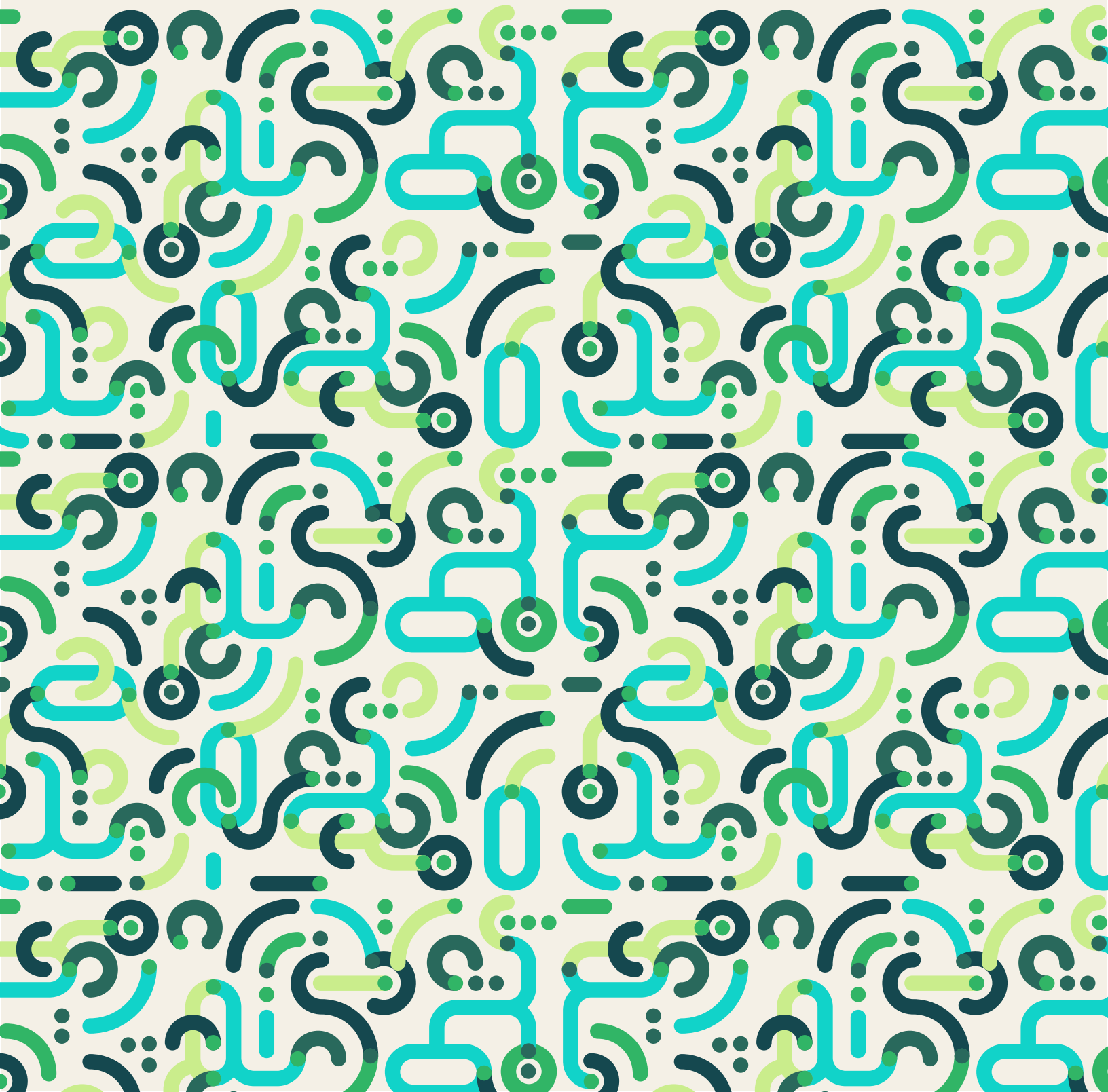


OpenTransit

Leveraging technology & digital teams to build sustainable, public microtransit for growing communities

Richard Switzer, Robert Luke & Dominic Bortolussi



Service delivery is increasingly moving online, and small cities and towns are typically well behind the curve when it comes to providing digital services that address local needs.

There are a number of factors facing smaller municipalities in overcoming this digital divide, including creating desirable tech jobs, attracting experienced talent, developing a sustainable business case for these new jobs, and most importantly, understanding the direct benefits a modern digital services division provides to the community.

OpenTransit will show that a successful, sustainable and local digital service is possible, and aims to provide a framework for future digital service delivery.

The OpenTransit Foundation is a not-for-profit organization that is developing an open-source ridesharing platform for small municipalities. Our 'white label' software is designed to be branded and customized for individual cities and is free to use in perpetuity, with 100% of the revenue accruing to the municipality itself.

