D-6700

TAREEK-Vis

An Interactive Visualization Tool for Large-Scale MATSim Traffic Simulations

See a whole city move.

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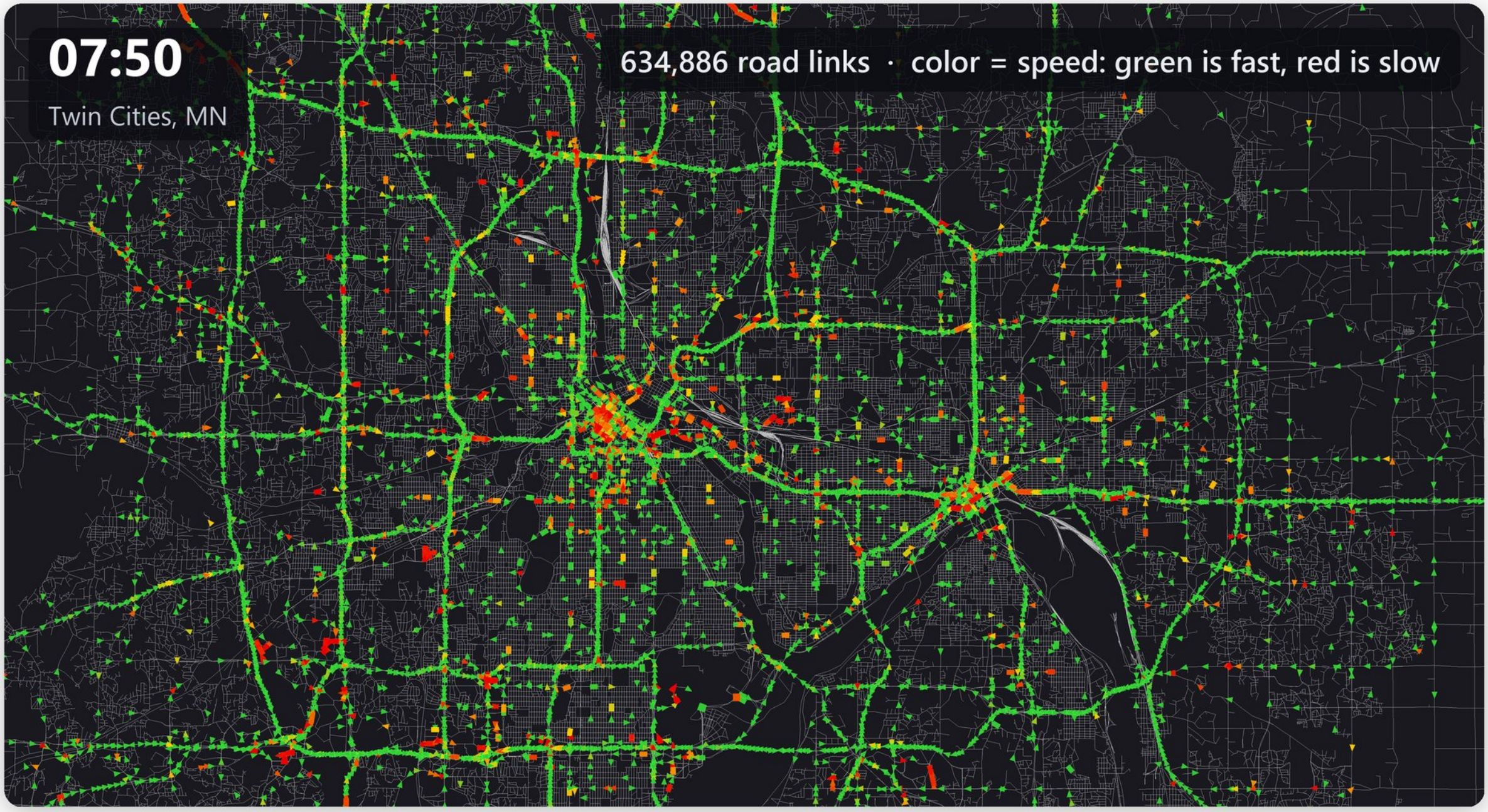
[1] St. Cloud State University, St. Cloud, MN
[2] College of Saint Benedict & Saint John's University, St. Joseph, MN
[3] Indiana University Bloomington, Bloomington, IN
[4] University of Alabama at Birmingham, Birmingham, AL

