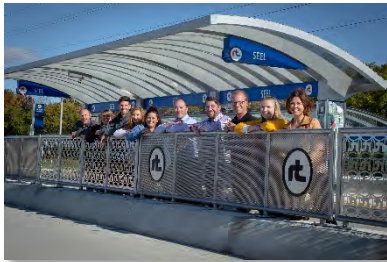


## 2021 Team Achievement Award

### *Southwest Rapid Transitway – Stage 2 and Pembina Highway Underpass Project*



The Southwest Rapid Transitway – Stage 2 and Pembina Highway Underpass project (SWT2) is one of the largest infrastructure projects undertaken by the City of Winnipeg to date and addresses the need for rapid transit as outlined in the city's Transportation Master Plans. The completion of this project, which extends Stage 1 of the Southwest Transitway, will help promote the increased densification of Winnipeg by facilitating the future development of several large-scale, infill, transit-oriented developments identified in OurWinnipeg's Complete Communities Direction Strategy. Early benefits were realized by combining the \$90 million Pembina Highway Underpass project and Canadian National (CN) Railway relocation to enable economies of scale and cost sharing through a P3 model. A comprehensive value for money assessment was also conducted and resulted in the selection of a Design Build Finance

(Operate) and Maintain project delivery model. Public art was coordinated through the Winnipeg Arts Council to provide unique Winnipeg-based themes by different artists at transit stations and bridges, instilling transit pride in Winnipeggers.

With the city's southwest population estimated to grow 40% by 2030, the transitway is essential to realize a mode shift required to moderate traffic demand on the roadway network and to improve the performance of the transportation system. The project will reduce Winnipeg's carbon footprint and dependency on road infrastructure making it a more sustainable city for future generations. Short-range objectives of increased transit ridership between 5% and 15%, reduction of on-street traffic congestion, reduced travel times, and improved transit service and schedule reliability have been achieved. Long-range objectives for related development and economic impact are showing success as transit-oriented development proposals adjacent to the transitway have already been submitted to the city.

The Stage 2 infrastructure project includes 7.6 km of exclusive, bus-only transitway, nine bus stations, transit overpasses at Pembina Highway, Bishop Grandin Boulevard, McGillivray Boulevard, and the CN Letellier rail line, as well as underpasses of the CN wye tracks, CN rail bridge over Pembina Highway, two pump stations, six signalized intersections, widening of Pembina Highway underpass, and pedestrian and bike facilities along the length of the transitway. The Pembina Highway underpass work would prove to be the longest in duration and most publicly impacted segment of the project.

Through innovative project delivery, refinement of the final design, and competitive procurement (P3) methods, the initial \$587.4 million budget in 2014 was revised to \$467.3 million by the start of construction in 2016. The project was completed in 2019 for \$418.4 million, a positive variance of 10% and overall savings of \$169 million from the initial budget.

The project team also met or exceeded schedule milestones including the Stadium Station completion for the 2017 Canada Summer games, construction completion two months early in October 2019, and full operation in April of 2020. The magnitude of financial savings combined with schedule achievements is a rarity for projects of this scale, complexity, and public scrutiny, and was achieved by employing the highest standard of project management practices by the project team.

The scale of the SWT2 project, both in profile and physical area, resulted in numerous project delivery and engineering challenges including relocation of critical power transmission lines and CN mainline railway, impacts to major arterial roadways, new transitway along the length of Manitoba Hydro right-of-way, work around environmentally sensitive lands, and major connections to the University of Manitoba and IG Field. Due to the immense size of the project, there were over 300 stakeholders with broad and diverse interests and a tiered stakeholder management approach was utilized to ensure effective communication and collaboration. Proactive engagement with stakeholders was critical in mitigating scope creep and the associated cost and schedule impacts.