

Professional Competition Overview & Problem Statement

Calgary is one of Canada's fastest growing cities, bringing more residents, businesses, visitors, and major events that place increasing demands on the transportation system. As the city continues to expand as a logistics hub for Western Canada, and invests in major destination districts, efficiently moving both people and goods has become increasingly important to supporting economic competitiveness and quality of life. Today, approximately 120,000 truck trips occur within Calgary each day, and 70% of goods entering and leaving the city move by truck. But the district has only so much curb space and roadway capacity, specifically within dense residential areas.

The 2027 Sandbox Competition will focus on the development of a Future Ready Last Mile Goods Movement Strategy within the residential areas of Hillhurst and Sunnyside in the City of Calgary, with specific emphasis on the Kensington Business Revitalization Zone. Teams shall develop a future-ready Last Mile Goods Movement Strategy that enables efficient and reliable goods movement while balancing the needs of businesses, residents and visitors, while also maintaining mobility, accessibility, economic vitality and quality of life.

Introduction to Sustainability for the City of Calgary

The city is working to advance its Climate Strategy by reducing greenhouse gas emissions while creating a more climate-resilient city, and its Goods Movement Strategy by improving the efficiency, safety, and reliability of commercial transportation. The Calgary Goods Movement Strategy was created in 2018 to guide transportation investment decisions over the next 30 years. The Goods Movement Strategy was created with extensive input from people representing a wide range of interests.

Goals of Calgary's Last Mile Goods Movement Strategy:

- Keeps goods moving reliably and efficiently to their last mile destinations
- Supports the district's economic activity and businesses
- Reduces conflicts between freight, transit, pedestrians, and cyclists
- Advances Calgary's sustainable transportation objectives
- Makes better use of limited street and curb space
- Can realistically be implemented, funded, and scaled

Goals & Objectives / Challenge Parameters

1. **Goals, Objectives & Vision. What initiatives would you include in the Last Mile Goods Movement Strategy and how would you demonstrate that it works?** Develop a vision and goals for the project. Identify specific Risks, Challenges and Barriers in implementing the Last Mile Goods Movement Strategy Identify, Discuss and Develop Solutions to those Risks, Challenges and Barriers considered.
2. **Prepare a Planning Approach and Conceptual Plan, *encompassing both design and planning strategies*, at the network level which address a Last Mile Goods Movement Strategy for these two communities.**
 - a. As part of this ITE Sandbox Competition, teams are not required to preserve the existing freight operating model. Teams can rethink any part of the system, including:
 - i. Infrastructure- loading areas, freight access, street design, consolidation facilities

- ii. Operations- delivery windows, routing, loading/unloading practices, consolidation, microhubs, shared delivery models, alternative delivery methods
- iii. Curb management- dynamic allocation, reservations, pricing, enforcement
- iv. Vehicles- EVs, cargo bikes, smaller vehicles, alternative fleets
- v. Technology - data-driven delivery management, booking platforms, real-time information
- vi. Policy- regulations, incentives, restrictions, partnerships
- vii. Partnerships - coordination among the City, venues, carriers, businesses, and property owners

3. Demonstrate the Proposed Impact. Your proposal must demonstrate measurable improvement using Key Performance Indicators (KPIs). Teams may select the KPIs most relevant to their strategy and should choose the KPIs that best demonstrate whether their strategy works. The emphasis is not on maximizing every KPI; rather teams should explain their priorities, trade-offs, and expected outcomes. Examples include

KPI Category	Potential Measures
Freight Performance	Delivery reliability, Travel time, Freight vehicle delay, Loading/unloading efficiency
Sustainability	Freight GHG emissions, Zero-/low-emission vehicle adoption, Vehicle miles traveled.
Street & Network Impacts	Traffic delay, Curb utilization, Freight/transit conflicts, Pedestrian/cyclist conflicts.
Economic & Business Outcomes	Delivery cost, Business access, Supply-chain reliability, Venue/event operations
Implementation	Capital/operating cost, Feasibility, Stakeholders required, Implementation timeline
Safety	Pedestrian & Bicycle Conflicts with Freight Traffic, Reduction in Exposure

Professional Scoring Categories:

- 1. Technical Memorandum and Approach to Sustainability (15%)**
 - a. Quality of Writing in Technical Memorandum
 - b. Team has established a clear vision and goals
- 2. Proposed Planning Approach & Conceptual Plan/Graphic (35%)**
 - a. Conceptual Plan/Graphic, Design Decisions and Improvements are Identified Clearly
 - b. Transportation Improvements are consistent with the goals/vision outlined by the team
- 3. Identify and present the KPIs which demonstrate the proposed Impact (35%)**
 - a. Identify KPI Categories which are practical and measurable
 - b. All KPI Evaluations and Measures are Justified
- 4. Differentiators of Plan/Approach (15%)**
 - a. Is there a specific improvement strategy that differentiates this plan/approach?