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Code + installer

1 What does a city do in one day?

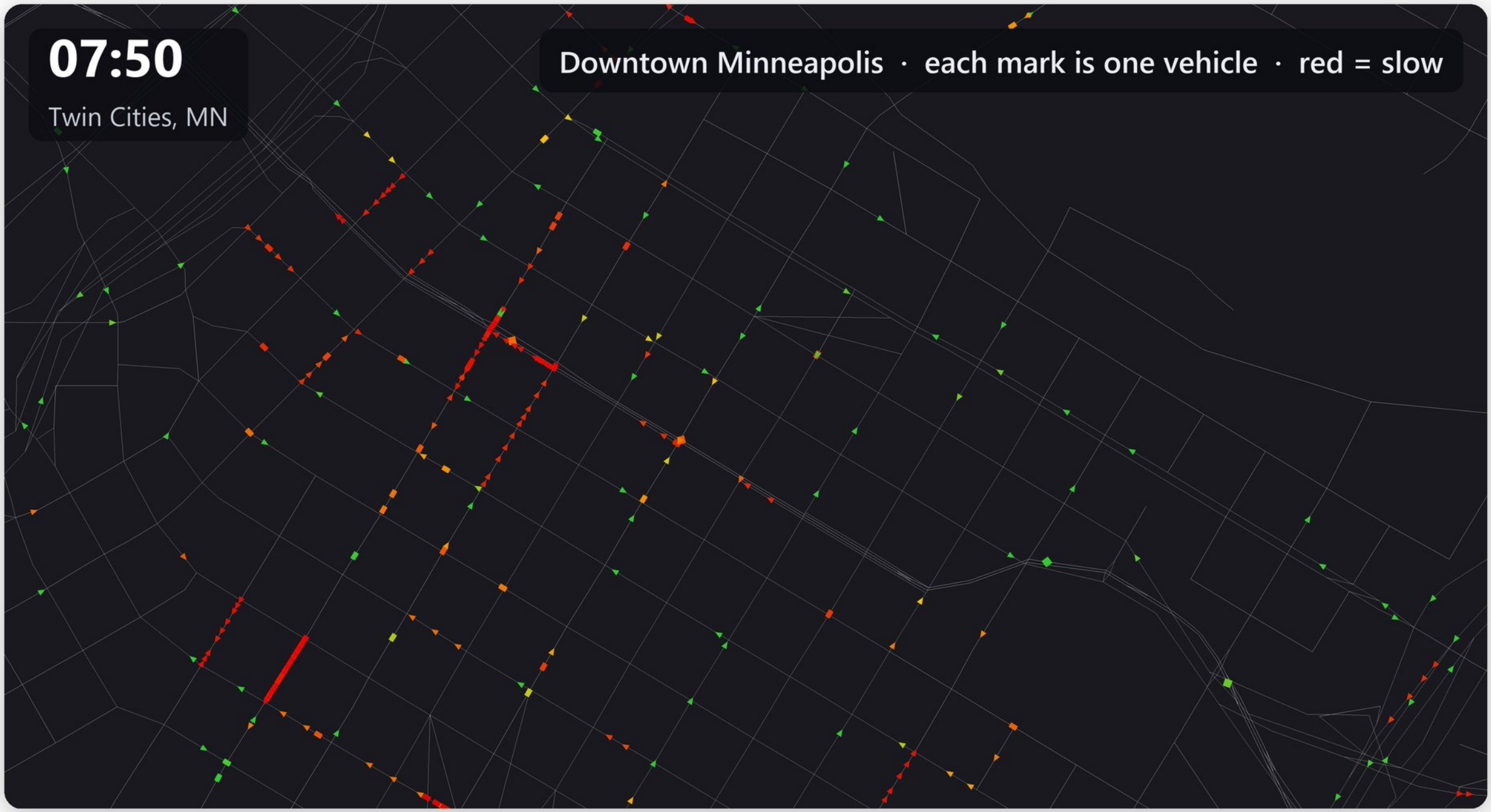
Open a MATSim run. Play every vehicle on the full road network.



