

Case Study - Brussels

Improving Parking Compliance in Bruxelles and Simplifying Policy Management



A success story from one of Europe's largest shared micro mobility fleets

Bruxelles Mobilité is the administration of the Brussels-Capital Region responsible for equipment, infrastructure and mobility issues. More than 10 shared micro-mobility providers were operating in the city. Bruxelles Mobilité partnered with Vianova in order to prioritize investments to promote micro-mobility and ensure user safety.

The Challenge

The City of Brussels was experiencing a rapid increase in shared mobility usage which was, in part, driven by pandemic related restrictions on public transport use and increased demand for socially distanced means of transport. However, The City identified that shared mobility was frequently used on busy roads predominantly used by automobiles, which posed a safety risk for shared mobility users. Additionally, the rise in shared mobility brought about other problems such as sidewalk clutter, posing an additional safety risk, particularly for disabled residents. The City wanted to support the use of shared mobility as a socially distanced alternative to private car use but wanted to limit the safety risks associated with shared mobility for both users and pedestrians.

The Solution

Vianova ingested, processed and aggregated raw data from nine shared mobility operators across four modes (e-scooters, e-bikes, e-mopeds and car share), making it accessible to Bruxelles Mobilité on Vianova's easy to read and use mobility dashboard. During the project, Vianova analyzed shared mobility data from the operators and presented it to City officials, including a Covid-19 impact analysis presentation on shared mobility usage during the pandemic.

The Results

Bruxelles Mobilité used several tools in the platform to help plan digital regulations and shared mobility infrastructure to improve the safety of shared mobility use in the city.


This included road segment analysis to identify the most frequented shared mobility streets, which informed The City's plans to build over 40km of pop-up cycle lanes.

About Vianova



Vianova enables cities to better integrate and manage connected, shared and autonomous mobility in the public space. Our platform helps cities and mobility operators better collaborate and communicate, in order to foster more liveable and breathable streets.

As an Intelligent Mobility platform, we are manipulating millions of connected vehicles data from all over the world, from our 100+ cities and micro-mobility operator partnerships in order to make the city safer, greener and more efficient.



After introducing the bike lanes, the number of shared mobility journeys increased by five-fold, helping the city with its objective of providing safe and flexible alternatives to private cars. The City also created and published 120 new geofenced policy zones using the MDS Policy API. Regulations included slow speed, no-go, no-parking zones, as well as incentivized parking hubs for riders. This reduced sidewalk clutter, subsequently the city could due to this reduce the number of street patrols by 30%, saving them a great amount of time and resource, as well as improving public and political opinion of shared mobility.

Conclusion

The City has become a success story for shared mobility worldwide. The fleet has grown to be one of Europe's largest across e-scooters, e-bikes, mopeds and more, while being able to keep control of the situation in an efficient, cost effective and compliant way. This has benefitted all stakeholders involved; local government, mobility operators, citizens and more. Today Bruxelles Mobilité continues to use Vianova's platform to communicate and monitor digital regulations, help inform infrastructure planning decisions and explore new data-driven ways of how shared mobility can continue to help the city reach its ambitious climate and transport goals.

AWS Benefits

As a mobility intelligent platform, Vianova is ingesting, storing and computing thousands of connected vehicles data in a secure and scalable way. Every time we are on-boarding a new city or a new mobility provider, we have to make sure that our technical capabilities will support our growth.

Vianova platform is fully taking advantages of the AWS Serverless services such as Lambda functions and Aurora PGSQL. Our unique architecture is able to run 1000+ API calls in parallel to call and ingest partners data without bothering on the provisioning and management of resources. We can adapt our infrastructure to our client usage while focusing on value creation and not infrastructure management. With our CI/CD pipelines we can also securely deploy new features and capabilities multiples times per week in a secure and seamless way by using AWS API Gateway and Cloudfront.

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