

VALIDATE GERMANY TRAFFIC MODEL AND TRAFFIC DATA PROVIDER

PTV Validate - Traffic Model for Germany

► National Traffic Model

- Covers Germany
- and European Neighborhood as exterior area

► Developed with PTV Visum - since 2005

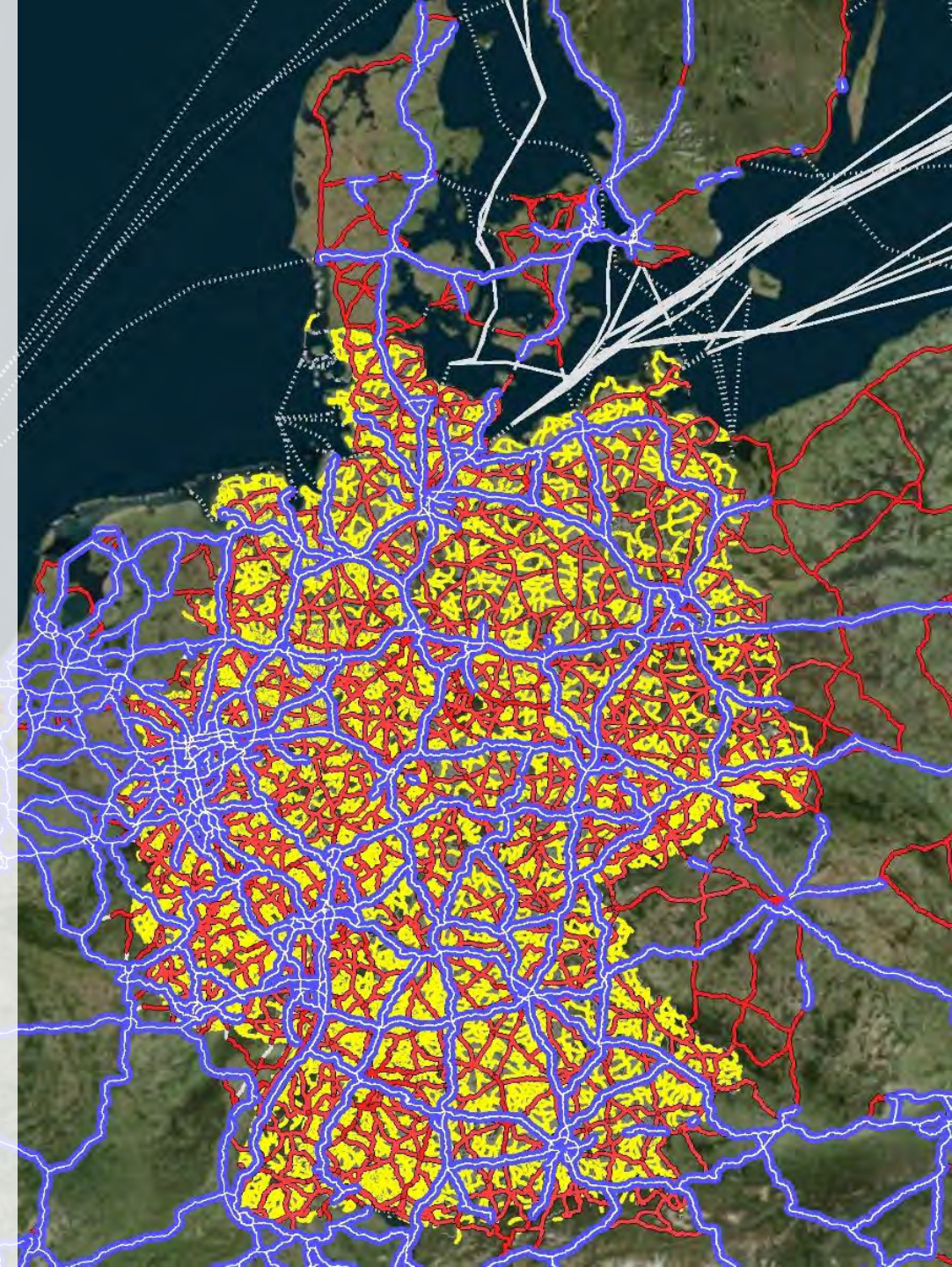
► Validate is a **MaaP** (Model as a Product)

► Benchmarks

- More than 20,000 Traffic Zones
- Approx. 6 million Road Segments
- Approx. 120 million Daily Trips

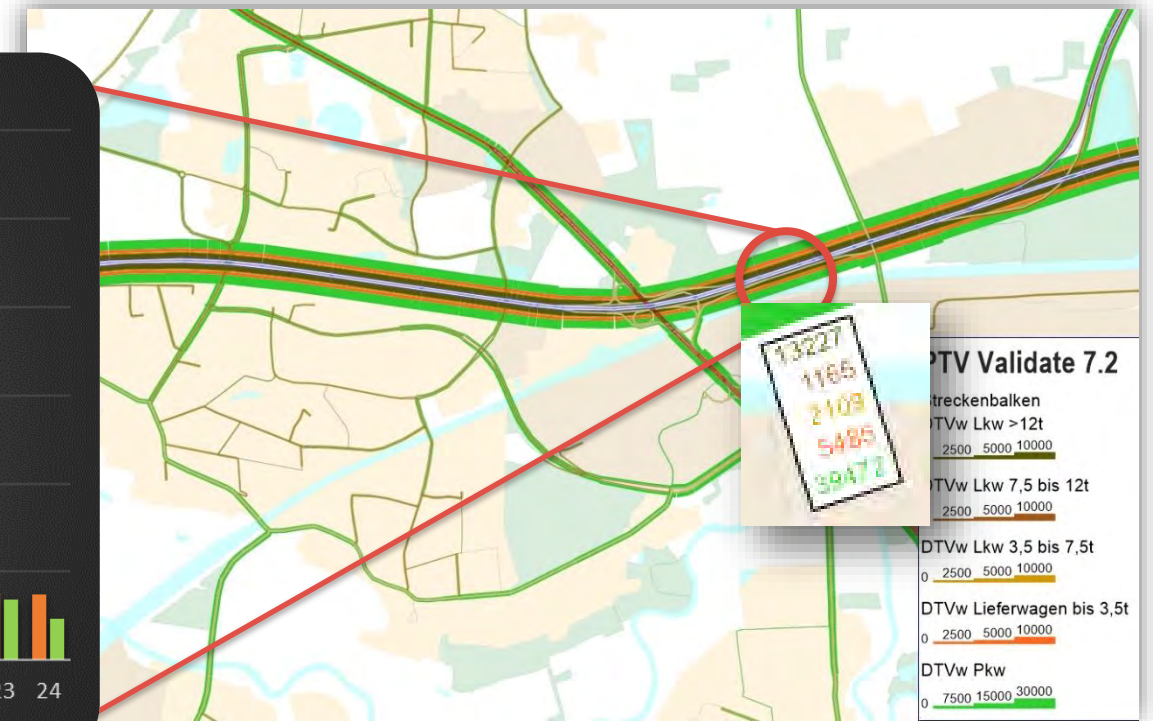
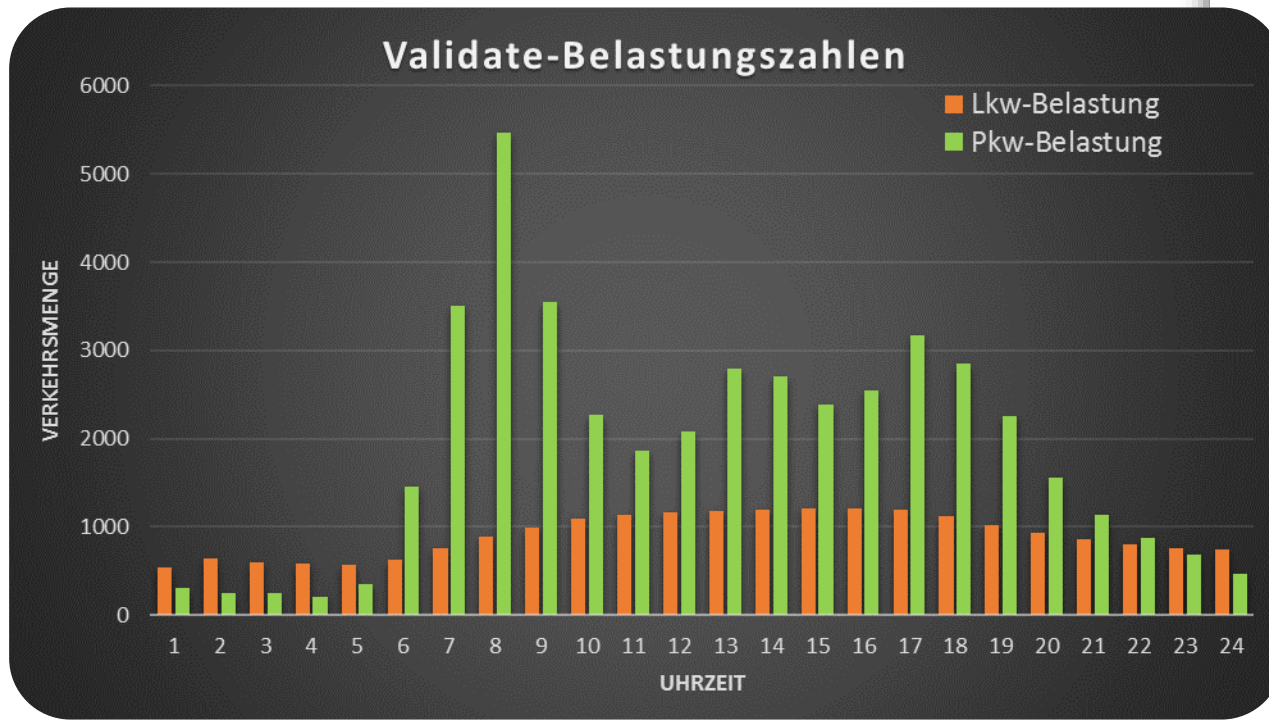
► Data Basis