Open | Zoom | Inspect | Validate | Analyze | What if | TAREEK-Air

2 What happens on this street?

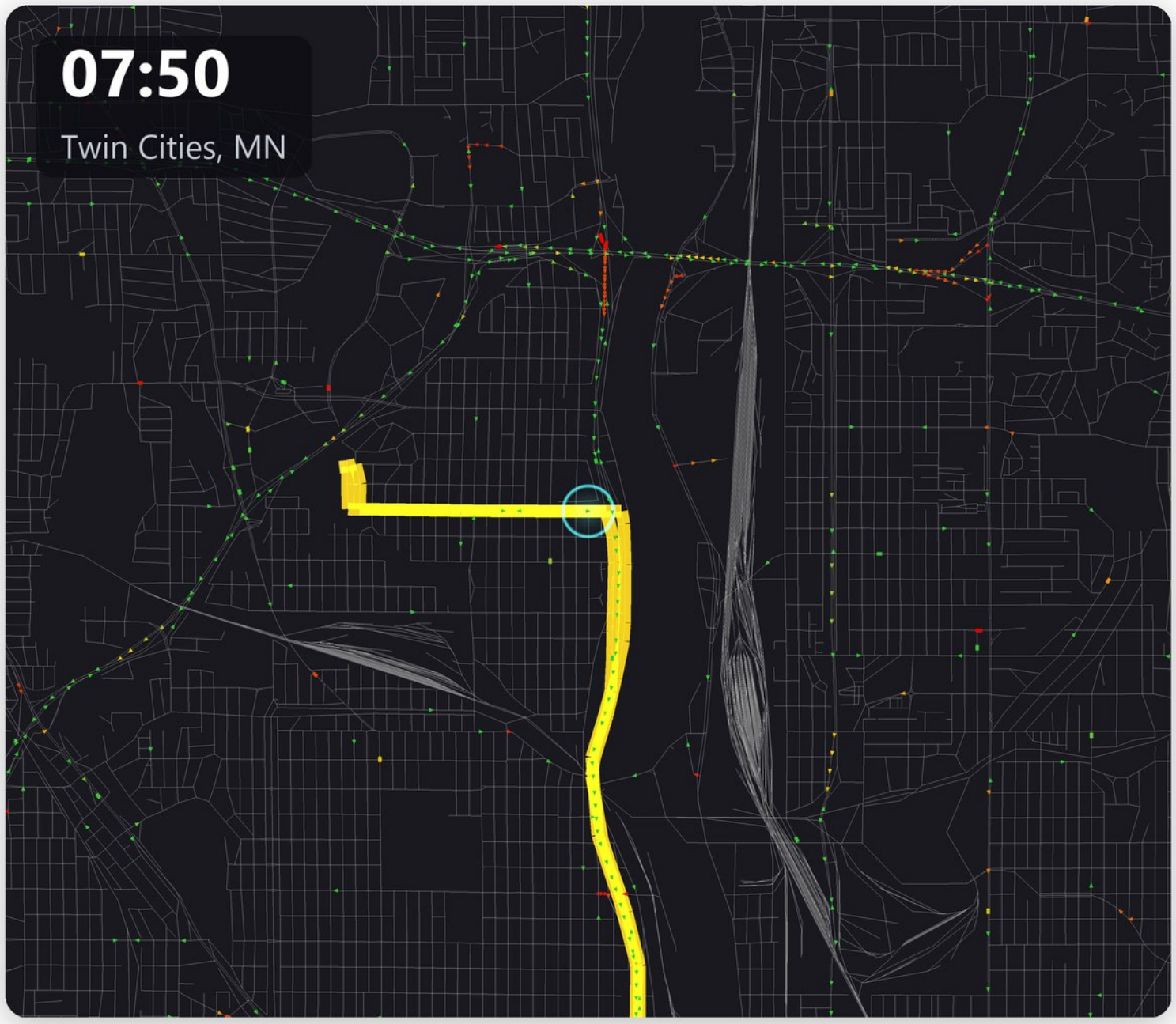
Zoom from the region to one block. The playback stays smooth.



