

# Revamping Legacy Transit Routes

## EXECUTIVE SUMMARY

- *Windsor, Ontario officials wanted complete transit system overhaul.*
- *Analysis confirmed that current transit routing didn't serve commuter needs.*
- *StreetLight metrics supported a comprehensive plan and budget requests.*

Over 20 years of budget constraints and piecemeal fixes left Windsor, Ontario with a legacy transit system in need of overhaul. Big Data helped planners establish project scope, prioritize, and determine budget needs.

## Mission: Complete Transit Overhaul

Transit Windsor knew they needed to improve. For years, the city had addressed transit issues on a route-by-route basis, resulting in a circuitous mishmash. A peer review from partners Dillon Consulting identified that Windsor was providing half the amount of service as other cities its size.

Transit Windsor officials wanted to preserve a handful of routes that were historically very well utilized. But for the rest of the network, Windsor wanted to build a fresh system based on user needs.

Although Windsor already had public feedback on desired routes, they needed to check that against hard data. They needed a comprehensive plan in order to determine budget needs.

**"The phone survey identified what people would feel comfortable doing. StreetLight provided metrics on how they were actually moving around."**

IAN BORSUK  
Dillon Consulting



# Analysis: Collect Quantitative Data on Most-Needed Routes

Dillon Consulting gathered data in three critical areas of study:

- **Transit data**, including costs, times, and ridership, from Transit Windsor.
- **Traveler movements**, analyzed via StreetLight's metrics created from LBS data.
- **Public attitudes**, rider engagement and other qualitative data collected from phone surveys.

To study actual commutes, researchers first ran a Zone Activity analysis in StreetLight InSight®, identifying origin-destination pairs with the highest percentages. Then they traced on a current map what transit routes riders would need to travel those O-D routes. In many cases riders would need to transfer up to three times, going downtown and heading back out.

Without StreetLight, researchers would have had to do a traditional O-D telephone survey, requiring significant effort and cost to acquire a statistically significant sample.

## Results: Comprehensive Plan

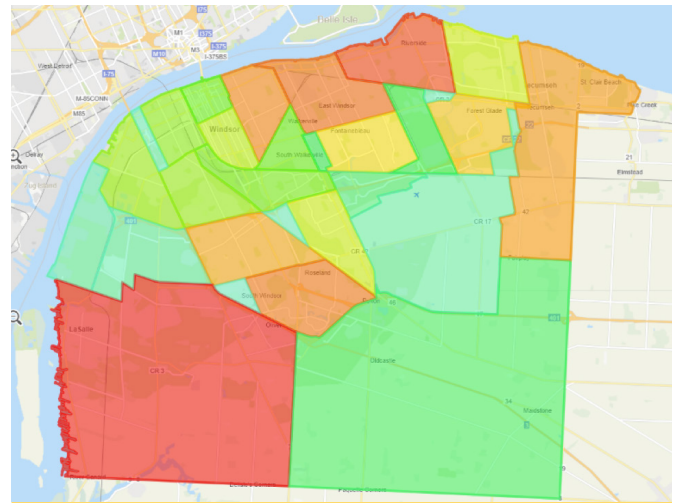
StreetLight's metrics established objective confirmation for issues that already had been raised in public feedback.

Primarily, analysis determined that downtown was not a top destination during peak travel periods, although nearly a dozen of the 14 routes studied had been routed through downtown. Although some commuters did need to connect to nearby Detroit through downtown, the transit system was simply not serving cross-town travel.

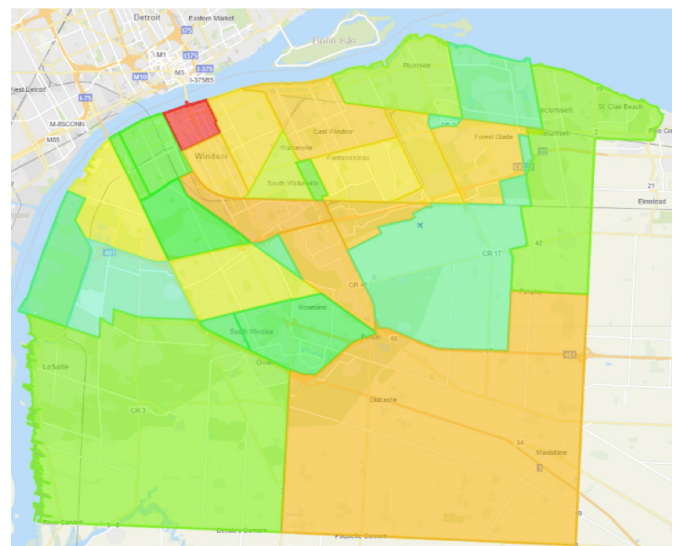
Dillon developed a new transit network based on core and local routes to serve residential areas to major transfer centers. To get from any location to another, a rider would need at most two transfers.

Planners also proposed additional enhancements, including a skip-stop service alongside some regular route, bus-only lanes, new shelters, and improved facilities and signage.

After a public commentary period, Windsor will finalize the plan and begin seeking funding for the 8-10 year project.



Distribution of Windsor's morning peak trip origins.



Distribution of morning peak trip destinations.



Destination transit stops relatively distributed across the city.