- HERE navigation network (updated yearly)
- Travel behavior data from MiD (official survey "Mobility in Germany")
- Official Socio-economic data (Zensus data)
- Official count data from BASt (German Highways Agency)
- and many more...



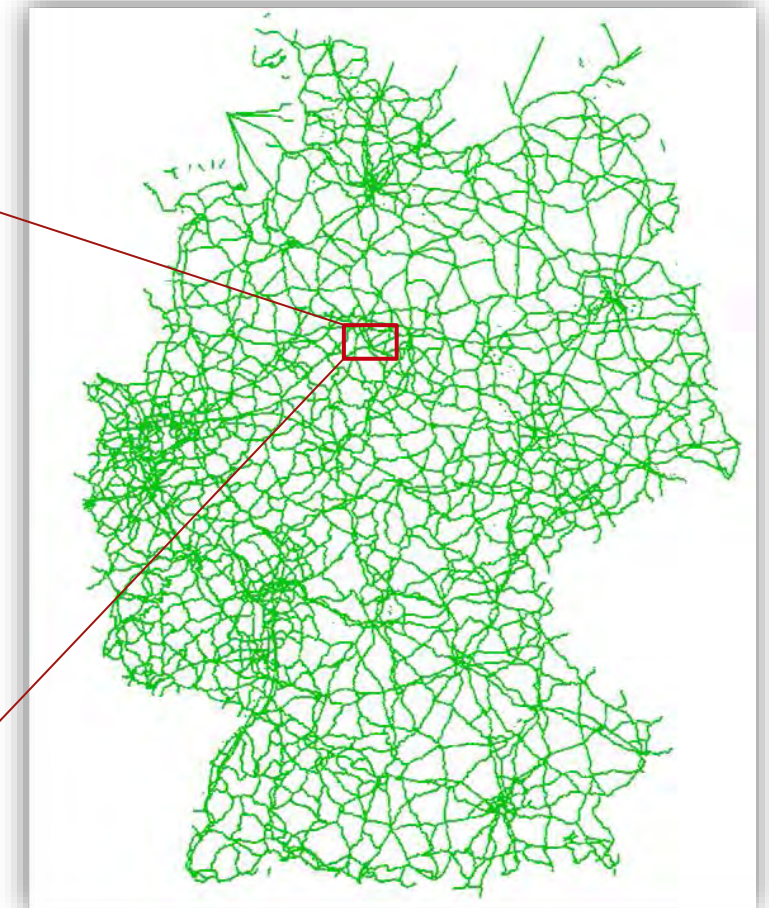
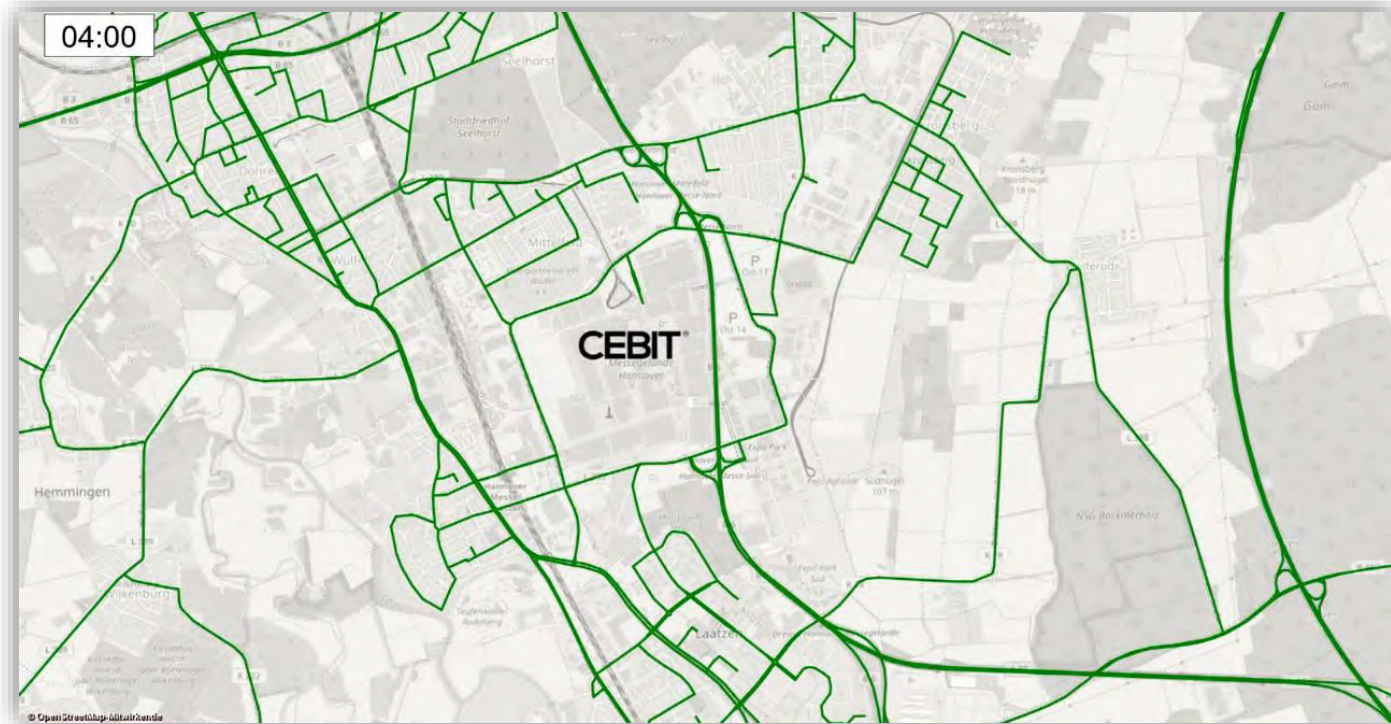
What Results does **PTV Validate** provide?

- ▶ **Traffic Volumes (Car/Truck in 4 demand segments)** for the entire main roads network of Germany
 - For every weekday type and time of day
 - Per road segment and direction
 - Incl. route information



