# Visualize your path to better transit

Every route has a story



PERFORMANCE MONITORING • APC/AVL DATA CLEANING RIDERSHIP ANALYTICS • ON-DEMAND TRANSIT ANALYSIS NETWORK OPTIMIZATION • RELIABILITY MONITORING



### KFY BENEFITS

- Deep understanding of ridership patterns helps you allocate service hours more effectively
- Accurate runtimes and proactive schedule adherence monitoring help you improve reliability and reduce complaints
- Insights into on-demand travel patterns, coverage, and access to opportunities help you design the best possible network
- Automated integrations, data cleaning, and exports to Excel & GIS replace your manual data processes

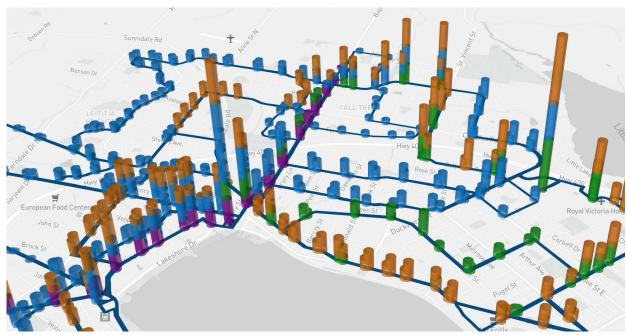


FIGURE 1: MAP OF THE TOTAL DEPARTURE LOAD AT EACH STOP.

# TRANSIFY FOR DATA VISUALIZATION

At Metrolinx (400 buses), Transify has been in-use for over two years and has made their APC and CAD/AVL data ready to visualize in seconds. As a large regional agency, Metrolinx had existing PowerBI dashboards for performance monitoring. Transify's detailed charts and maps have added the ability to deep dive into ridership patterns, helping planners better understand how customers are using their routes and informing the roll-out of their 10-Year GO Bus Strategy.

"Transify goes into a lot more detail than our PowerBI dashboards. You need to dive deeply into those rich, local level data to understand the patterns of travel."

- Anthony Smith, Service Strategy Manager at Metrolinx.

### TRANSIFY AS A ONE-STOP DATA PLATFORM

At Barrie Transit (50 buses), Transify has been in-use for over two years and has made their APC, CAD/AVL, On-Demand, and census data all ready to visualize in seconds. Each of these data sources has been fully integrated with Transify, making manual data extractions and uploads a relic of the past.

## IMPROVING RELIABILITY

Barrie Transit staff have used Transify to update their schedules with more accurate runtimes and new timebands. This improves customer experience by reducing wait-times, time spent holding at timepoints, and the chance of missing an early bus.

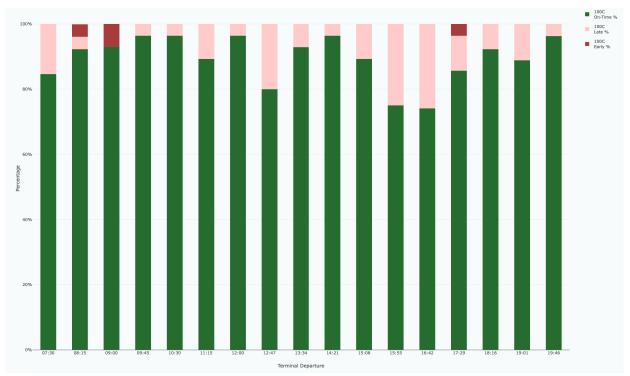


FIGURE 2: ROUTE ON-TIME PERFORMANCE, WITH EACH BAR REPRESENTING A TRIP.

"Our previous method of setting runtimes for scheduling was very tedious but Transify made it painless! Transify has allowed us to make more accurate schedules and add new timebands that we previously did not have the time to create. We saved over a week in updating our schedules while doing significantly more analysis!"

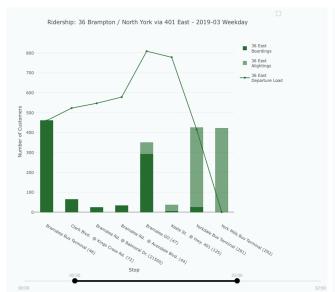
- Robin Mennie, Transit Planner at Barrie Transit

"Transify's induced demand for more scheduling refinements due to the ease of pulling actual run time data. This leads to better run times matching actual conditions by hour to the benefit of the transit customer."

- Mike McConnell, Transit Projects Lead at Barrie Transit

## RIDERSHIP ANALYTICS

Throughout the pandemic, Metrolinx planners used Transify to track which stops and route segments were recovering faster as they restored service. With the rollout of the 10-Year GO Bus Strategy resuming, planners are using Transify to prioritize and monitor changes based on recent ridership patterns.



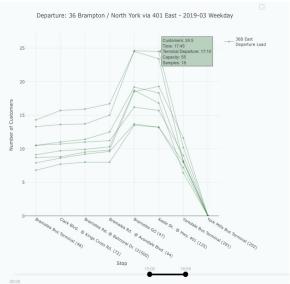


FIGURE 3: ROUTE RIDERSHIP PROFILE. HOVERING OVER THE ELEMENTS REVEALS THE BOARDINGS. ALIGHTINGS, AND DEPARTURE LOAD AT EACH STOP. AVERAGE DEPARTURE LOAD AT EACH STOP IN THIS IS THE MOST POPULAR CHART IN TRANSIFY DUE TO THE IMMEDIATE INSIGHTS AND CONTEXT IT SLIDER INSTANTLY FILTERS THE TRIPS THAT PROVIDES INTO A ROUTE'S RIDERSHIP PATTERNS.

