



Analysis by



Policy relevant cycling data en –information

Exploring Talking Bikes (GPS) data

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Tour de force interest

Relation between technical possibilities and policy relevant questions

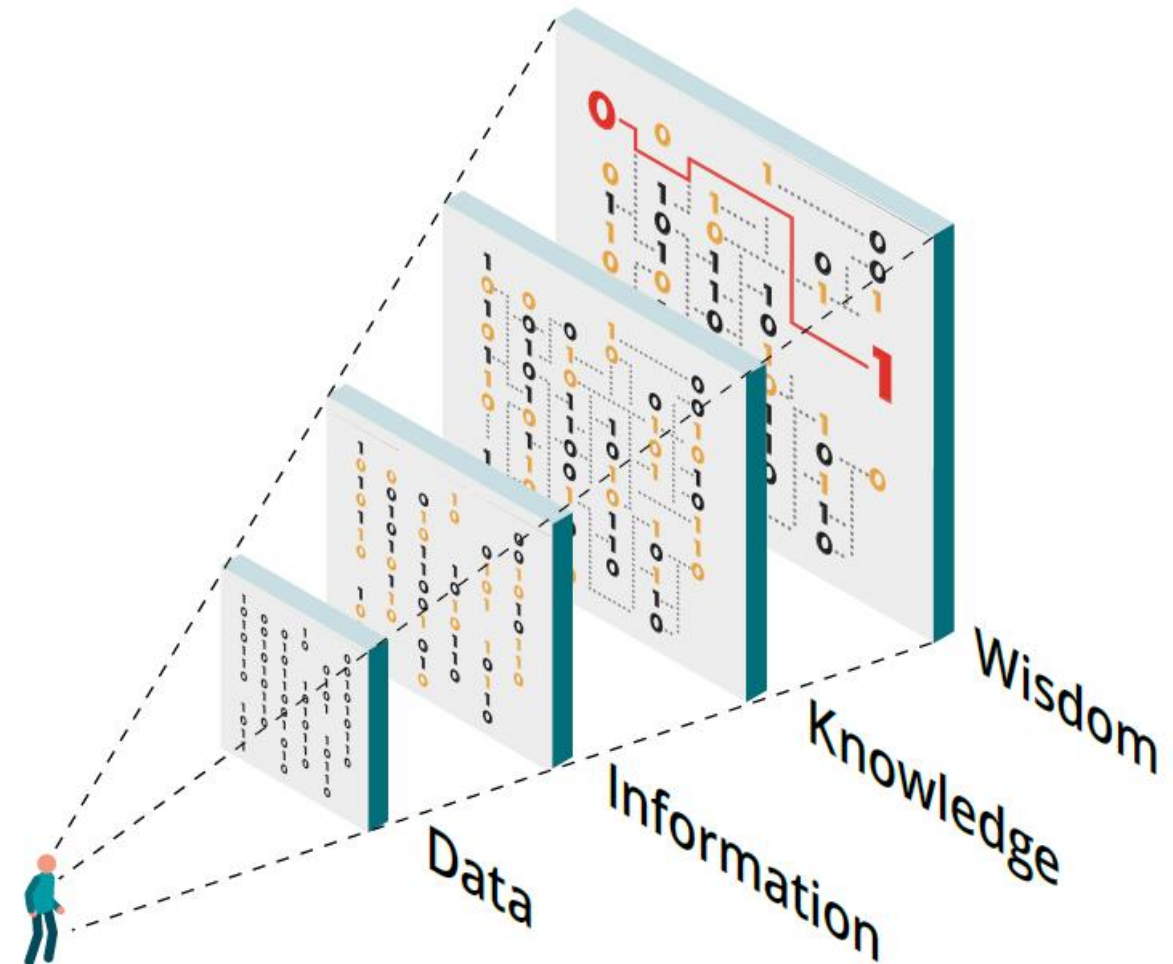


Talking bikes data



Project scope:

- Exploring Talking Bikes GPS-data
- Data quality for future use GPS-data





Mogelijke use cases

Typen toepassingen

- Real-time traffic information and control
- Multi-modal “gebiedsgericht benutten” (GGB+)
- Transportation planning
- Network design and performance
- Policy evaluation