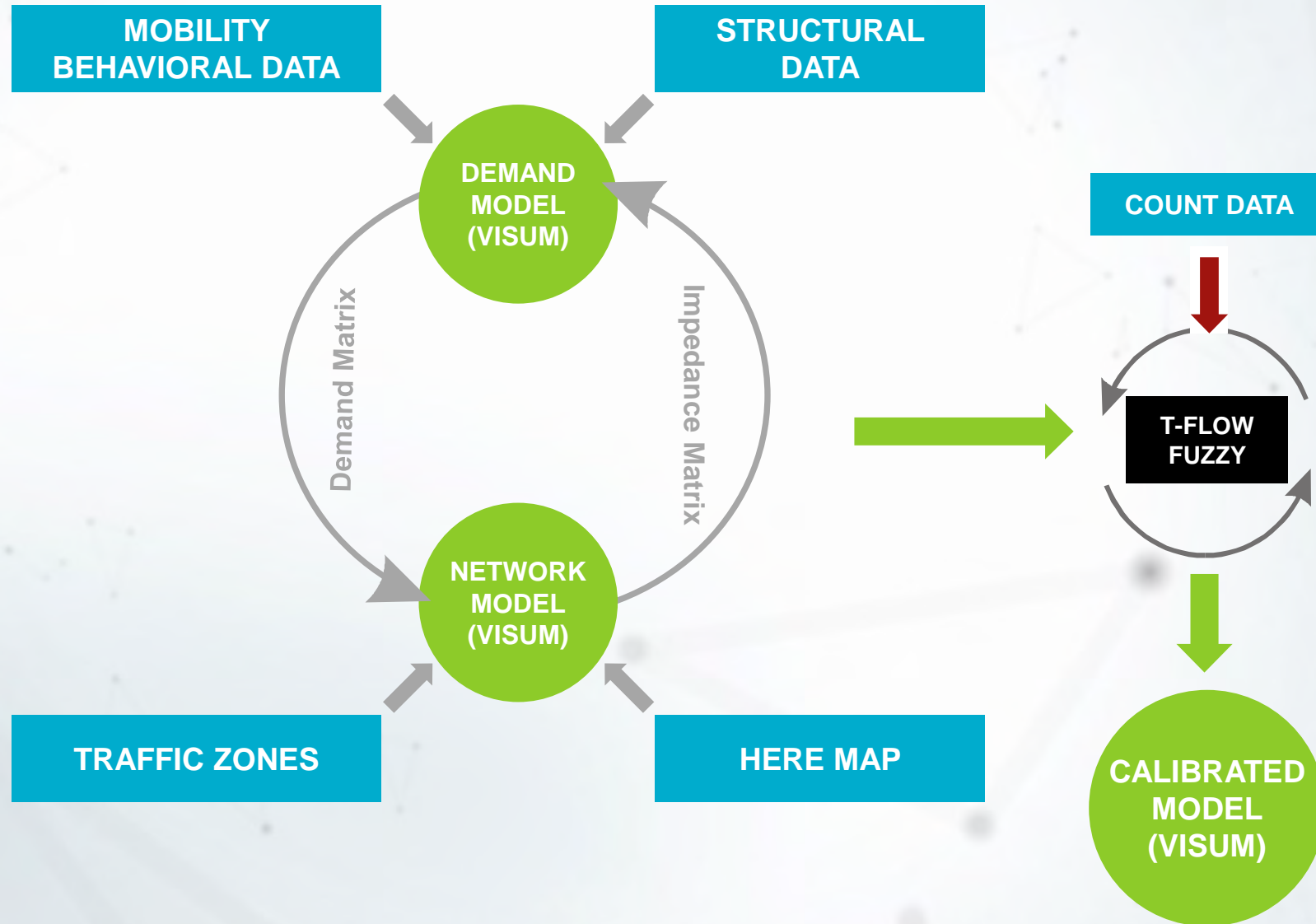
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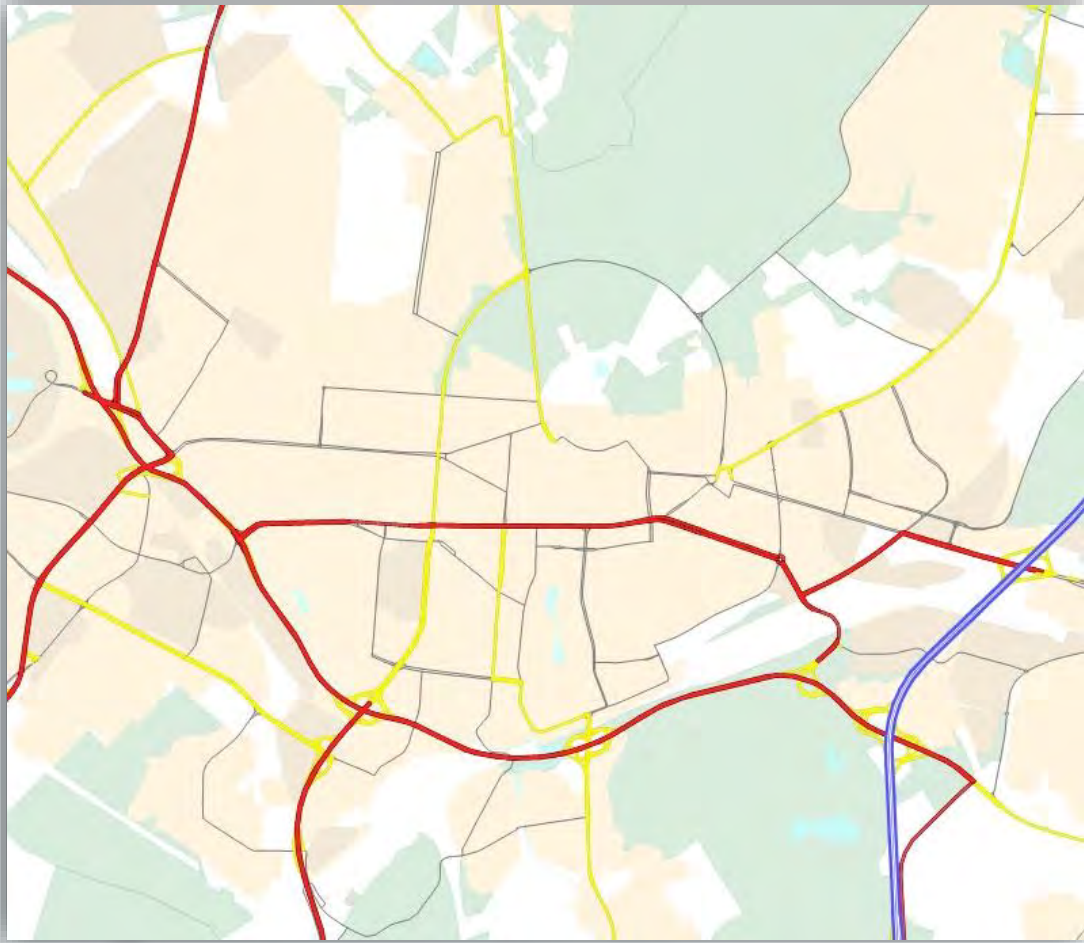


Level of Service: Hourly volumes during a regular weekday (Hanover Fair/ Germany)

