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Advancing Infrastructure

OpenPaths™

Transportation Planning, Modeling, and Analysis

Thousands of professionals around the world rely on OpenPaths to understand the urban, metropolitan, regional, and national movement of people. OpenPaths delivers the most comprehensive transport modeling platform for strategic and operational transport planning.

With OpenPaths you can capture a complete representation of mobility, incorporating travel demand at any level of detail from zones to individual persons, tours, and trips, and multimodal traffic on any mode from cars to public transit and beyond to answer questions about the future of mobility.

OpenPaths is offered in two distinct licensing options.

- OpenPaths Advanced includes OpenPaths EMME®, OpenPaths CUBE™, and OpenPaths CityPhi®.
- OpenPaths Ultimate includes everything in the Advanced Edition plus OpenPaths AGENT® and OpenPaths DYNAMEQ®.

Explore the comparison chart to choose the solution that enables you to best meet your unique strategic and operational transport modeling goals.

Features	OpenPaths Advanced	OpenPaths Ultimate
Demand Modeling		
Population Synthesizer		◆
Activity-based (ABM), tour-based, trip-based and hybrid modeling		◆
Model assembly UI[1]		◆
Advanced choice modeling[2]		◆
Automated model calibration		◆
Matrix calculations[3]	◆	◆
Matrix balancing	◆	◆
Network Modeling		
Private traffic assignments[4]	◆	◆
Public transit assignments[5]	◆	◆
Dynamic traffic assignment		◆
Mesoscopic traffic simulation[6]		◆
Shortest path and accessibility engine	◆	◆
OD matrix estimation (ODME)	◆	◆
Dynamic OD matrix adjustment		◆
Traffic control plan generation[7]	◇	◆
Mapping, Editing and Visualization		
Multimodal network editing	◆	◆
Traffic simulation network and control plan editing		◆
3D visualization and playback[8]	◇	◆
GIS functions	◆	◆
Basemap display	◆	◆
Mapping and charting	◆	◆

Key

◆ All functionality included

◇ Some functionality included

Notes

[1] UI-based assembly for general specification of demand models

[2] Includes nested and multinomial logit, location, temporal, and daily-activity pattern choice models and time-space constraining

[3] General purpose matrix operations to support classic demand modeling steps

[4] Bi-conjugate, path-based, junction-delay, quasi-dynamic traffic assignments

[5] Frequency-based, schedule-based, and crowded transit assignments

[6] Including transit vehicle simulation

[7] Ultimate Edition required to synthesize control plans for traffic simulation

[8] Ultimate Edition required for ABM (Activities and Population Synthesis scenes) and traffic simulation playback animations

[9] No limits on threads used

[10] Advanced Edition: OpenPaths EMME APIs, OpenPaths CUBEPy, OpenPaths CityPhi SDK. Ultimate Edition: OpenPaths AGENT APIs, OpenPaths DYNAMEQ APIs

[11] Advanced Edition includes importers for GTFS, OSM, Shapefile, OMX, OpenPaths CUBE, OpenPaths EMME data. Ultimate Edition includes importers for Aimsun, VISUM, SATURN, SYNCHRO™, and HERE data

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Features	OpenPaths Advanced	OpenPaths Ultimate
Computing and Workflow		
Multithreading / parallel processing[9]	◆	◆
APIs and SDKs[10]	◇	◆
Scenario Management	◆	◆
Flowcharting and code-free workflows	◆	◆
Data Interfaces[11]	◇	◆

Key

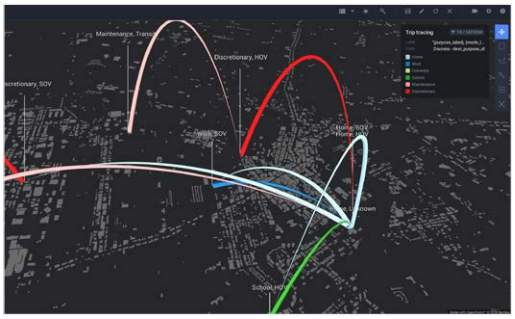
◆ All functionality included

◇ Some functionality included

Notes

Functionality varies by application across OpenPaths EMME, OpenPaths CUBE, OpenPaths AGENT, OpenPaths DYNAMEQ, and OpenPaths CityPhi

Leverage leading multimodel network modeling procedures fit for your application.



OpenPaths includes everything needed for modern travel demand modeling, including ABM.

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