Real-time	GGB+	Planning	Design	Policy making and assessment
Multi-modal connected traffic control Real-time travel time information Route guidance Speed limit	Setting up the frame of reference Determine priority and function maps (for bikes and vehicles) Design traffic management plan	Demand estimation and prediction for transport service planning (e.g., first-mile last-mile)	Bicycle network design Design of bicycle parking facilities Design of traffic management measures (e.g., control plans)	Ex-post policy assessment



Traffic variables and KPIs

Each of the applications that we can consider somehow use traffic and transportation data to compute **traffic variables** or **Key Performance Indicators**. Before deriving a list of indicators, we first define *categories* within which we define these indicators (non-exhausted list as follows):

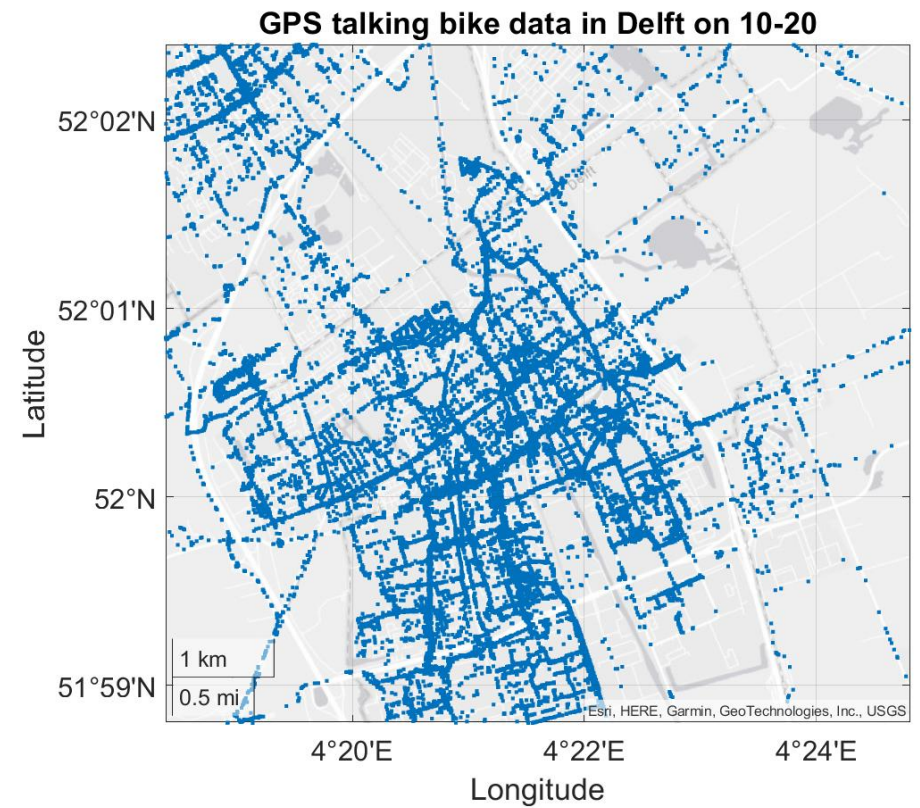
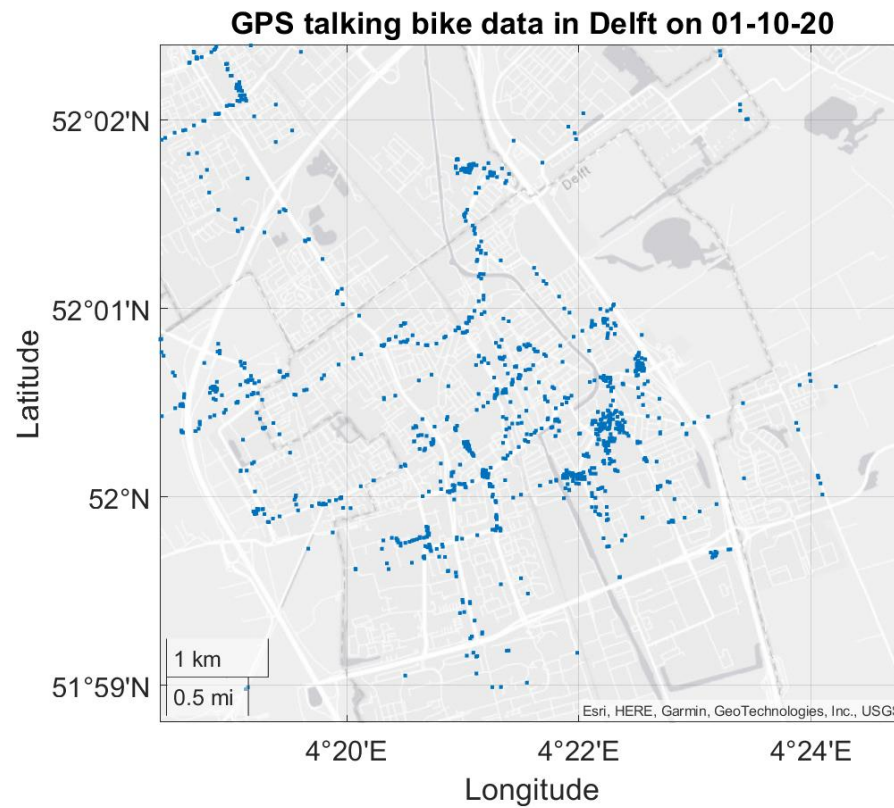
- Accessibility
- Reliability
- Safety
- Health
- Environment
- Equity