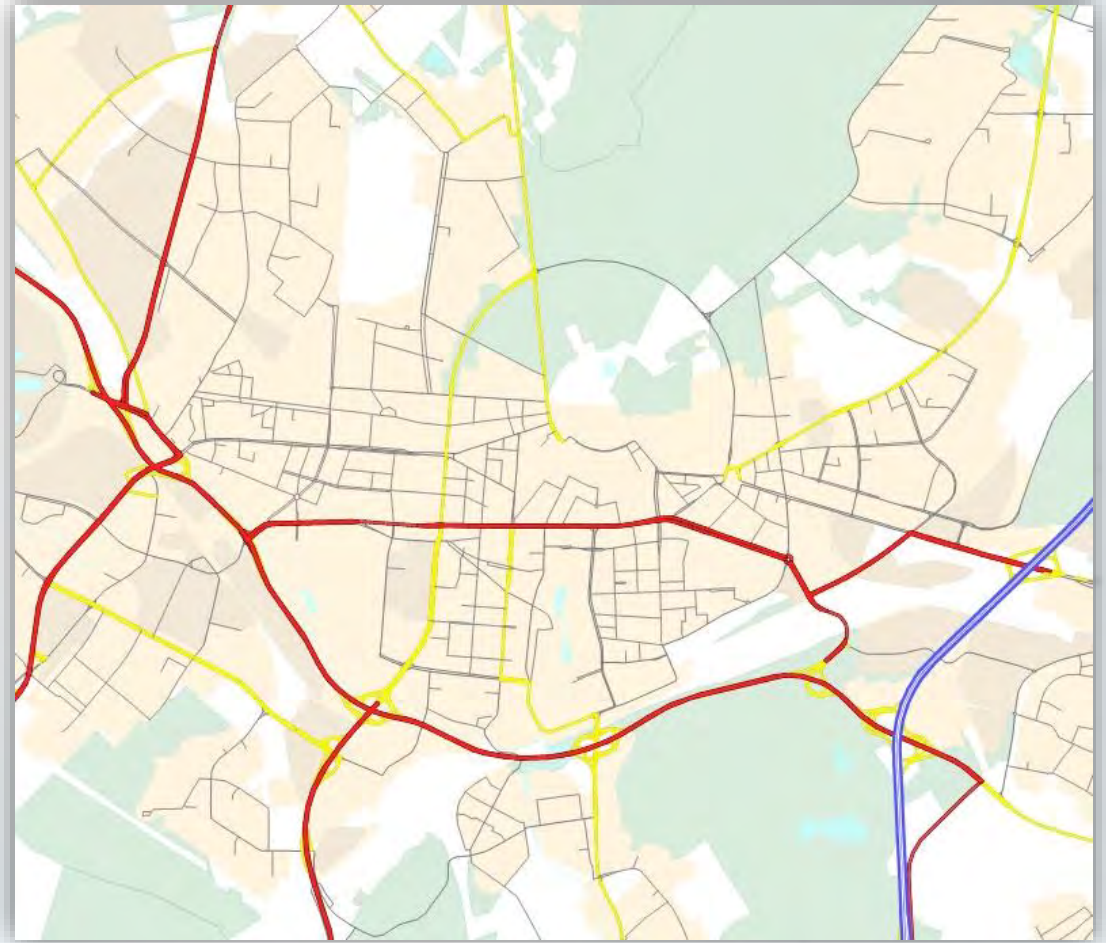
Work Flow in PTV Validate



Network in PTV Validate



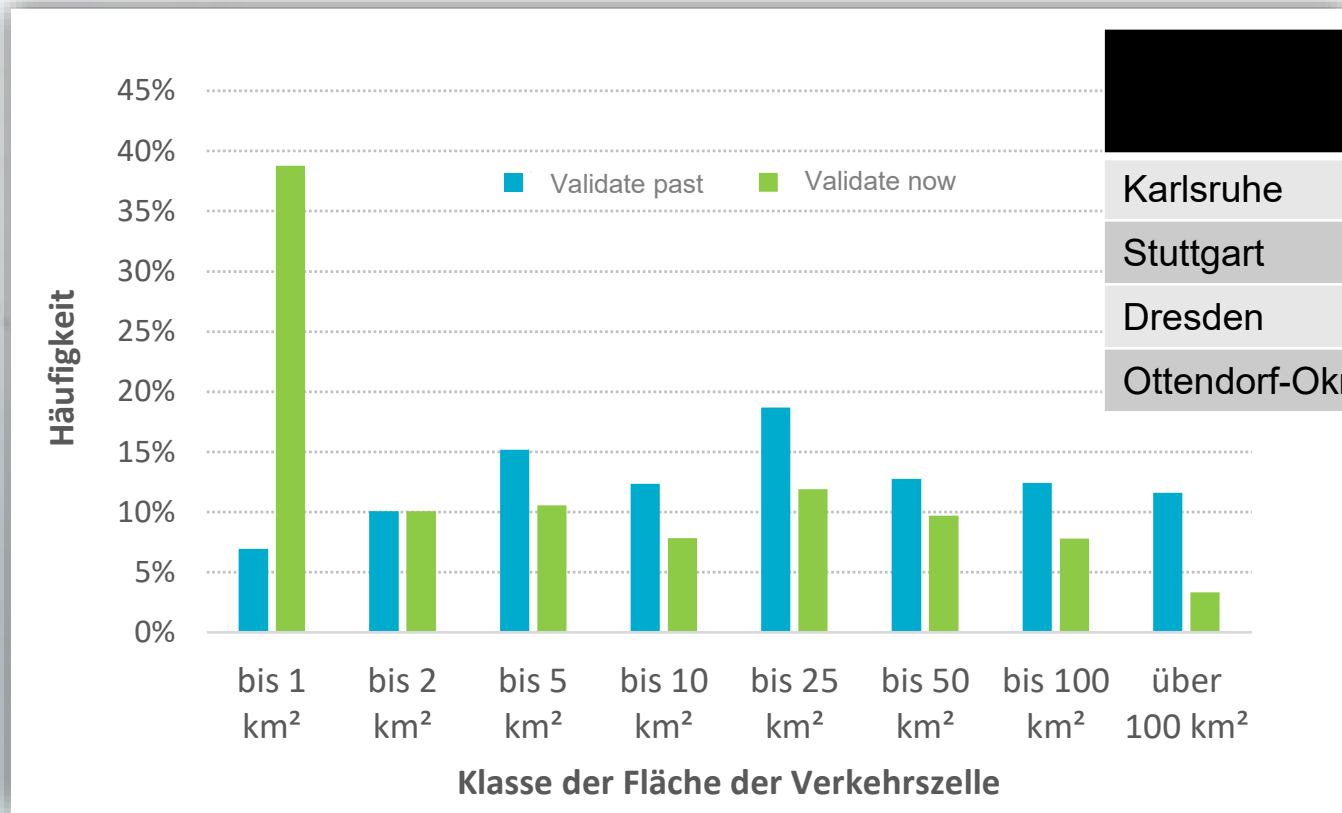
Validate in the past



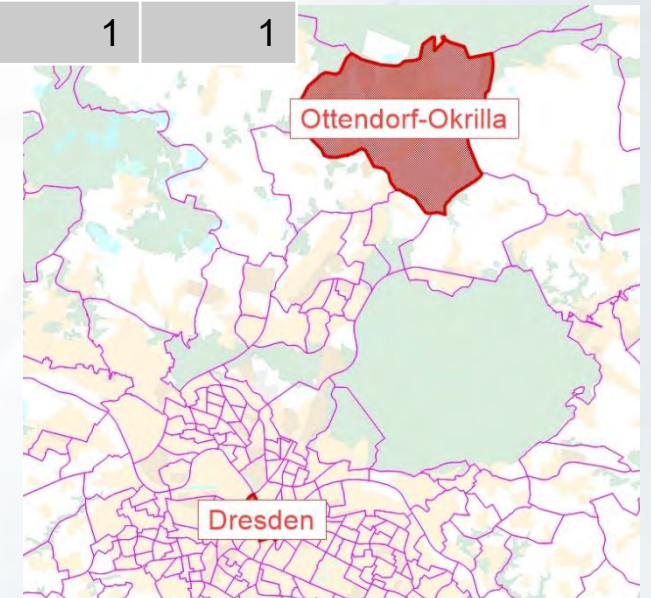
Validate now

Zoning in PTV Validate

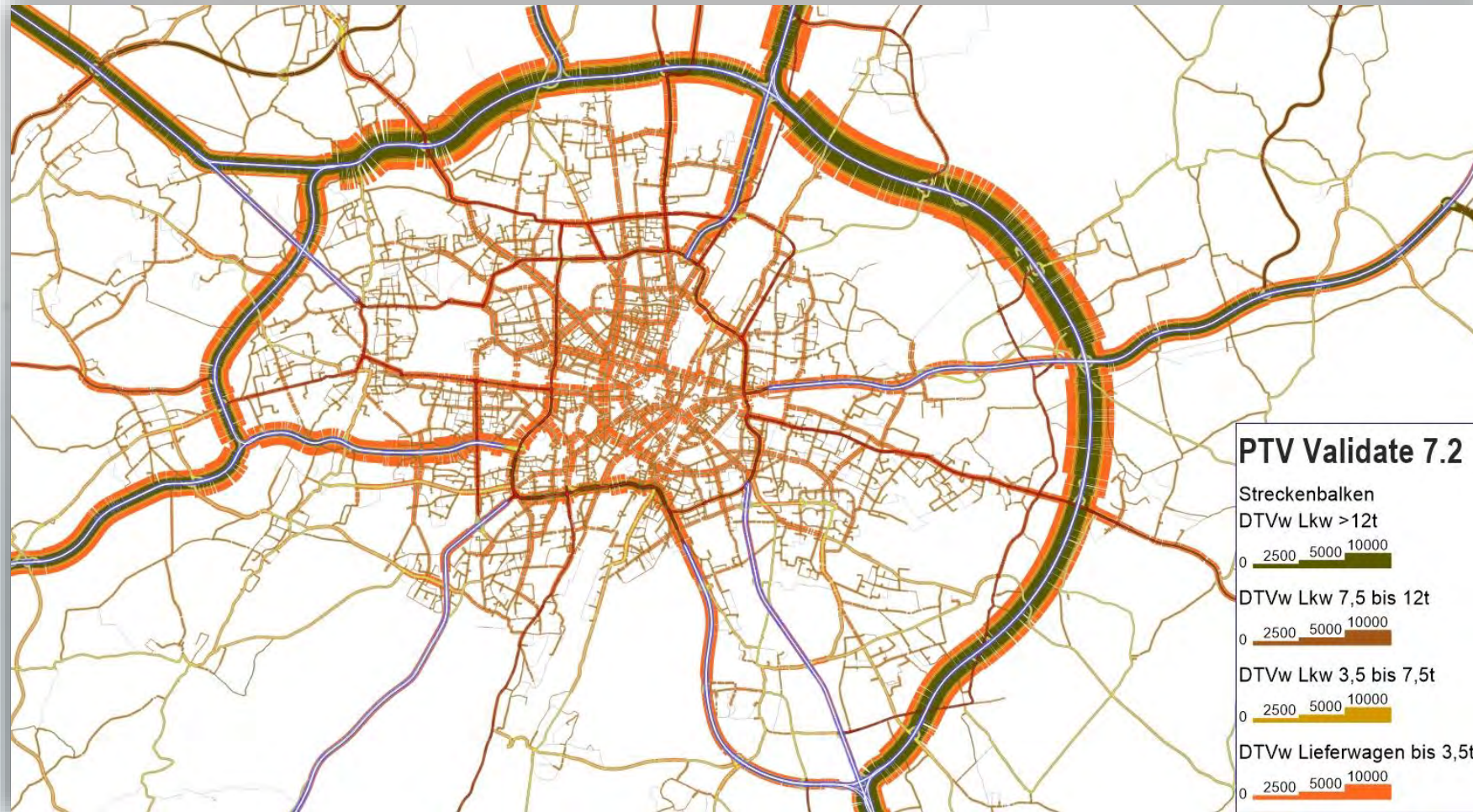
- Last Zoning Update: Increase from 10 000 to 20 000 zones
- Focus on City Areas



