



# Vilnius, Lithuania

## Smarter Cities Challenge executive summary

### Introduction

The objective of the IBM Smarter Cities Challenge® is to help high-potential cities around the world improve services to their citizens by becoming more instrumented, interconnected and intelligent. Since the program's inception in 2010, more than 115 cities have received Smarter Cities Challenge grants, and many have already started to implement the recommendations provided by their IBM teams.

The City of Vilnius, the capital of Lithuania, was one of 16 cities selected to receive a Smarter Cities Challenge grant from IBM in 2014. During three weeks in May and June, a team of six IBM experts worked to deliver recommendations on the transportation challenges identified by Mayor Arturas Zuokas and his senior leadership team.

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## Our goal is for Vilnius to be the number one Smarter City in central and eastern Europe.

— Mayor Arturas Zuokas

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### Highlights:

- Engage the community to help influence and improve transportation options
  - Use integrated data to provide comprehensive, real-time and predictive insights
  - Pursue new business models to leverage the City's investment
  - Accelerate development through governance and a unified Center of Excellence
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### The challenge

The city of Vilnius has achieved economic growth and regional success over the past decade, resulting in increased residential car ownership and growth in the suburbs. With a population of more than half a million people distributed over 400 square kilometers, and a high percentage of residents commuting to the city center, Vilnius faces mounting transportation congestion challenges. The City's terrain, urban design and state-influenced financial constraints further limit its ability to enhance transportation infrastructure and support a large capacity.

With these challenges in mind, the City outlined the following objectives:

- Reduce traffic congestion
- Decrease the environmental impact of traffic
- Improve residents' quality of life
- Increase public transportation usage
- Integrate data across transportation systems
- Leverage real-time and predictive analytics
- Improve the public transportation user experience
- Follow approved budgets, particularly where determined by the state
- Preserve the historic Vilnius "Old Town," a UNESCO World Heritage site

## Findings and recommendations

The City of Vilnius has a proactive, motivated and innovative team in place, determined to leverage technology in a phased approach to increase residents' quality of life, productivity and the City's economic growth. The City has plans to continue implementing individual projects but doesn't yet operate under a unified organizational design, strategy or process, which impedes efforts.

Building off the team's findings, the following recommendations were made:

**Community engagement** – Engage the community to help influence and improve transportation options by expanding and enriching the tools, resources and messaging that will encourage public transportation use.

- Enhance citizen and municipal collaboration
- Improve the user experience
- Incentivize public transportation usage

**Big data analytics** – Use integrated data to provide comprehensive, real-time and predictive insights by enabling analytics capabilities across all traffic data sources and creating the Vilnius Integrated Intelligent Transportation System (VIITS).

- Make real-time Vilnius traffic data available on a common platform
- Increase use of data to make City transport decisions
- Leverage existing data capabilities to manage, predict and optimize traffic

**New business models** – Pursue new business models to leverage the City's investment by using VIITS to explore, introduce, expand and reinforce revenue streams.

- Protect existing revenue streams
- Create new revenue streams

**Governance** – Accelerate development through a strong, integrated governance of leaders and key decision makers and a unified Center of Excellence that supports Smarter City efforts.

- Create a Smart Vilnius Center of Excellence (COE)
- Establish key performance indicators (KPIs) and critical success factors (CSFs) to measure success
- Implement foundational capabilities and skills across the COE through coaching and training

## Conclusion

The City of Vilnius is forward thinking and progressive. With the City's economic, academic and regional leadership, as well as its strong foundation of skilled residents and technology, Vilnius is well positioned to achieve its vision of becoming the number one Smarter City in central and eastern Europe. For this to happen, the City must address local challenges related to traffic and transportation to ensure continued economic growth, local productivity, improved public safety and continued quality of life.

## For more information

To learn more, send an email to [ccca@us.ibm.com](mailto:ccca@us.ibm.com) or visit [smartercitieschallenge.org](http://smartercitieschallenge.org)

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