		Application				
		Real-time	GGB+	Planning	Design	Policy making
Category	Accessibility	Flow Speed Travel time Routes Stops at intersections and crossings	Flow Speed Travel time Delays Route choice Stops	OD table Flow Demand	Routes	Routes Flow Demand Distance Travel time
	Reliability	Travel time variability Incident frequency	Travel time variability Incident risk			
	Safety	Exposure Flows Speed variation			Incident Route Speed Stops	Exposure
	Health	Exposure				
	Environment	Modal shift				
	Equity					

Overview of the Talking-Bikes – Map visual



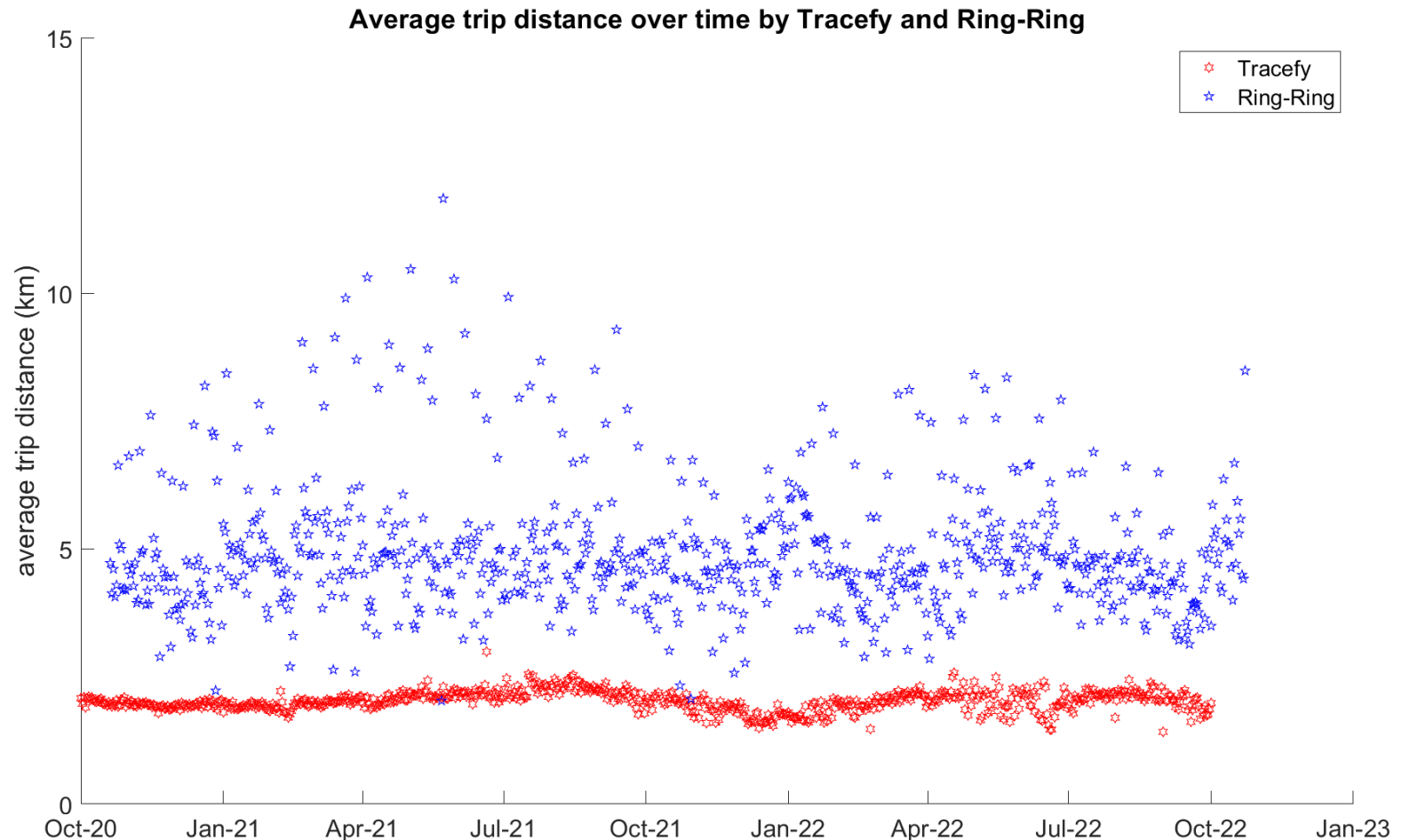
GPS data points





Data insight (example)

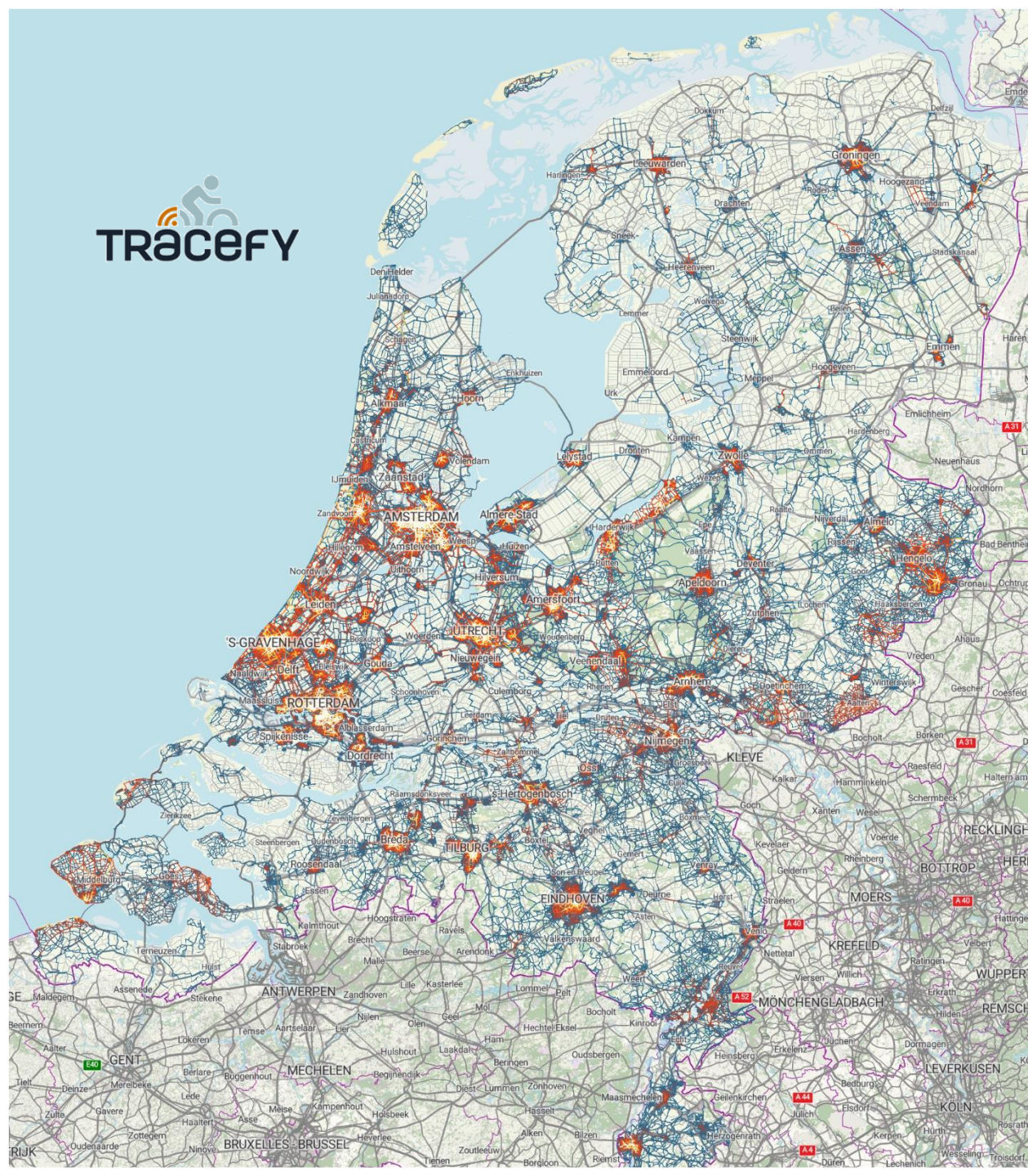
- Average trip distance per day – over time