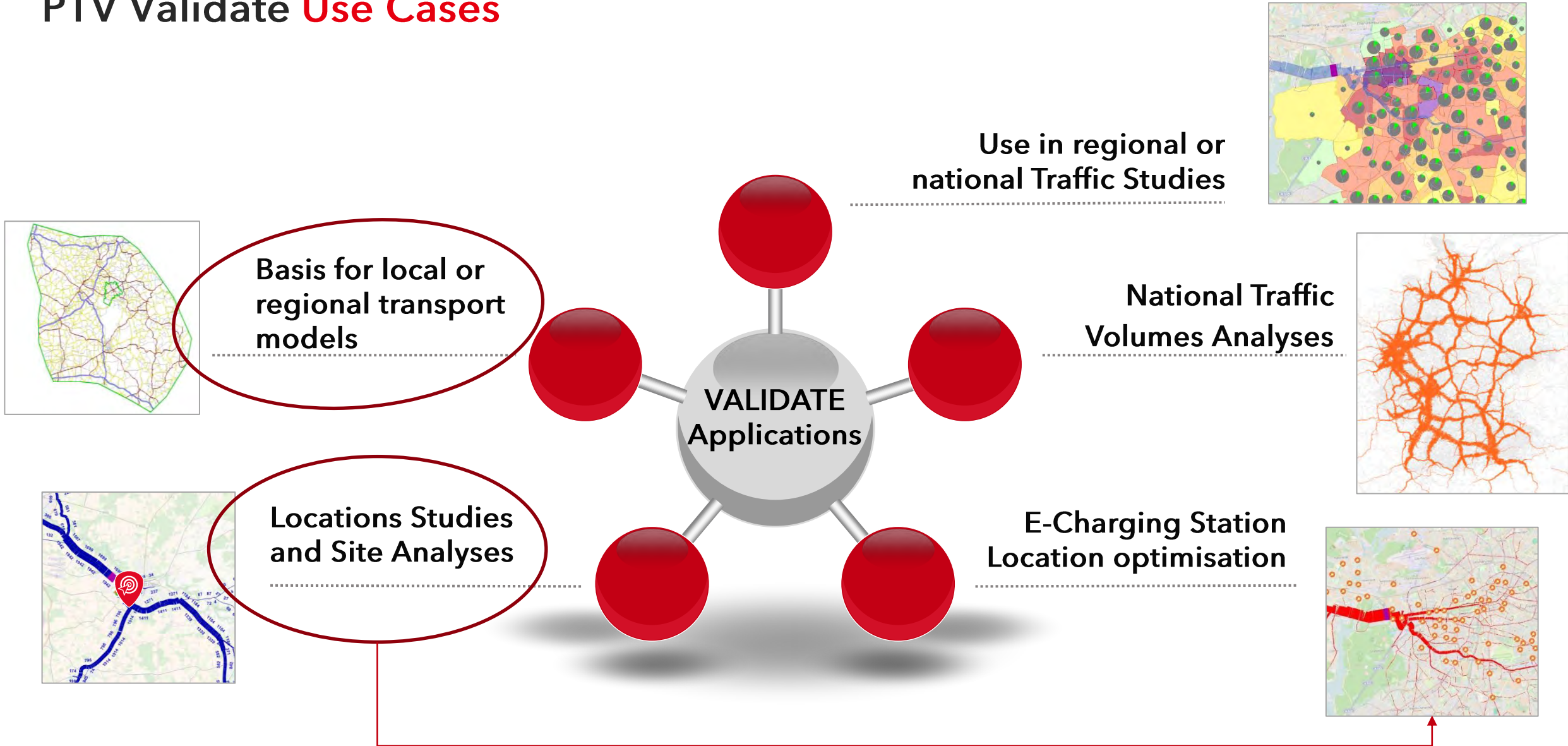
	No of Zones	
	Past	Now
Karlsruhe	44	130
Stuttgart	77	286
Dresden	57	227
Ottendorf-Okrilla	1	1



Demand Segments in PTV Validate



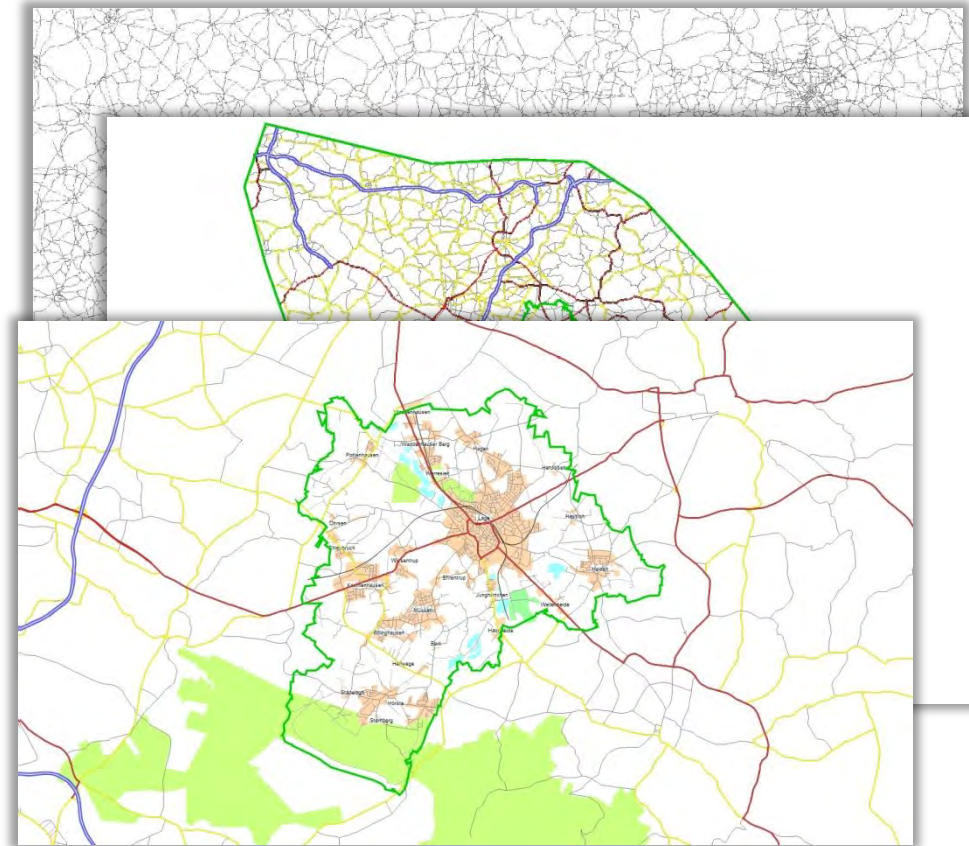
PTV Validate Use Cases



Validate as a Basis for local or regional **Traffic Studies and Forecasts**

Approach:

- ➔ **PTV + customer:** define subnet cut-out from Validate
- ➔ **PTV:** creates subnet
- ➔ **PTV + customer :** define core area
- ➔ **PTV:** adds detailed area network
- ➔ **Customer:** refines core area model and conducts traffic study

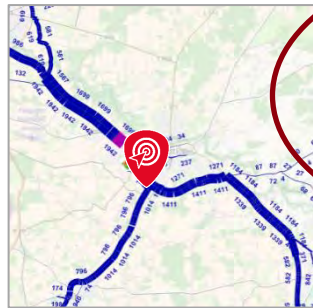


➔ **Relieve of many model development preparative tasks** → **Focus on the core tasks**