OpenTransit takes an open source software and learning approach to create and sustain this model. This allows municipalities to provide better public services at a lower cost by realizing the significant efficiencies that modern software platforms can provide.

Longer term, it also creates a foundation for sustainable regional economic development in the form of well-paid technology jobs at the local level.

OpenTransit will also directly support the hiring and training of local digital services teams using experienced software development leaders and supported through partnerships with local educational institutions (secondary, college and university).

What Is Microtransit?

Microtransit encompasses a number of new public and private transit tools designed for point-to-point, location-to-location and last mile commuting. Common microtransit services include passenger van service between commuter hubs and large employers, and 'micromobility' services like bike share and scooter networks.

Increasingly cities are looking for ways of incorporating these non-traditional transportation modes into their public transit networks to increase ridership, improve mobility and reduce the use of single occupant vehicles.



The OpenTransit rideshare app provides a business case to show municipalities that a **local digital services team is both possible and economically viable**. OpenTransit also establishes some key digital services that can be leveraged for future applications, including **digital identity, online payment, location services** and **mobile apps**, and builds partnerships with local educational institutions to promote **digital skills development, education, work integrated learning** and **retraining**.

Provide smaller municipalities with a base infrastructure to grow a digital services team.

Leverage ubiquity of mobile devices and the ability of software to scale with negligible per-user cost.

Improve services delivery in rural markets through digital platforms.

Enable smaller centres to support the growth of well-paid technology jobs.

Build networks of communities sharing open-source software with each other to address common challenges.

Why OpenTransit

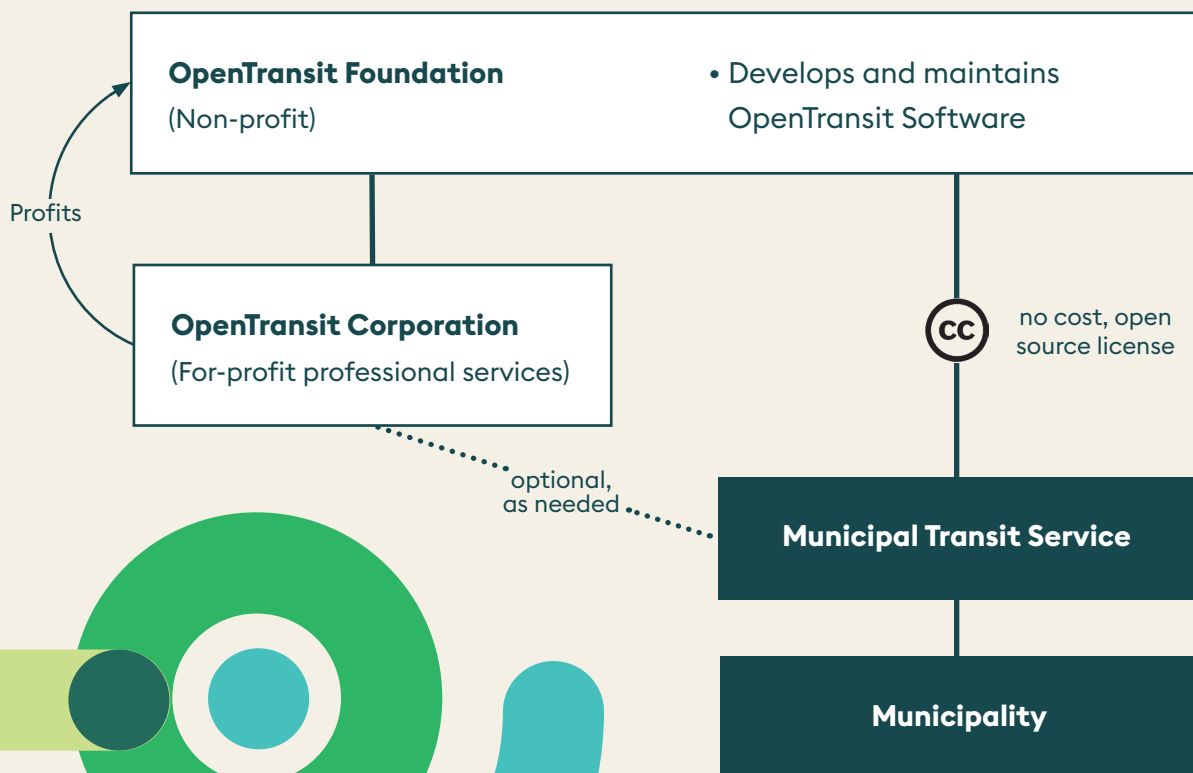
For a number of reasons, governments remain near the bottom when it comes to digital service innovation, particularly at the municipal level. This is a big missed opportunity, as **software and digital services scale far more efficiently** than traditionally staffed services delivery. As tens of thousands of startups have demonstrated, small investments in software can grow and evolve to deliver massive customer benefit.

