

Delivering the Future – Innovation in Parcel Logistics

Thorsten Freers, Senior Public Policy Manager Amazon

March 13th 2025



The Importance of Innovation

Work Health and Safety

- Reduce workplace accidents
- Improve quality control
- Enhance security measures
- Increase operational reliability

Customer-Centric Focus

- Constantly seeking ways to improve customer experience
- Innovation focused on solving customer problems
- Commitment to lowering prices and increasing convenience

Operational Efficiency

- Reduce operational costs
- Improve delivery speed and accuracy
- Optimize warehouse operations
- Automate repetitive tasks

Future-Proofing

- Stay ahead of technological trends
- Adapt to changing consumer behavior
- Invest in emerging technologies



AI and Automation in an Amazon Robotics Fulfillment Center



<https://www.aboutamazon.com/news/operations/amazon-robotics-robots-fulfillment-center>



AI and Automation in an Amazon Robotics Fulfillment Center

<https://www.aboutamazon.com/news/operations/amazon-robotics-robots-fulfillment-center>



AI and Automation in an Amazon Robotics Fulfillment Center



"Sparrow" can detect, select, and handle individual products in our inventory.



"Sparrow" takes on repetitive tasks



AI and Automation in an Amazon Robotics Fulfillment Center



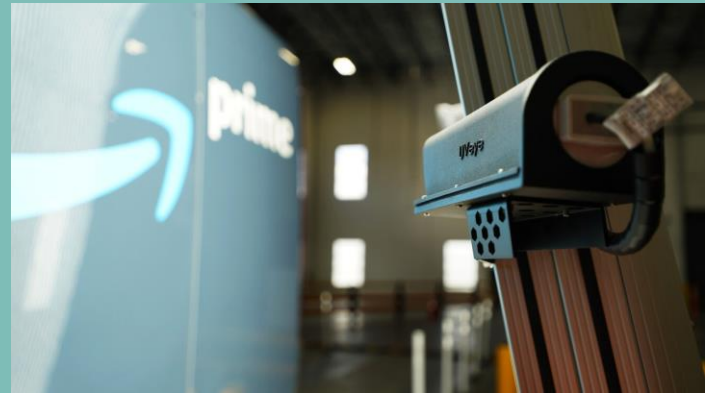
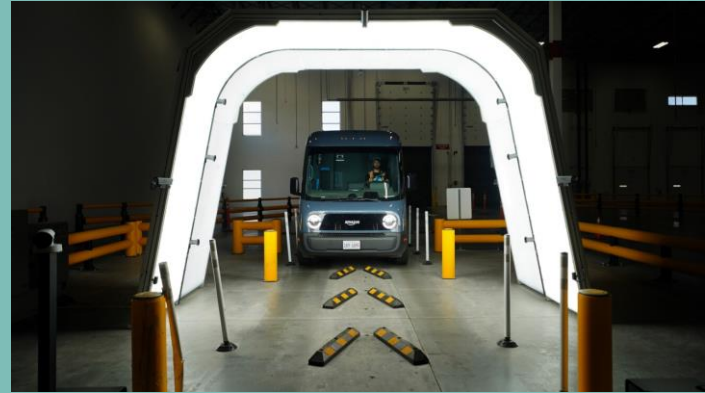
AI and Automation in Vehicle Inspection

<https://www.uveye.com/amazon-announcement/>



AI and Automation in Vehicle Inspection

- AI-powered automated inspection system revolutionizing vehicle scanning
- Advanced computer vision and machine learning algorithms
- Drive-through scanning technology that takes seconds to complete
- Capability to detect both external and undercarriage issues



AI and Automation in Vehicle Inspection

- Drastically reduced inspection times compared to manual methods
- Consistent and reliable results eliminating human error
- Digital record-keeping of all inspections
- Scalable solution for large fleets
- Enhanced safety through thorough vehicle monitoring

