

# Checklist

Digitize your city's traffic management in less than a month



part of Umovity

Streamlining traffic management is essential for the development of sustainable and vibrant urban areas. Nevertheless, smaller cities and regions, constrained by limited resources, often face challenges in adopting digital systems to monitor and forecast traffic patterns. Fortunately, the journey towards establishing an effective traffic dashboard is more straightforward than anticipated. With the assistance of our checklist, implementation becomes not only feasible but can also be achieved in less than a month.

#### Pro Tip

Maintain honesty and realism in your responses to these questions to effectively plan your subsequent actions. Don't be discouraged by any unfavorable answers. With the advancements in technology, cities facing financial and human resource constraints now have the capability to establish a dependable traffic management system (for further details, see "The technological aspect").

#### What resources are available?

Explore the resources at your disposal. Begin by assessing your annual budget dedicated to traffic management. Are there existing personnel handling traffic management, or is there a possibility to delegate these responsibilities to others? Consider the option of hiring additional staff if needed. Also, check if your city is equipped with infrastructure such as sensors, counting points, detectors, or similar systems to record traffic events.

#### Who should participate?

In the initial stages of any project, it's crucial to define the key stakeholders, identify those who can provide valuable input, enlist necessary support, and keep relevant parties informed. Determine whether municipal or city council involvement or authorization is required. Identify the specific authorities and departments responsible for the system's setup, utilization, and maintenance. Consider who needs access to the dashboard — this might include the police department, civil engineering department, urban planners, or the transport department, depending on the city. Ensure the active involvement and support of all stakeholders to guarantee a swift and seamless implementation.

#### The technological aspect

Now you should take a look at your inventory. If this shows that you have numerous resources (personnel, IT, hardware) at your disposal, you can choose between different technologies. However, the resource situation is usually more difficult. In this case, you should pay attention to the following points when selecting a software solution:

#### Floating car data instead of sensors

The installation, upkeep, and interconnection of detectors and sensors throughout your transportation network are not just costly but also time-intensive.

A viable alternative to this is the utilization of Floating Car Data (FCD). This entails data contributed by cars actively navigating the current traffic scenario. FCD can be procured directly from prominent data providers. Nevertheless, opting for a software solution that has already incorporated and streamlined this data is recommended.

## Software as a service instead of a customized desktop solution

Every city is unique. However, when time and budget are limited, opting for existing software is preferable to developing a custom solution. With cloud solutions, specifically Software as a Service (SaaS), you save IT resources while consistently working with the latest versions, maps, and data. Additionally, users are not tethered to a stationary PC but can access the software from any device with internet connectivity.

#### Data exchange and connectivity

If your city has standalone detectors or sensors with data you wish to integrate into the new system, seek software with compatible interfaces and open file formats. This facilitates seamless connections to other systems, such as those used by the police authority or traffic planning department.

#### Present state or future prediction?

Are you seeking software to monitor real-time traffic, or do you also want the capability to predict future developments? Software solutions equipped with selflearning algorithms (machine learning) empower you to achieve both objectives: monitoring current events and generating forecasts for the next 15 to 90 minutes. This capability enables proactive measures, helping minimize or even prevent traffic congestion.

#### Choosing the right software provider

Navigating the expansive and intricate market for traffic management software can be challenging. Identifying a suitable and dependable partner requires careful consideration, as the options span from fledgling startups to well-established companies. Each has its merits and drawbacks. Start-ups often provide swift and innovative solutions, but their long-term market presence and ongoing support in case of issues may be uncertain.

Conversely, established software companies, especially those specializing in the mobility sector, bring extensive experience, expertise, and dedicated support departments to the table. While processes may take a bit longer, the trade-off is a dependable and mature product.

Our recommendation is to explore multiple solutions. During discussions, clearly articulate your requirements, budget constraints, technical preferences, and needs. Additionally, inquire about the support you can expect from the company if issues arise.

#### **Pro Tip**

Maybe your city is already employing traffic software, such as for traffic planning. Ask your colleagues about their experiences with the provider and determine if the company also provides a solution for traffic management. It's possible that the two systems can be integrated, presenting opportunities for synergies and end-to-end, digitalized, and automated processes.



#### **Everyone starts small: pilot project**

After selecting a software solution, it is advisable to embark on a test phase or pilot project. During this phase, you can thoroughly evaluate the new system, conduct initial traffic analyses and tests, acquaint your employees with the tool, and assess your setup whether in terms of location or for a limited duration.

Evaluate if the personnel resources are adequate, determine if other individuals or departments need to be engaged or informed, and identify the structures and processes that must be established or adjusted to use the software efficiently.

#### Pro Tip

Last but not least, you can also use the pilot project to convince decision-makers of the new system and its added value.

#### **Roll-out**

Congratulations! You've successfully implemented an efficient, digitized, and automated traffic management system in a remarkably brief time frame and with the available resources. Now, you possess a valuable tool that will assist you in enhancing road safety and creating a more liveable environment.



## **PTV Flows**

### The cost-effective & hassle-free traffic management solution

PTV Flows enables traffic managers to effortlessly monitor and predict road traffic in real time.

Utilizing machine learning, cutting-edge algorithms, and automated alerts, the software allows cities to optimize their traffic management without requiring extensive resources or intricate infrastructure.

PTV Flows is cloud-based, self-updating, and can be configured in just one day.