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UQ: 5.28
Median: 4.70
LQ: 4.19

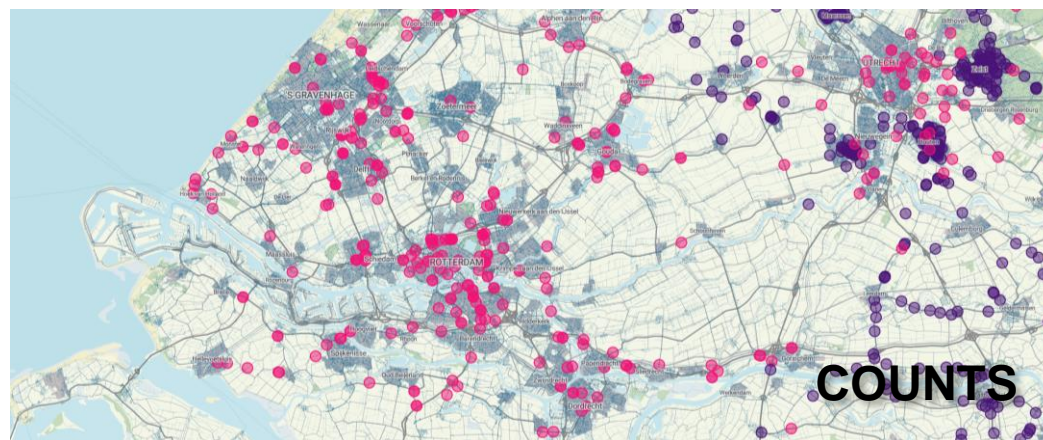
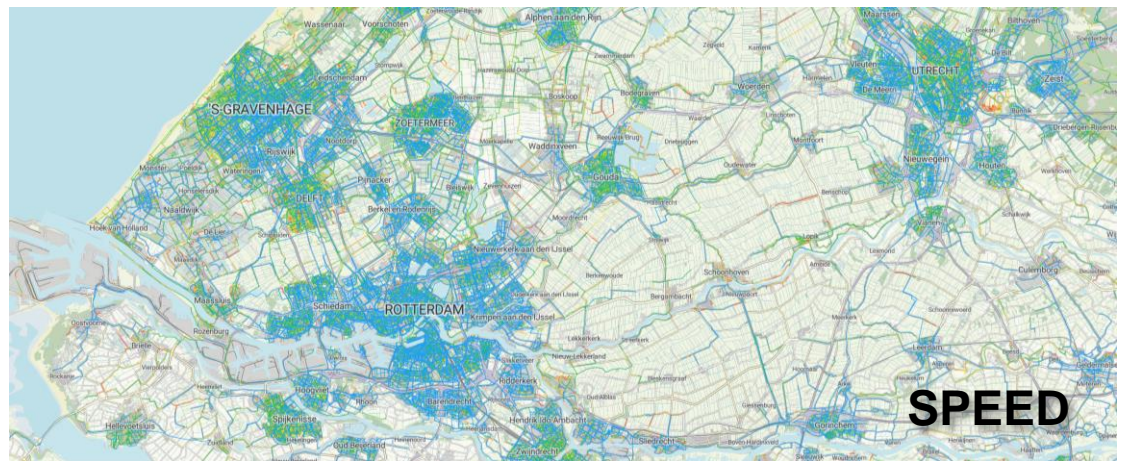
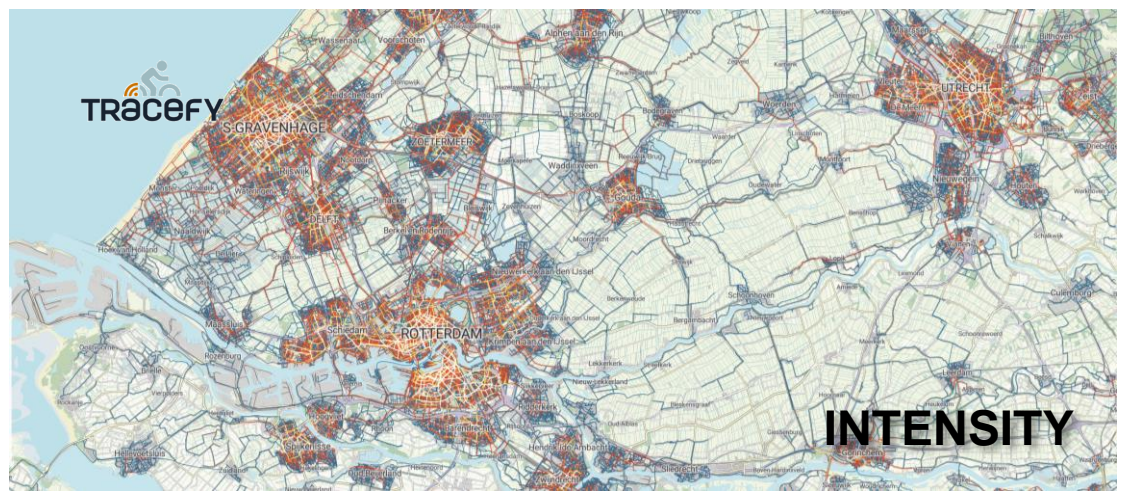
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UQ: 2.14
Median: 2.02
LQ: 1.91