Open | Zoom | Inspect | Validate | Analyze | What if | TAREEK-Air

3 Who is in this car?

Click a vehicle. See the trips of its driver and the route of the day.



person_60030

Trips (2)

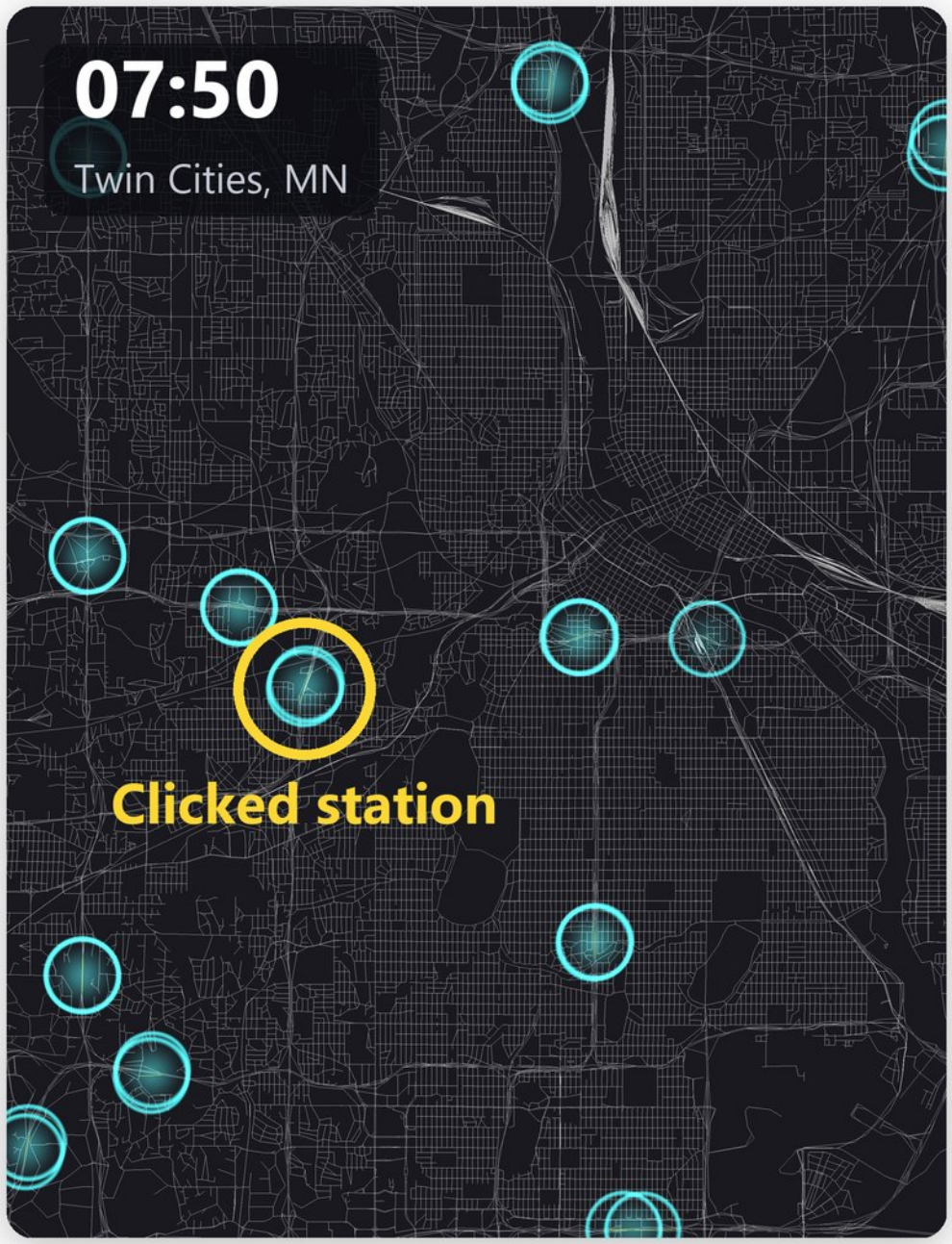
Home	car	**Work**
07:46:40	(00:16:59)	08:03:39
Work	car	**Home**
09:28:10	(00:12:33)	09:40:43