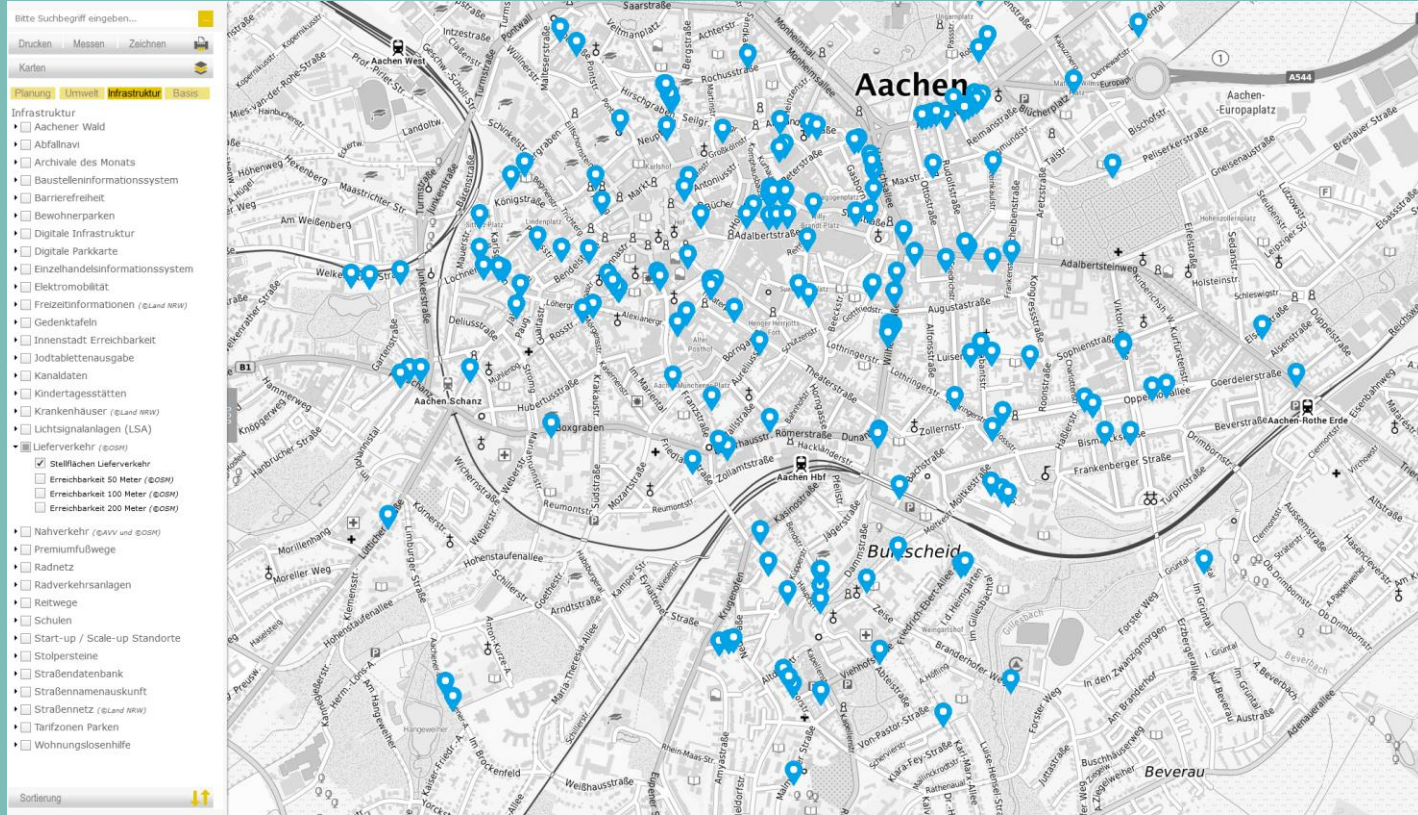


Use of Public Data for Route Planning

- The Mobility Department of the City of Aachen developed a [Geo Data Portal](#)
- The geo portal provides freely accessible, public geodata in a map service for:
 - Planning (urban land-use planning, development/zoning plans)
 - Environment (e.g. air quality, landscape planning, water protection)
 - Infrastructure (e.g. road/bike/pedestrian, Schools, parking zones)
 - Basis (e.g. aerial photographs/satellite imagery)
- Amazon worked with the city to integrate new data related to parcel delivery:
 - Delivery zones
 - Construction sites
 - Public EV charging infrastructure
- The data provided can be pulled and integrated in Amazon's route planning algorithm



