats. GeoMedia technology enables you to bring data from disparate databases into a single GIS environment for viewing, analysis, and presentation. GeoMedia's data server technology supports open standards, providing direct access to business and project data from virtually any geographic data objects (GDO)-compliant data server within your enterprise. These include Oracle®, Microsoft® Access, Microsoft SQL Server™, MGE, MGSM, IBM® DB2®, ArcInfo, ArcRoute, and ArcView.

BRIDGE THE GAP BETWEEN TECHNOLOGY AND PRODUCTIVITY

Intergraph helps you get the most from your investment by providing a comprehensive set of services for the open computing environment, including system integration, consulting, project services, and implementation. GeoMedia Transportation Manager is ready to use right out of the box; however, where customization is required, a documented public API to software capabilities facilitates open customization with industry-standard tools such as Microsoft Visual Basic®.

WHY TRANSPORTATION INDUSTRY LEADERS CHOOSE INTERGRAPH

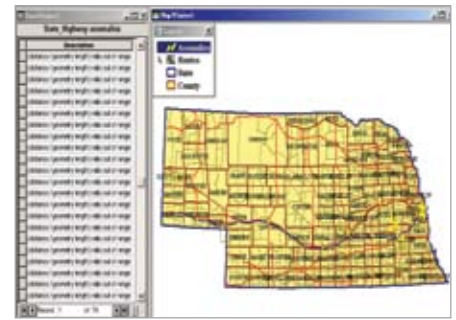
Road, rail, pipeline, and waterway agencies around the world depend on Intergraph for advanced geospatial transportation solutions. Benefits include:

- Improved planning and decision making
- Data sharing across the enterprise and around the world
- Quick access to data no matter where it resides or what format it takes
- The industry's best analysis and display capabilities
- An empowered mobile workforce
- Third-party partners to develop a complete industry solution
- Merger of geospatial data with information technology and business process improvement tools to create efficient workflows

ABOUT INTERGRAPH

Intergraph Corporation is the leading global provider of spatial information management (SIM) software. Security organizations, businesses, and governments in more than 60 countries rely on the company's spatial technology and services to make better and faster operational decisions. Intergraph's customers organize vast amounts of complex data into understandable visual representations, creating intelligent maps, managing assets, building and operating better plants and ships, and protecting critical infrastructure and millions of people around the world.

For more information, visit www.intergraph.com.



The LRS Validation command provides a list of anomalies found when the linear referencing system is verified. As you correct errors from the list, they automatically disappear from the data and map windows.



Merging linear referencing system (LRS) and routing capabilities, GeoMedia Transportation Manager's Best Path command shows the safest route for oversized vehicles. Taking advantage of the command's Edge Restrictors, the route avoids roads with low-capacity bridges that could collapse under extra weight.