Hide Person Route

Open | Zoom | Inspect | Validate | Analyze | What if | TAREEK-Air

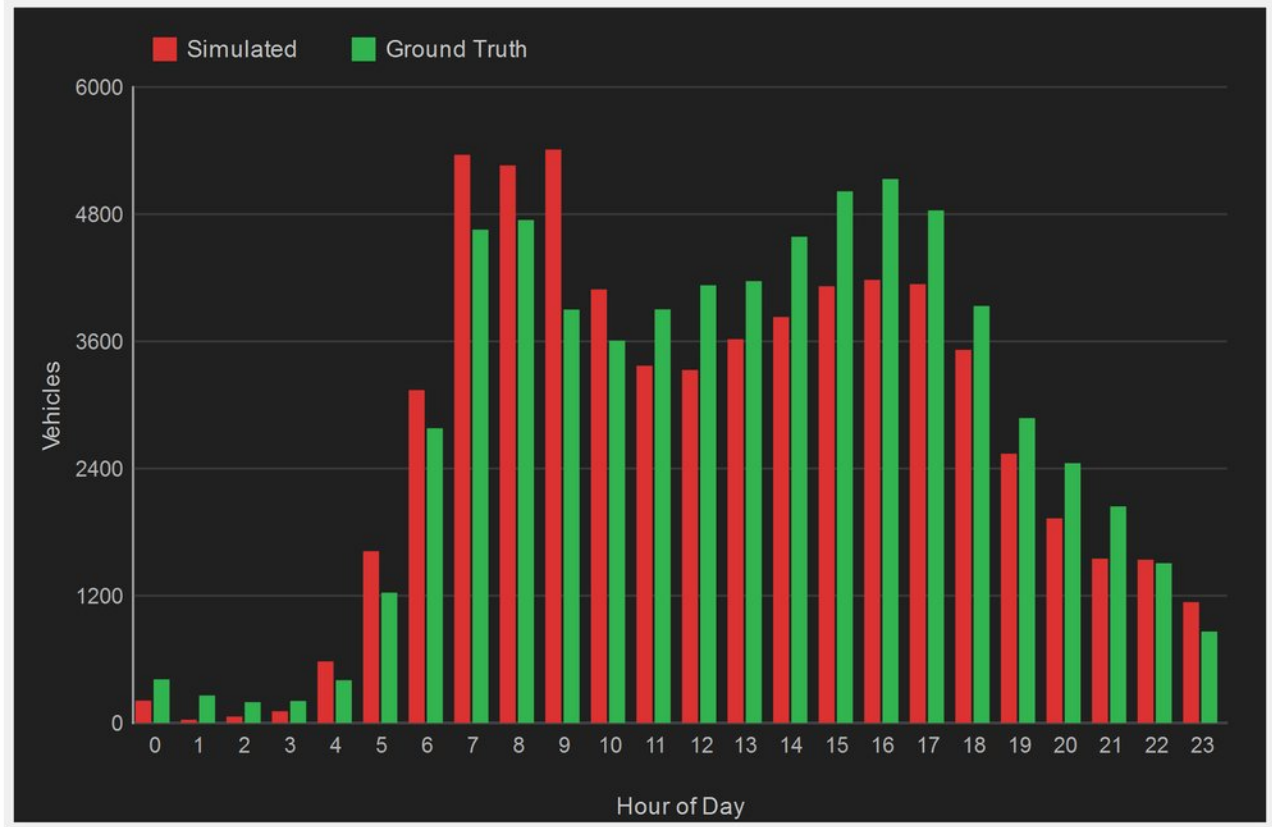
4 Does the model agree with the counts?

Load traffic counts. Click a count station to compare it hour by hour.



