SWARCO McCain

PENNSYLVANIA

FEATURED DEPLOYMENT

CITY OF ALLENTOWN



SWARCO McCain partners with the City of Allentown, PA to manage the traffic surge generated by the PPL Center during major events

OVERVIEW

In its pursuit of a redevelopment project, the City of Allentown constructed the PPL Center, a multi-purpose indoor arena that spans over a 5-acre square area. To manage the PPL Center's traffic surge, Allentown entrusted SWARCO McCain and General Highway Products, Inc., to implement traffic control intersection and adaptive system solutions.

LOCATION

Allentown, the third-largest and one of the fastest-growing cities in Pennsylvania, established the PPL Center as a keystone in its downtown economic rejuvenation plan. The PPL Center consists of a 230,000-square-foot multi-use arena and a 100,000-square-foot events center encompassing a 5-acre square block area.

THE CHALLENGE

The construction of the PPL Center posed an immediate traffic challenge for Allentown. During major events, traffic congestion and travel time affect 39 traffic intersections around the PPL arena and the central business district. The city needed a dynamic signal system capable of quickly adjusting to sudden traffic surges during major events. The aim was to reduce congestion and wait times, ensuring both vehicular and pedestrian safety while maintaining smooth traffic flow, especially during peak event times.



SOLUTION

SWARCO McCain, in collaboration with its local partner, General Highway Products, Inc., undertook Allentown's redevelopment project to address signal control and traffic management bottlenecks. The solution covered timing conversions, analysis, adjustments of dynamic traffic responses and the implementation of MyCity TMS.¹

The project also included supplying and configuring 39 McCain ATC eX2 NEMA Controllers with McCain Omni eX® Intersection Control Software at 39 intersections around the PPL Center with plans to extend this to 10 additional intersections. In addition, MyCity TMS was implemented through a traffic server to integrate with Allentown's signal controllers. As part of enhancing the infrastructure, the controllers were integrated into Allentown's Peer-to-Peer (P2P) radio communications, adding an extra level of connectivity. Additionally, SWARCO McCain provided software training for personnel, supplied adaptive control licenses, and ongoing technical support.

THE RESULTS

SWARCO McCain and General Highway Products, Inc.'s traffic management solutions provided Allentown with tremendous improvement in traffic conditions during major events. The dynamic signal system adeptly adjusted to the heightened traffic flow, reducing congestion around the arena and main thoroughfares. While it was clear that vehicular access to the arena was more streamlined, pedestrians also found improved crosswalk timings and safer passage during peak event hours. Now, residents and visitors of Allentown can enjoy effortless navigation with reduced wait times and a more systematic traffic experience on event days.