Corporate Structure

The OpenTransit Corporation is the for-profit parent company of the OpenTransit Foundation. In addition to the non-profit foundation, the corporation will maintain a professional services arm that will be available to assist municipalities at market rates with a broad range of design, implementation and training services. In keeping with the foundation's broader goals of supporting the development of software development skills, OpenTransit Corporation will also assist with hiring and training staff, setting up management and operational structures and developing frameworks for short and long-term planning.

Municipalities that wish to use OpenTransit software are under no obligation to use the services of OpenTransit Corporation, and all profits from the OpenTransit Corporation are returned to the OpenTransit Foundation to support the continued development of open-source software and related activities.

OpenTransit



Uber in Innisfil

The experiment in the city of Innisfil, located 80km north of Toronto, is a fascinating look at how one growing municipality leveraged a relationship with Uber to develop an alternative public transportation network without the overhead of buying buses and hiring staff.

However the service has become a victim of its own success, with Innisfil council proposing to limit the number of riders per month, raising fees and reducing their subsidy.

A central issue is that most of the revenue (which comes from Innisfil taxes & fees paid by Innisfil residents) is leaving Innisfil and going to Uber in California.

Were this revenue to go back to the city of Innisfil the municipality would be able to provide the current level of service at a significantly reduced cost (or significantly increase the service without increasing the current cost).

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On a well-designed mass transit system, the more people using it, the “cheaper” it gets.

But the opposite is happening in Innisfil. Only so many passengers can fit in the backseat of an Uber, and the ride-hailing company, not the town, is pocketing most of the revenue. With per-capita costs essentially fixed, the town is forced to hike rates and cap trips as adoption grows. But this can create a perverse incentive: Fare bumps and ridership drops tend to go hand-in-hand on traditional systems.

The program racked up 86,000 rides in 2018. Nearly 70 percent of respondents to a city survey said that they were satisfied or more than satisfied with the new service—figures that would be the envy of any traditional public transit agency.

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— [Uber Was Supposed To Be Our Public Transit](#), CityLab, April 29th, 2019

It is clear that Innisfil needs Uber. Or more accurately, they need a microtransit service provider that can provide a rideshare platform.

This is the initial challenge The OpenTransit Foundation intends to address, and in doing so help establish a pathway to a long-term, self-sustaining economic benefit to municipalities across the country.

Innisfil has shown that the microtransit rideshare model can work for municipalities, but they pay a price for leveraging a platform they don't control. While Uber has built an excellent ridesharing platform, they are hardly unique. Lyft, Brazil's EasyTaxi, Australia's Hitch-a-ride and China's Didi Chuxing (the world's largest ridesharing platform) are all independently-developed software businesses that provide essentially the same service.

OpenTransit's software will be distributed under an open-source model, meaning **municipalities are free to use the software without paying licensing fees or a share of revenue**. Municipalities will be expected (by setting up an arms-length transit entity) to provide appropriate staffing to manage the local deployment, app customization, billing and ongoing operations, while the OpenTransit Foundation will be responsible for maintaining the core software platform. If required, the OpenTransit Corporation will directly provide or recommend consulting services to guide the implementation process.

In Conclusion

In the near term, the development of OpenTransit will provide immediate opportunities for Canadian municipalities to implement a microtransit solution that they can customize to their specific needs while **ensuring that 100% of subsidies and revenues stay local**. It also provides the business model for local tech jobs and a path for growth.

Longer term, all municipalities in the OpenTransit community network will share in improvements and new services developed on the platform, creating additional jobs and economic growth as digital services grow. This growth of local software literacy aligns with government job creation and employment retraining mandates to develop well-paid tech jobs in smaller centres.

From a tech talent perspective, this growth will be well-timed: as a generation of Canadians are finding themselves priced out of home ownership in major centres like Vancouver and Toronto, the opportunity to relocate to a smaller centre can be an attractive proposition - if there are good jobs for them to go to.

OpenTransit Phase One: Research (winter 2019-2020)

Research and data collection led by OCADU in cooperation with select municipalities and post-secondary institutions. Develop viable microtransit models to inform the OpenTransit platform development

Phase Two: Product prototyping and validation (spring-summer 2020)

Partner with a digital product studio to design and prototype the beta version of the OpenTransit platform. Phase One findings will be validated through iterative prototype testing with potential customers (riders and municipalities). Develop and document the technical roadmap, platform development cost and production timeline.

Phase Three: Mobile app and platform build (fall 2020-summer 2021)

Build and delivery of OpenTransit beta platform to select rural markets, work with municipalities to onboard local software teams onto the platform, develop local training and handoff procedures.

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