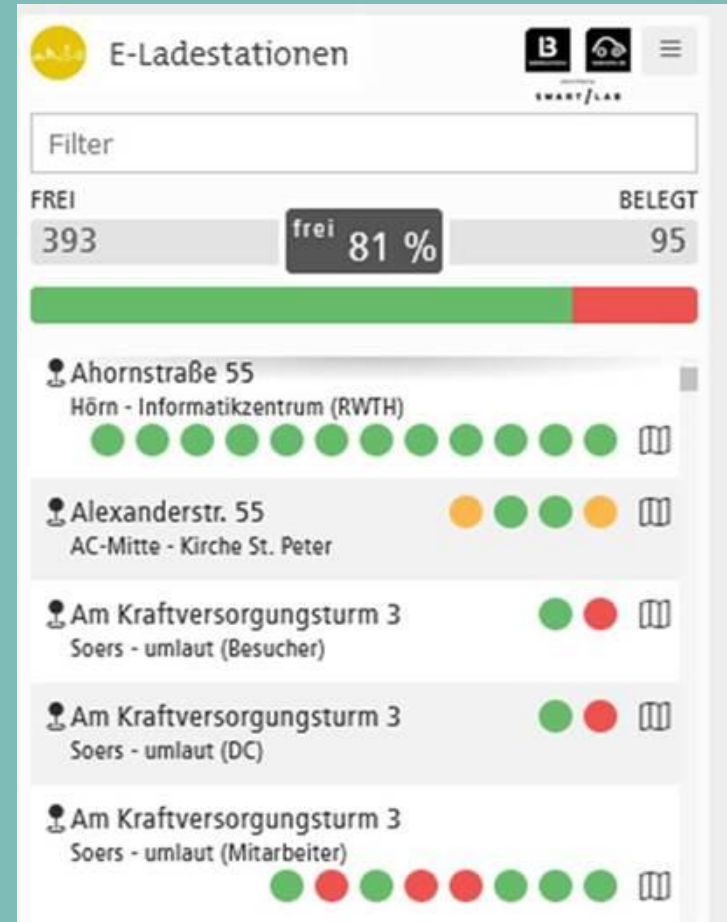
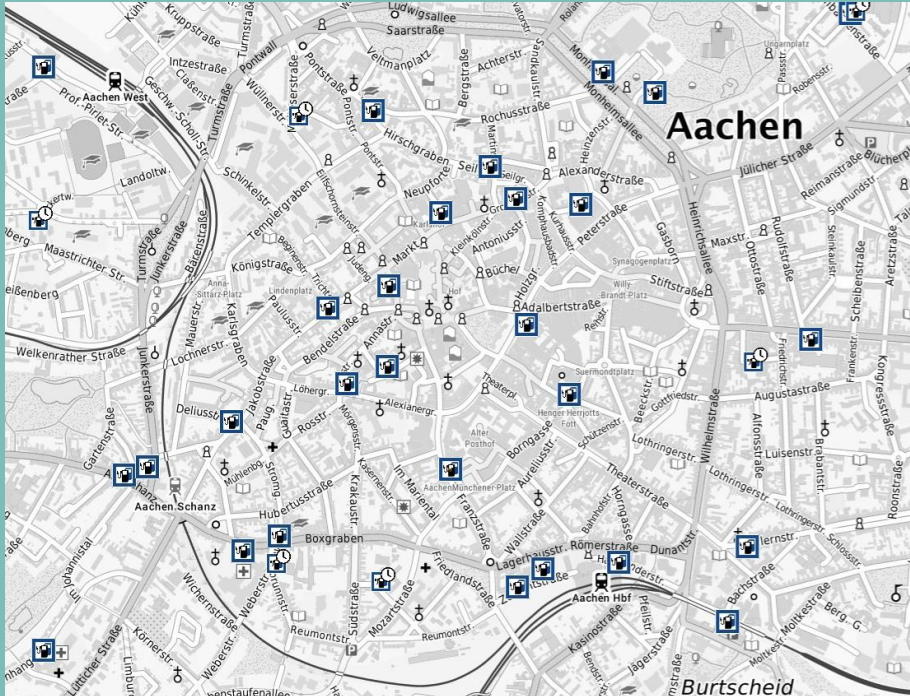
Use of Public Data for Route Planning



- Locations of delivery zones, clustered by size



- Location of public EV charging points
- Real time availability of EV charging points



Use of Public Data for Route Planning

Existing construction sites

Baustellen

- AN DER WELSCHEN MÜHLE, Saurengasse**
Sperrung Rad-/ Fußweg im Rahmen A 544 Sperrung
von: 12/20/2023 bis: 9/29/2025
- Achterstraße**
Fernwärme- und Straßenbauarbeiten
von: 4/1/2024 bis: 11/7/2024
- Adalbertsberg**
Arbeiten mit Autokran/ Arbeitsbühne
von: 7/3/2024 bis: 7/4/2024

2.1 Standorte der angeordneten oder geplanten Ladezonen

Nach derzeitigem Stand sind weitere Ladezonen im Stadtgebiet an folgenden Orten bereits geplant und schon angeordnet* oder in der Planungsphase:

1	52066	Kasinostraße 97/ 99
2	52064	*Lochnerstr. 51
3	52064	Lochnerstr. 32
4	52064	Lochnerstr. 4/20
5	52070	Lothringer Str. (ca.) 108
6	52070	*Reichsweg 1-2
7	52072	Roermonder Str. 1, 2

Der aktuelle Stand der vorhandenen Ladezonen kann jederzeit im Open Data Portal und externen Geodatenportal der Stadt Aachen abgerufen werden (Links s.o.).

Planned construction sites



**ANY
QUESTIONS?**