Count station FHA_27_010730_fwd

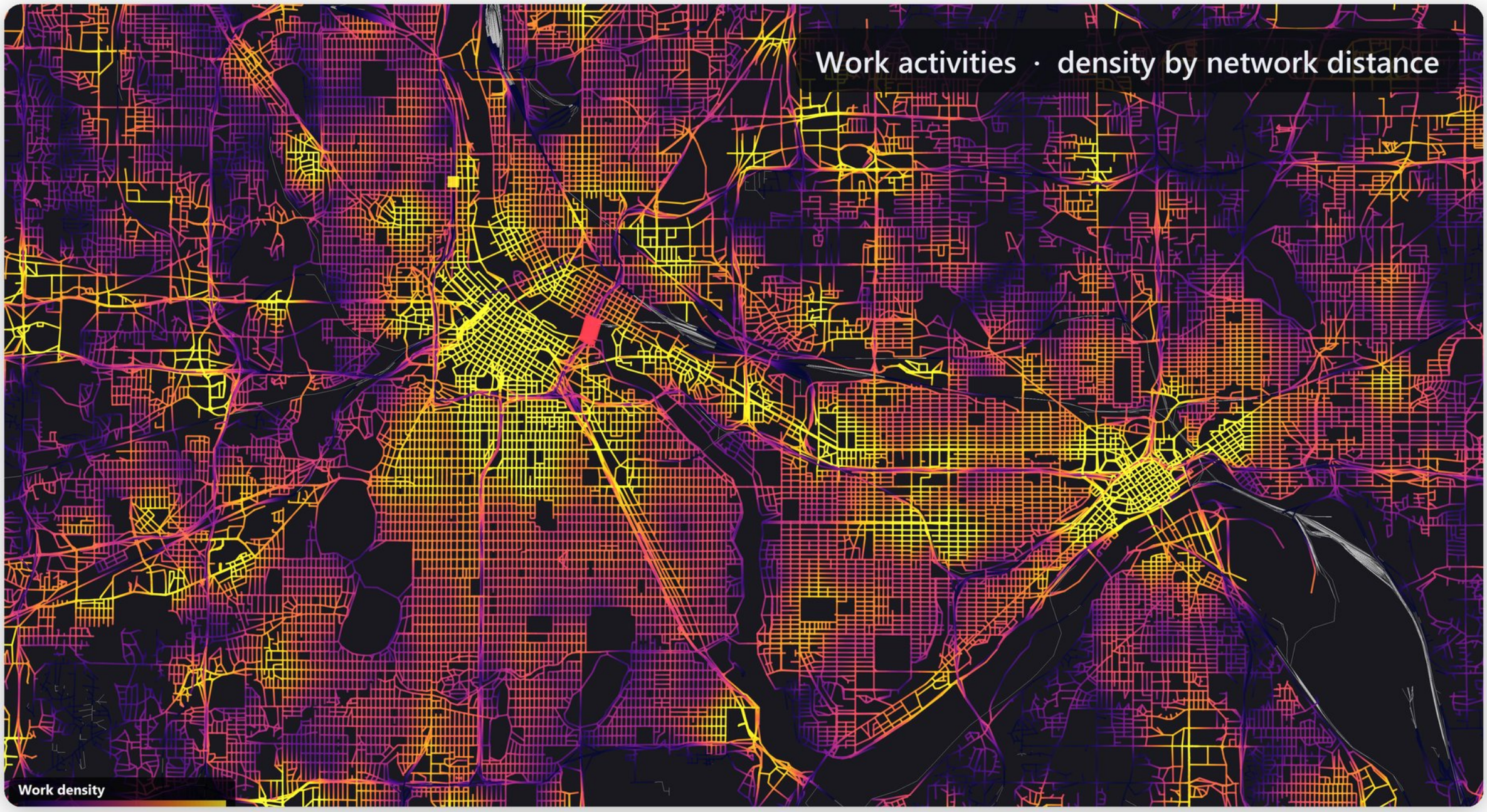
Link 193189, a freeway west of Minneapolis · simulated volume x 10 (10 % sample)



Open | Zoom | Inspect | **Validate** | Analyze | What if | TAREEK-Air

5 Where do people work?

See the density of each activity type along the road network.



Open | Zoom | Inspect | Validate | **Analyze** | What if | TAREEK-Air

6 What if we close this road?

Select roads on the map. Export a scenario file for the next run.



