

**Black&McDonald**

# SMART CITY SOLUTIONS

Mobility and Intelligent Transportation Systems





Building a smarter urban environment is not just about leveraging technology to expedite processes, optimize infrastructure and achieve greater efficiency. It's about embracing innovation to create a more resilient, sustainable and inclusive future for the next generation.

Our goal in integrating smart city technologies is to respond more effectively and dynamically to the needs and desires of users while minimizing resource consumption and environmental impacts. We believe in the power of smart technologies to improve the quality of life for communities and people across North America.



## OUR APPROACH

Our integrated team approach is about bringing together the right people, processes and data to provide turnkey smart city solutions. We believe in sitting down at the table with our client on day one to develop a shared vision and working cooperatively throughout the process to deliver each project safely, to specification, on time and on budget.

Our experience in a truly integrated project delivery model—design/build/operate/maintain—gives us the edge in understanding the interactions between citizen, built environment, and urban environment. We've seen first hand how smart city and smart building technologies and strategies reduce overall environmental impacts from cradle to grave.





### **Self-performance**

Our integrated multi-disciplinary team has the expertise and capacity to respond to any volume, scope or complexity of work, from design build through to maintenance and management. Our operational team has extensive experience executing smart projects in diverse sectors, including municipal, commercial, industrial and critical environments.

### **Local Presence across North America**

With teams on the ground across Canada and the United States, we provide an agile, local solution.



### **System Integration**

Leveraging our expertise in construction, utility, and infrastructure projects, we enable systems and technologies to communicate with one another and bring smart environments to life.

### **Innovation**

We get excited about new technologies and continuously integrate new approaches into our repertoire of ideas.





### **Cost Certainty**

With nearly 100 years of lessons learned, we provide accurate scheduling and costing procedures and deliver our projects on time and on budget.

### **Education and Advocacy**

We understand the importance of end-user adoption, and we are passionate about designing and implementing programs to support user buy in.



# OUR SERVICES

## Mobility and Intelligent Transportation Systems

**New smart technologies have the ability to improve the performance, usability, and safety of our transportation systems to the benefit of users, owners, and operators alike.**

### **Intelligent Transportation Systems**

Today's cities, municipalities and provincial road authorities face the significant challenge of managing higher than ever traffic volume, integrating multiple transportation systems and responding to the demands of increasingly engaged and informed users. To maximize transportation assets and infrastructure, while ensuring the safety and satisfaction of drivers, riders and pedestrians alike, the managers of roadways must look to the innovative solutions available through new smart technologies and Intelligent Transportation Systems (ITS).





# OUR SERVICES

## Mobility and Intelligent Transportation Systems

Our ITS Services include:

- Advanced Traffic Management Systems (ATMS)
- Adaptive Traffic Control Systems (ATCS) in Partnership with [Rhythm Engineering](#)
- Intersection and Highway Management Using Radar Technology in Partnership with [Smart Microwave Sensors](#)
- Automated Speed Enforcement
- High Mast and Street Lighting Installation, Upgrades and Maintenance
- Traffic Signal Installation and Maintenance
- Decorative Lighting Fixture Installation
- Fixed and Portable Variable Message Signs
- Loop Detectors
- Airfield Lighting, Navigation and Landing Aids
- Emergency Services and Storm Recovery Response Teams





# OUR SERVICES

## Mobility and Intelligent Transportation Systems

### ITS Turnkey Concept

Leveraging our expertise across traffic engineering, utilities, energy management, and mechanical and electrical construction, Black & McDonald offers turnkey ITS solutions for municipal, regional and provincial clients. We have a team dedicated to researching and working with the best smart transportation technologies on the market, and our multidisciplinary capabilities provide a seamless, one source solution that encompasses design, installation, integration, maintenance, and emergency service of ITS installations.

Our turnkey solution saves our clients time and money by eliminating the need to navigate between the numerous contractors and subcontractors typically involved in ITS projects. Our team has the leading edge technical knowledge and tested construction capabilities to deliver the best turnkey ITS solutions in the industry.