FIGURE 4: TRIPS DEPARTURE LOAD CHART. HOVERING OVER EACH TRIP REVEALS THE MARCH 2019. ADJUSTING THE TIME-OF-DAY ARE SHOWN.

As part of their Transit Vision network plan, Barrie Transit is planning for more direct routes as to speed up travel times while maintaining coverage with on-demand service. Transify's Hexagon Map below groups together stops as to help their planners identify which corridors are the busiest and where there is excess capacity.

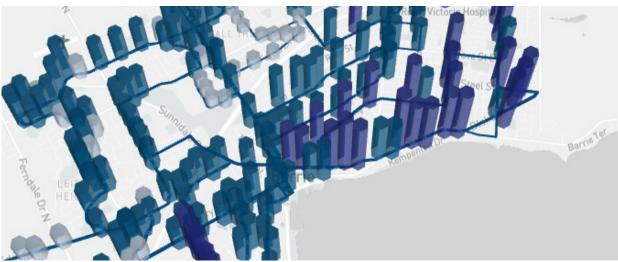


FIGURE 5: HEXAGON MAP SHOWING THE AVERAGE PASSENGER LOAD OF THE STOPS WITHIN EACH HEXAGON.

# OPTIMIZING THE EXISTING NETWORK





FIGURE 6: HEAT MAP OF CROWDED TRIPS.

FIGURE 7: MAP-BASED STOP SELECTION.

Transify's maps make identifying where crowding is taking place and answering ridership-related questions faster than ever. Barrie Transit is creating maps of their on-demand trip patterns to share with stakeholders to convey how the service is being used by residents.

As usage of the on-demand service grows, Barrie Transit plans to study potential fixed routes to serve the busiest times and areas - all of which can be done right in Transify.



FIGURE 8: ORIGIN-DESTINATION PAIRS OF ON-DEMAND TRIPS, WHICH COULD REVEAL OPPORTUNITIES TO INTRODUCE FIXED ROUTE SERVICE.

# IMPROVING SCHEDULE ADHERENCE

At Barrie Transit, Transify is being used to quickly understand the full context behind customer complaints on both crowding and reliability.

Transify is also proactively identifying trips that are not adhering to the schedule based on customized criteria. For instance, trips that started early or late without a reason (i.e. previous trip arrived on-time) are flagged, which planning staff can pass to their contractor for investigation.

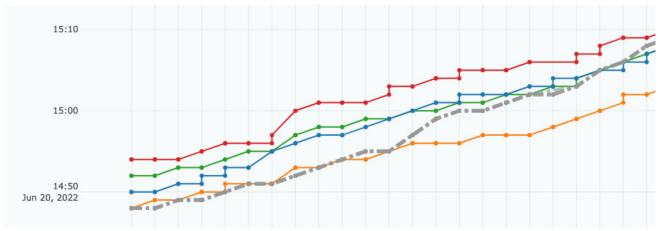


FIGURE 9: CHART SHOWING A TRIP ACROSS FOUR WEEKDAYS. THE DASHED LINE REPRESENTS THE SCHEDULE, AND THE X-AXIS CONSISTS OF EACH STOP IN ORDER.

# VISUALIZING COVERAGE & DEMOGRAPHICS

As part of Barrie's Transit Vision, stops are being moved to balance the spacing between them and to support more direct routes. As moving stops is a gradual process, impacts in transit coverage to residents, jobs, and equity-deserving groups are measured in Transify prior to making each stop or routing change.



FIGURE 10: 5-MINUTE WALK TO TRANSIT WITH A NEW STOP PAIR, WITH THE AREA SHADED GREEN REPRESENTING THE AREA THAT GAINED ACCESS TO TRANSIT WITHIN A 5-MINUTE WALK.

# VISUALIZING ACCESS TO OPPORTUNITIES

Improving access to opportunities is a key component of Barrie's Transit Vision, which is being visualized right in Transify. In addition to supporting custom shapefile datasets, Transify has partnered with Esri to generate demographic metrics from thousands of data fields for any shaded area in Transify.

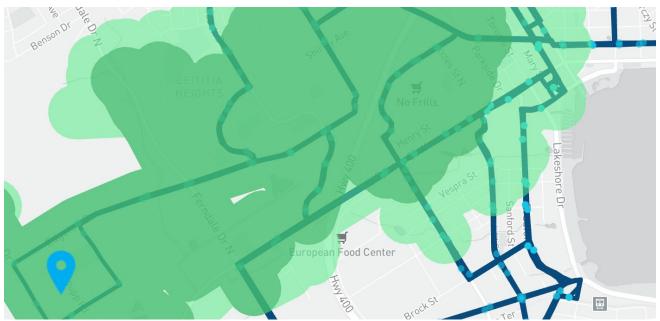


FIGURE 11: IMPACT OF IMPROVING ONE ROUTE'S FREQUENCY FROM EVERY 30 TO EVERY 15 MINUTES. THE LIGHT-GREEN SHADED AREA REPRESENTS THE AREA THAT IS NEWLY ACCESSIBLE IN A 30-MINUTE TRIP, MAKING DOWNTOWN AND 2.4X MORE JOBS REACHABLE.

### SUCCESS WITH TRANSIFY

This case study showed how both Metrolinx (400 buses) and Barrie Transit (50 buses) are using Transify to visualize their paths to better transit.

From improving reliability to designing a better network, Transify is there to help you transform your service with data you already have.

# WANT TO LEARN MORE?

Schedule a Demo: <a href="mailto:transify.com">transify.com</a>