Link ID	From -> To	Road type	L
165253	267078135 -> 8369419513	Unknown	
629366	708315944 -> 719857201	Unknown	
620903	709039876 -> 267078135	Unknown	
165254	719857201 -> 708315962	Unknown	
467239	708315984 -> 708315944	Unknown	
467240	8369419513 -> 1883270850	Unknown	

6 of 6 links checked — Remove

Action: Close these links

Name: i35w_bridge_closure

Description: Optional

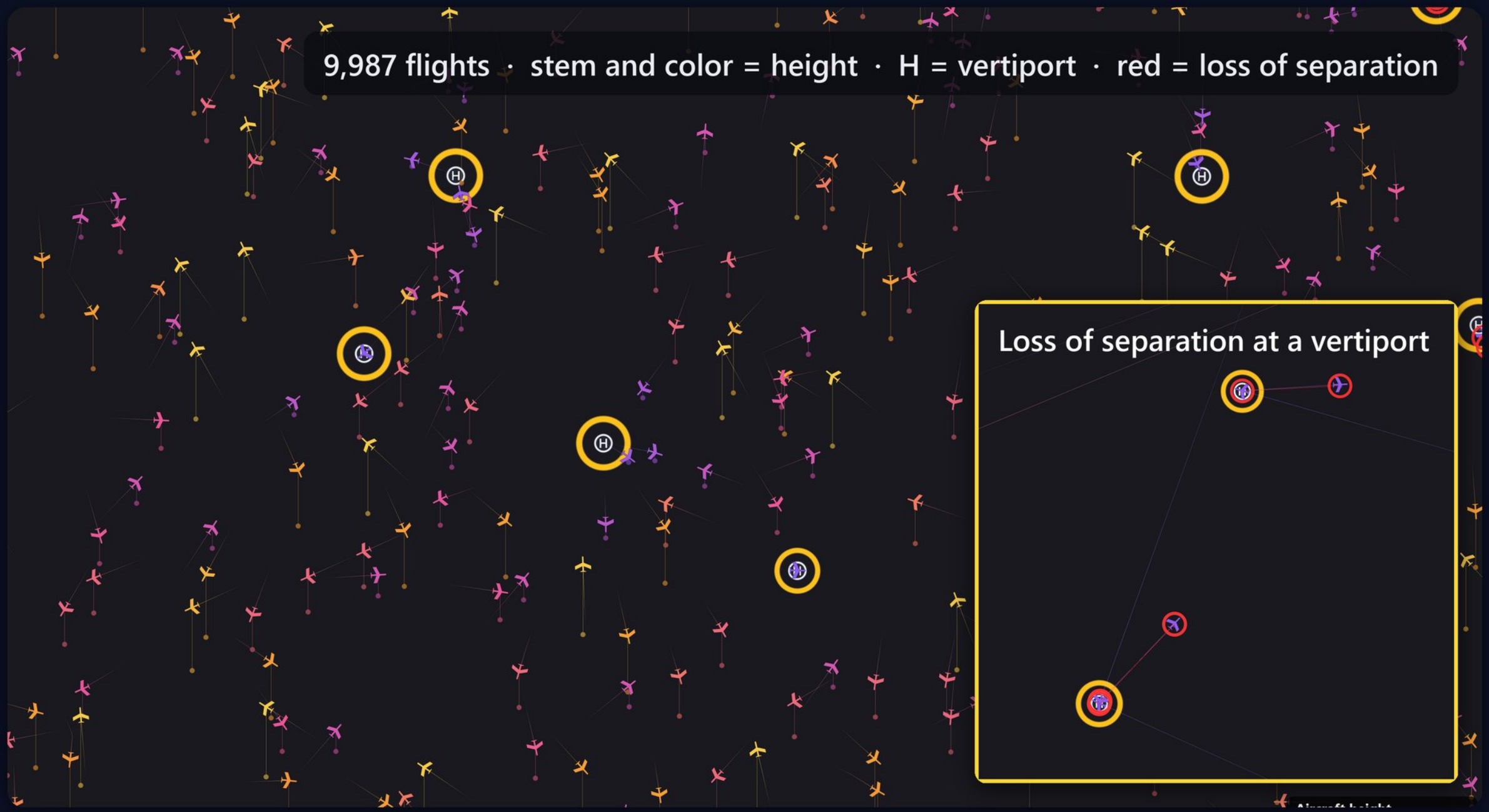
Base run: experiment_20260527_155153_tc_blend

Clear — Export scenario file...

SNEAK PEEK

7 What if traffic goes up?

TAREEK-Air: air taxis and drones, with height, losses of separation and holds.



Open → Zoom → Inspect → Validate → Analyze → What if → **TAREEK-Air**