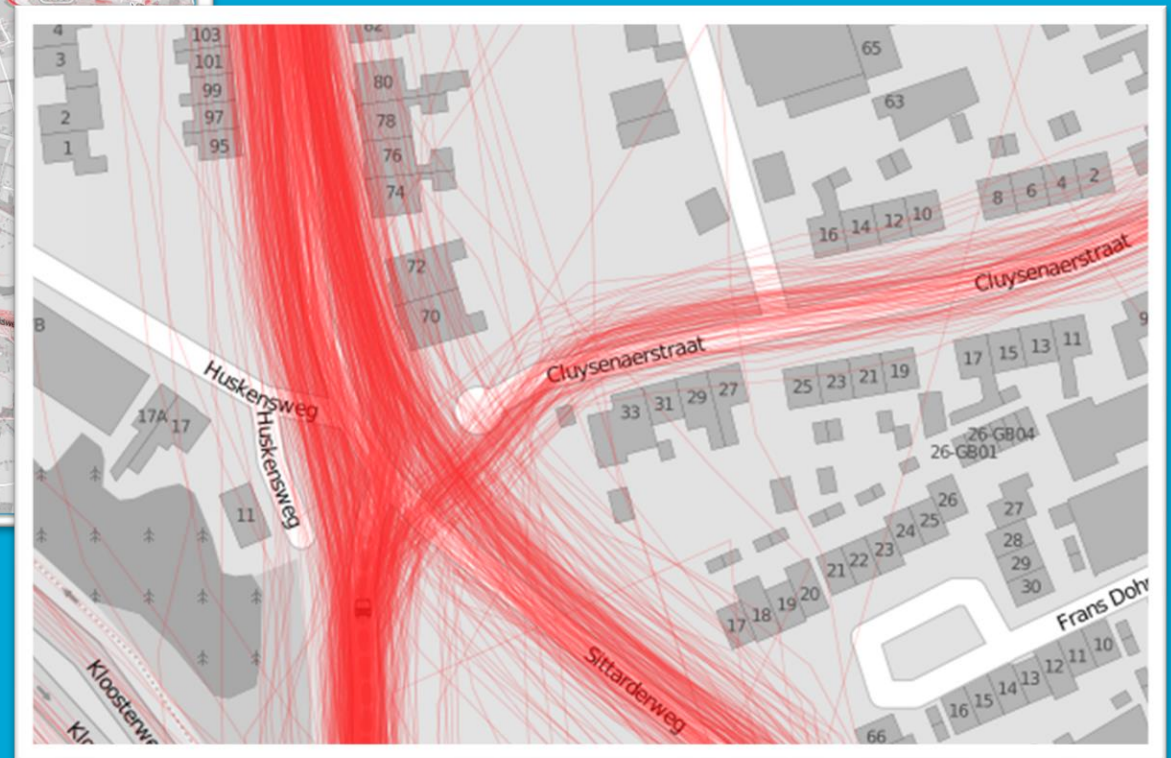


provincie
Zuid-Holland



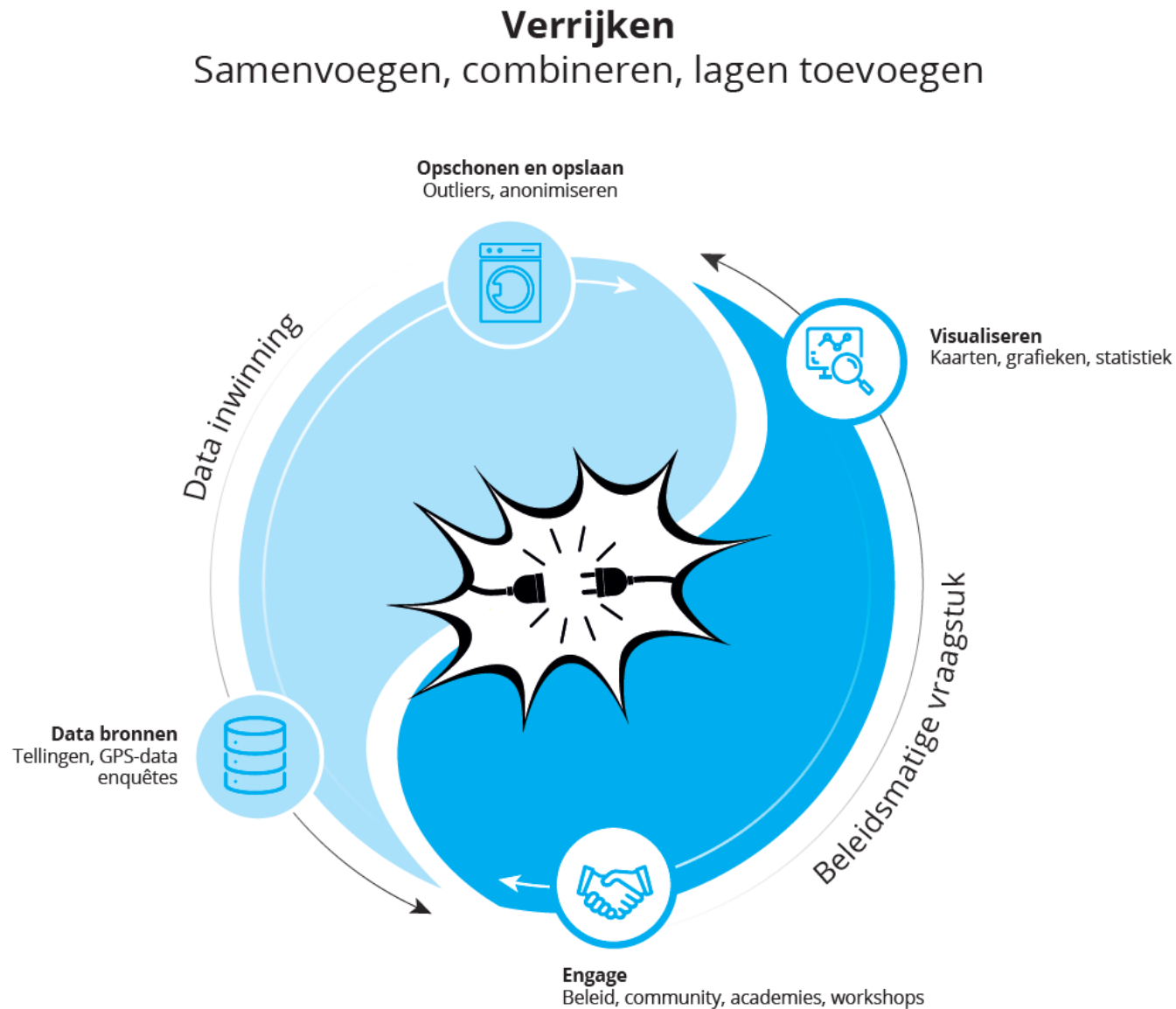


Latent insights



Dutch Future

Developing a roadmap
for connecting relevant policy
questions with data



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