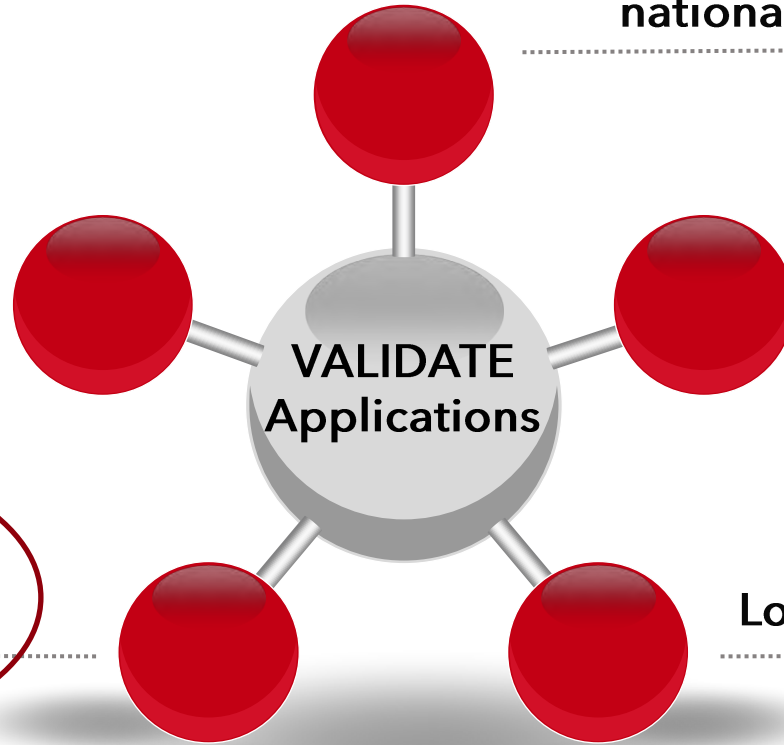
PTV Validate Use Cases



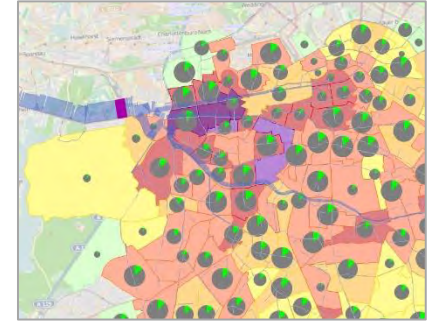
Basis for local or regional transport models



Locations Studies and Site Analyses



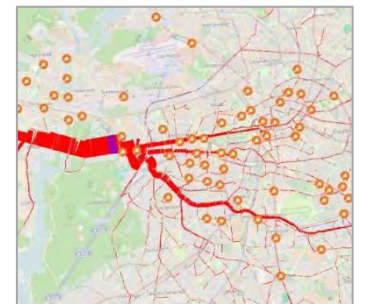
Use in regional or national Traffic Studies



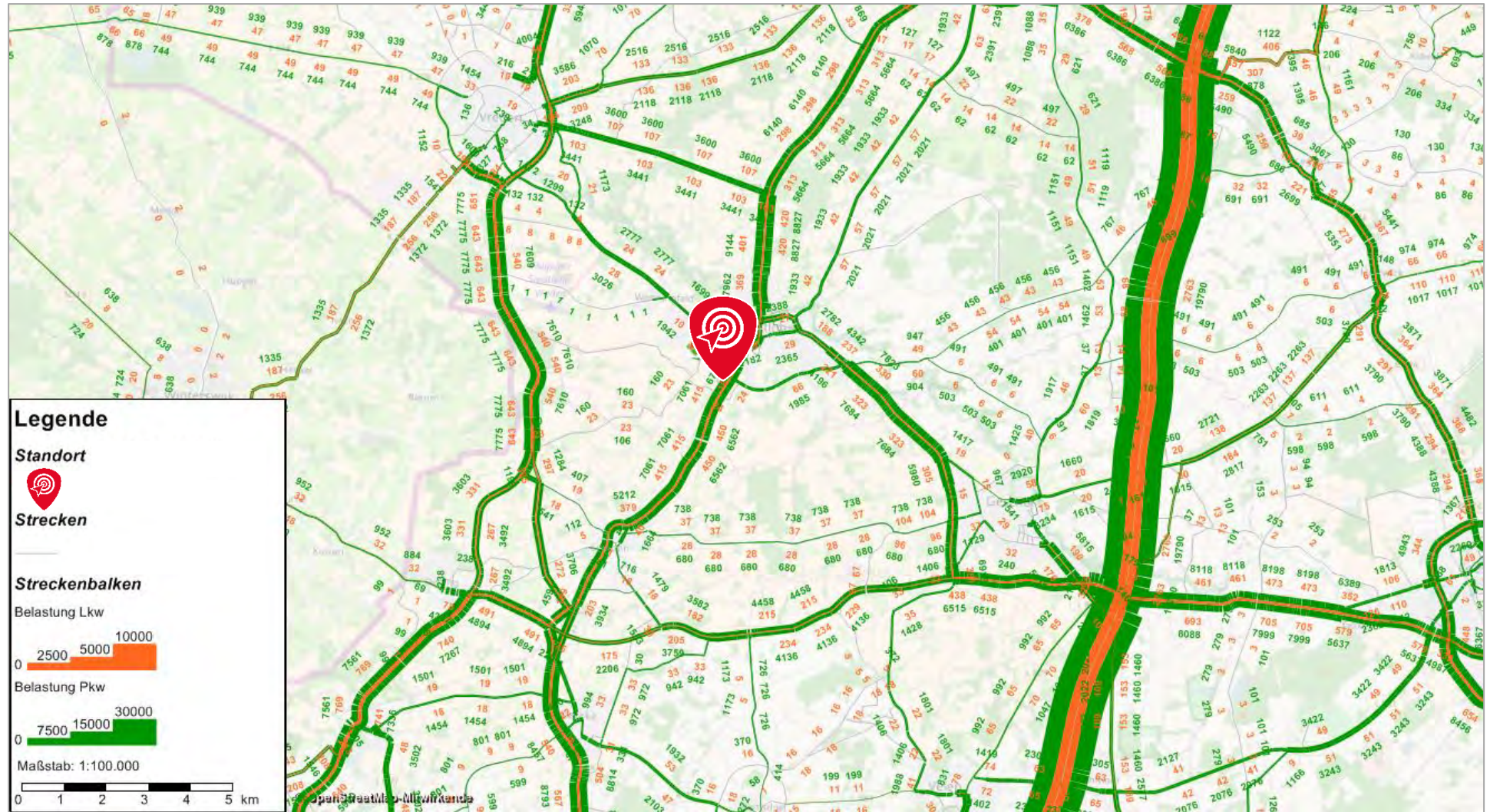
National Traffic Volumes Analyses



E-Charging Station Location optimisation



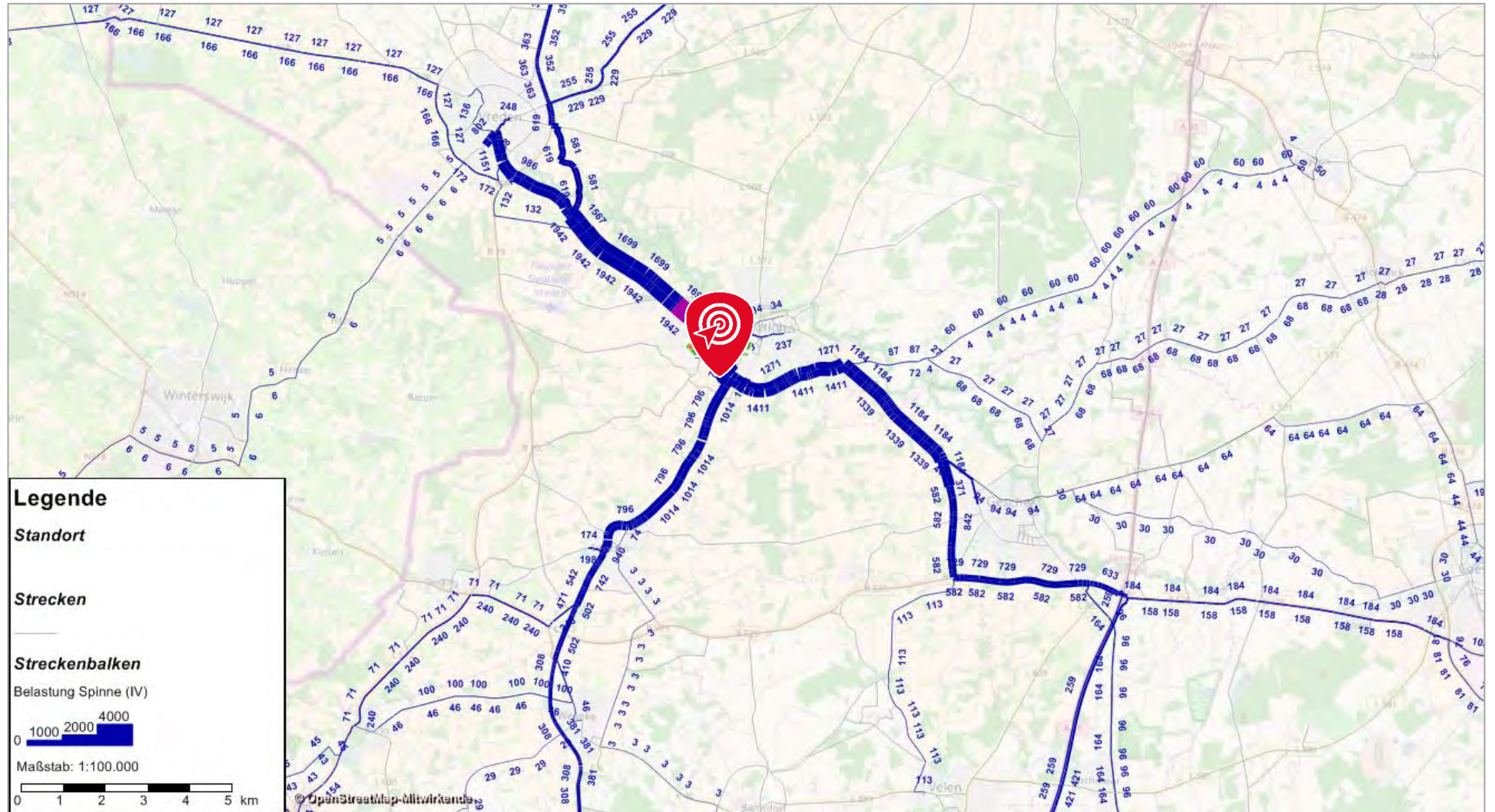
Location Analysis with PTV Validate – Flow Bundle Analysis



