

SWARCO

MYCITY JOURNEY TIMES

POWERED BY **FLOATING CAR DATA**

Internet-of-Things SOLUTION FOR SMARTER CITIES.



Technological evolution in the world of mobility management creates new dimensions and data sources to optimize the performance of the entire mobility ecosystem. One of such sources is Floating Car Data (FCD), where the enormous amounts of location information originating from different IoT nodes like smartphones and vehicles are utilized to derive mobility-relevant metrics such as journey times.

This data set can be combined with the data from traditional traffic sensors in SWARCO MyCity, our holistic mobility management suite. A city using FCD can now receive real-time visualization of congestion and travel times, with the ability to measure and dynamically adjust, via-routes' – covering more than just A to B paths without the need to purchase, install or maintain any physical sensors in the field.

STEER
YOUR **TRAFFIC**
IMPROVE
JOURNEY TIMES
ANALYZE
YOUR **CITY**



Due to the embedded FCD within SWARCO MyCity, operators can now easily start gathering travel time information regarding any routes of interest by configuring such on the user interface with map pins or geo-locations, and within minutes, these route segments are populated with real-time data.

Since MyCity will default to showing the

fastest route between the start and end point, the route editor allows the user to add via points to specify particular routes.

Like most data sets within MyCity, historical reports can be generated. One can also combine various data points, look for anomalies, and then drill down to understand the root cause. Furthermore, all historical reports can

be exported to allow further processing via BI (Business Intelligence) tools or Excel. E.g., this way, operators can easily understand the correlation between air quality metrics, noise levels, number of bicycle riders, and travel times after implementing a pop-up bicycle lane or executing re-routing strategies to improve the air quality downtown.



OPERATOR AND PLATFORM BENEFITS

NO INSTALLATION

Built upon the power of IoT (Internet-of-Things), the solution doesn't require any physical hardware in the field that needs to be purchased, installed or maintained.

EASY ACCESSIBILITY

The micro service-based technology is built on a brand-new platform and operated by SWARCO 24/7 in a secure cloud system.

NEAR REAL-TIME DATA CAPTURE

Compared to conventional travel time sensors that provide data with up to 15 minutes of latency, FCD offers significantly lower latency (smaller than one minute). Specifically for time-critical use cases such as detecting sudden traffic spikes after an event to adjust the traffic management and routing strategies require minimal latency.

PROACTIVE MANAGEMENT

For sustainable and proactive mobility management in the digital age, you need to understand your data as a first step. MyCity not only collects the data from multiple sources and areas, but it also analyzes your real-time and historical data, provides you with user-friendly reports, and enables you to create simple and complex strategies.

FULL DATA COVERAGE

FCD enables operators to gain a detailed view of their complete mobility landscape. While physical sensors limit the data capture to their field of detection (usually at intersections) and force operators to assume what is happening between such data points and along roads equipped with little or no sensors, MyCity with FCD grants a complete view wherever travelers move.

FLEXIBLE INTEGRATION

SWARCO MyCity shares & process data from different systems in an urban environment and we can act as a the aggregator of mobility relevant data sources and convert these to value-adds but also as a vendor who acts as a contractual aggregator.

OPERATOR FRIENDLY

It's easy to use from a single sign-on system that gives you access to important data and reports via a user-friendly and intuitive dashboard.

MODULAR AND SCALABLE

MyCity is scalable and enables you can add new solutions when you need them or accommodate project-specific requirements.



- MINIMAL DATA LATENCY
- ROUTE CREATION WITHIN MINUTES
- NO HARDWARE
- NO INSTALLATION
- NO MAINTENANCE

A STATE-OF-THE-ART RESPONSE TO THE EVER-INCREASING TRAFFIC VOLUMES

FCD + STRATEGY MANAGER TO STEER TRAFFIC

MyCity enables operators to fully automate specific actions by utilizing travel times derived from FCD via the Strategy Manager. Once a certain threshold is surpassed, which indicates a traffic jam, pre-configured strategies are enabled to adjust the signal plans, re-route traffic and showcase the results of your efforts.

SPECIAL EVENT MANAGEMENT

Special events (such as concerts or sports games) cause overcrowded primary routes, as people consider those to be the fastest and easiest. The goal of successful event management is to transfer as much event traffic onto alternate underutilized routes or modes in a proactive manner. This requires route information to be collected as thoroughly as possible.

ACCELERATING THE MOBILITY TRANSFORMATION

Cities are increasingly redistributing their infrastructure to alternative modes of transportation such as public transport or bicycle lanes. Once such implementations are complete, public authorities want to understand what impact of this across numerous variables. Before and after-

analysis of average travel times in order to prove the relatively low increase on vehicle traffic allows an objective and data-driven justification to scale such efforts throughout the City.

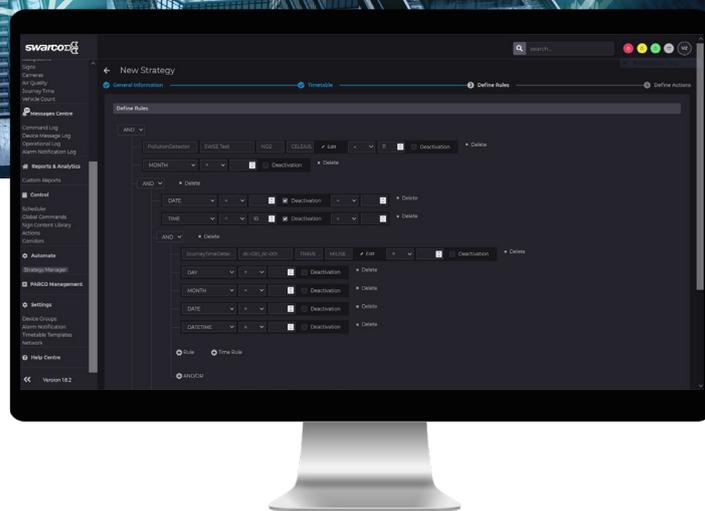
HANDLING OF TEMPORARY ROAD WORKS

Understanding and handling temporary impediments to a City's mobility landscape such as roadworks has traditionally been a rather static approach. Lacking sufficient real-time and historical data deriving from often lacking communication and power infrastructure to these sites as well as the hefty price tag behind implementing temporary sensing drove operators to either not act or act based on assumptions. MyCity with FCD now enables to measure the travel times along

these sites within minutes, adjust the measured routes when road works move, change mobility strategies based on this data and run consecutive impact analysis.

DETECTION OF MID-BLOCK EVENTS

Events in between detection points such as a traffic collision mid-block or a tree that fell on the street tend to be handled only when communication from drivers not only reaches first responders but also the traffic operators. With MyCity and FCD, you can instead also measure in between your existing field sensors and be assured that the system notifies you should any ABNORMALITÄTEN occur and even adjust the local traffic operations to minimize the impact.



The Austrian-based traffic technology corporation, is a growing international group providing the complete range of products, systems, services and solutions for road safety and intelligent traffic management.

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The Better Way. Every Day.