Location Analysis with PTV Validate – Flow Bundle Analysis

Validate provides information about:

- Volumes
- Origin and destination of every vehicle
- Route of every vehicle
- Shares per trip purpose



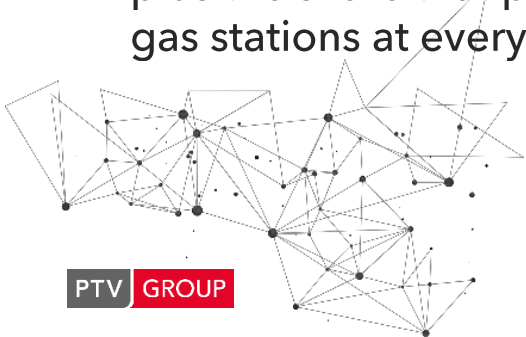
Route-based location analysis with PTV Validate

Success Story Gas Station Optimisation

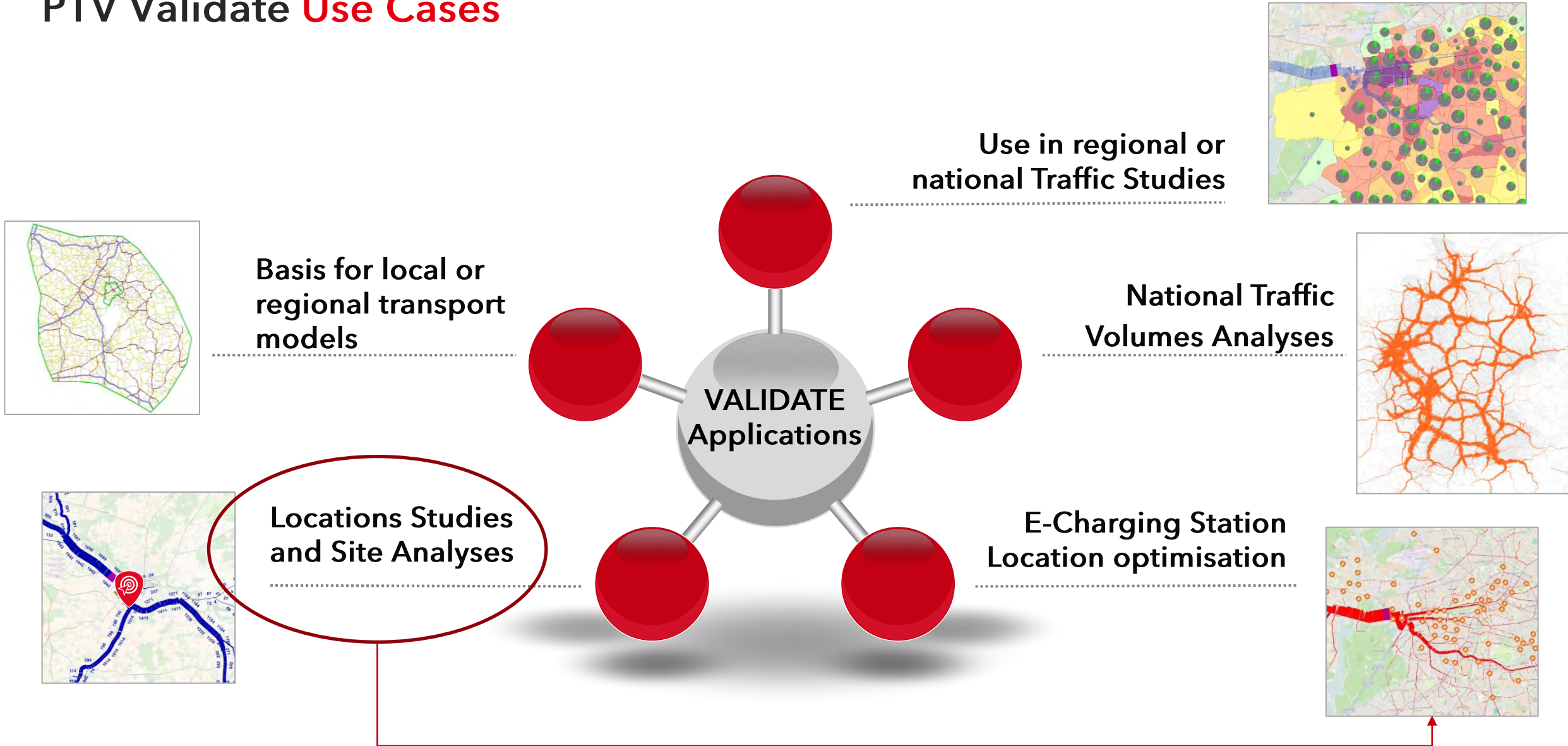
Success Story:

Route-based location analysis for gas stations

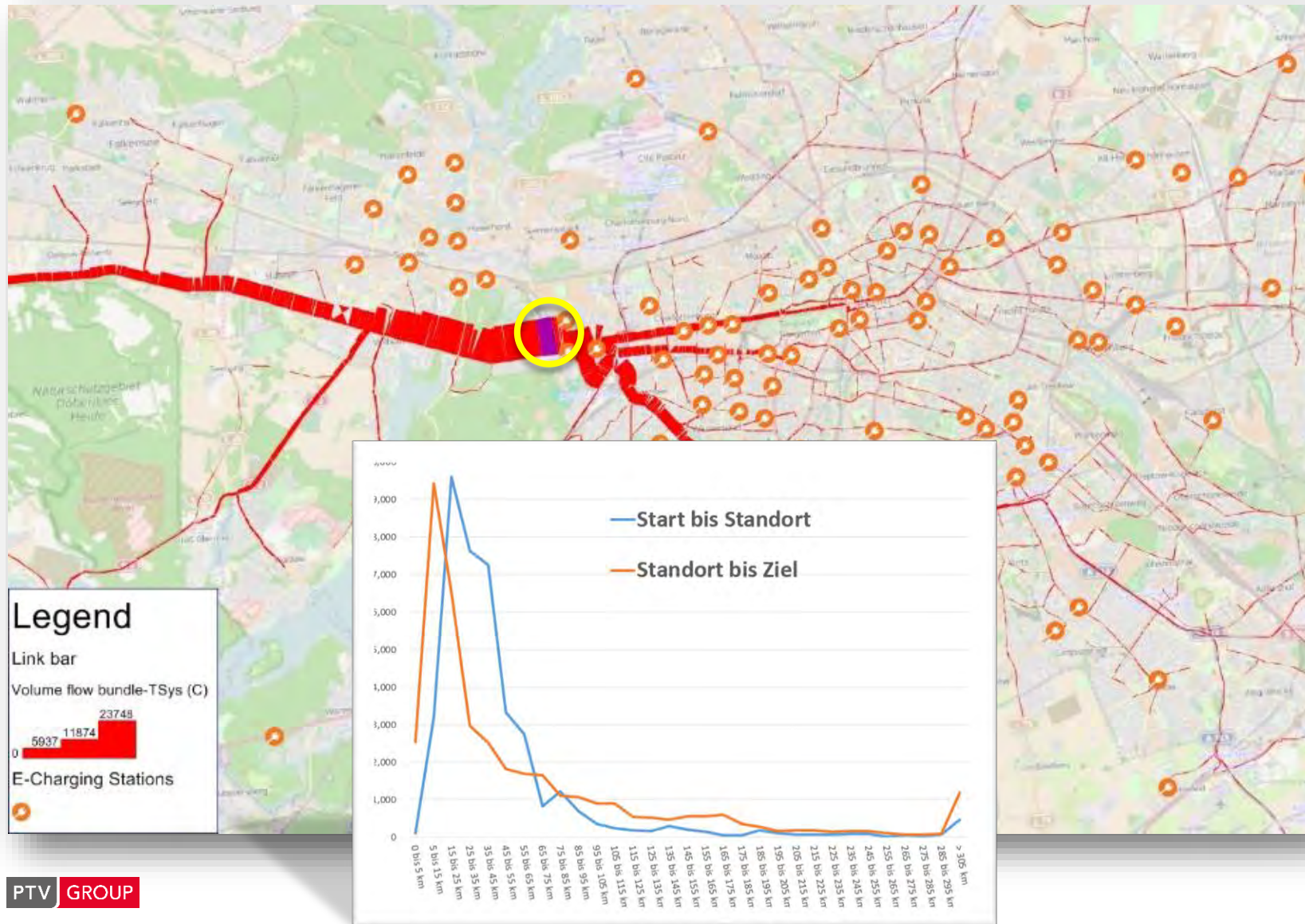
- Based on Validate Germany
- We calculate flow bundles for every location
- We conduct route-based analyses to find the most relevant competitors not the nearest, but the one that was or will be passed by most vehicles along the route
- We deliver the number of passing vehicles at the requested location plus the share that pass competitor gas stations at every location



PTV Validate Use Cases



E-Charging Station Location Optimisation

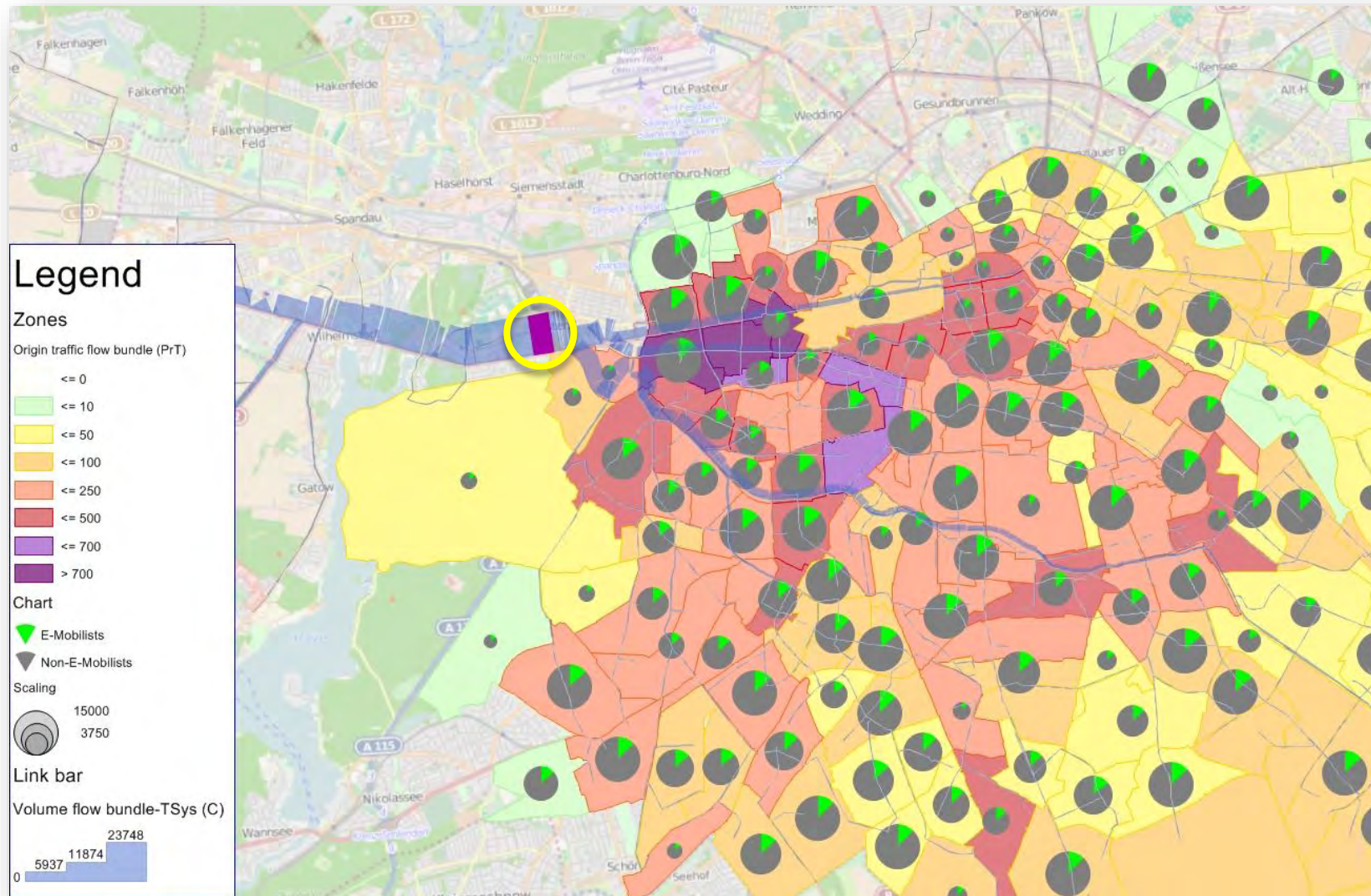


Model-based Studies with Flow Bundle Analysis

- ▶ Where are the main routes?
- ▶ How many charging stations exist already along these routes?
- ▶ Which areas are undersupplied?
- ▶ What is the trip length distribution at a charging station?

(how many vehicles have a potential need for recharging)

Sociodemographic Analysis with **PTV Validate**

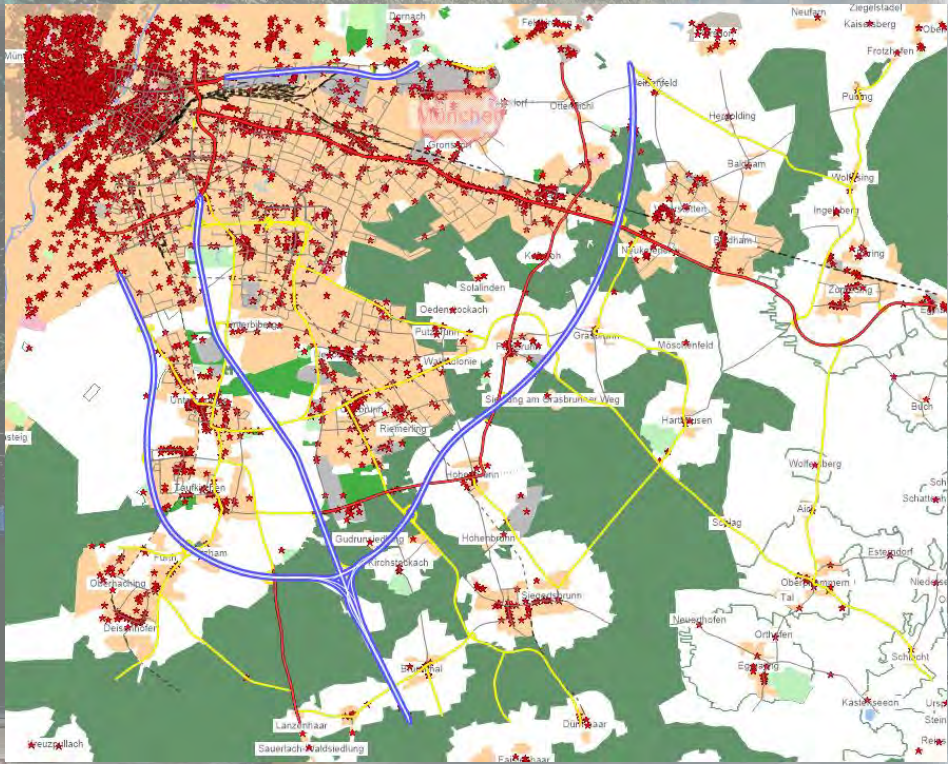


➤ Linkage to socio-economic data on zone level:

- Population
- Commuters
- Purchase power
- E-Car fleet

➤ Trip purpose information

- Work
- Shopping
- Leisure
- ...



Validate Test Data for free
"Munich-Southeast"

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New Validate 2022

Information

Was sind die Zutaten für ein
exzellentes Modell?



Website Traffic Data



Factsheet Download