



# **PRELIMINARY REPORT ON FINANCIAL VIABILITY OF ONE WINDOW FREIGHT PERMITTING PLATFORM FOR EASTERN ONTARIO**

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Produced by Eastern Ontario Leadership Council

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County of Lanark

County of Frontenac

Northumberland County

Ontario Good Roads Association

Ontario Trucking Association

Town of Perth

Town of Smiths Falls

Transnomis Solutions Inc.

United Counties of Leeds and Grenville

United Counties of Prescott and Russell

United Counties of Stormont, Dundas and Glengarry

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## 1. Executive Summary

This report summarizes the results of a joint project by the Eastern Ontario Leadership Council and its municipal members, with Transnomis Solutions Inc., to design, develop, and test an online platform through which municipalities and freight carriers could transact permitting business, particularly permits for Oversize-Overload shipments.

As the report describes, successful development and deployment of an online platform requires deep understanding of the business processes that underlie its use, key conditions/criteria that will determine the possibility (or probability) of user adoption and ongoing use, the governance and management oversight that will be required to ensure high levels of user satisfaction (and therefore retention), and the conditions that will determine ongoing financial viability of the platform itself.

While Transnomis Solutions Inc. undertook technical development as part of its suite of offerings to the transportation marketplace, and six Eastern Ontario municipalities stepped forward to serve as a user test group, the Ontario Ministry of Municipal Affairs and Housing provided financial support to the EOLC (through the County of Frontenac) for analysis of potential cost-savings for municipalities. This report delivers on that expectation but also goes further, providing insight on potential cost savings to freight carriers and financial analysis about the financial sustainability of the online platform under different sets of assumptions.

The report also includes commentary on non-financial aspects of a platform's success (ex. choosing the right business model, ensuring that appropriate governance is put in place). Taken together, the work of all parties has led to a series of conclusions that can form the basis for future endeavours related to online permitting:

- It is indeed possible to develop an online platform that would be attractive to both municipalities and freight carriers and could deliver financial and other benefits to both parties.
- The volume of and revenues associated with the test business use case (Over-size Over-limit shipments) is too small in Eastern Ontario alone to suggest that a 'standalone' platform would be financially sustainable, even though the platform would generate benefits to both parties (municipalities and freight carriers).
- There is potential to create and operate a financially sustainable online permitting platform by 'scaling' the version developed in the first instance for Eastern Ontario. In this case, scaling means some combination of a) taking the platform province-wide to increase the number of municipalities and freight carriers using it, b) broadening the types of

permits that could be obtained through the platform, and c) providing value-add services beyond the permitting process itself.

- The financial modelling tool developed through this project can be an extremely useful mechanism through which to bring multiple types of stakeholders together to validate assumptions and conclusions of this report; examine the feasibility of a scaled-up platform; determine levels of stakeholder interest in taking on specific roles related to ongoing operation of the platform; negotiate pricing, revenue and expense sharing, and test specific proposals for advancing the online permitting concept.
- Because the EOLC has no aspirations to either own or manage the online platform (including the governance role), it can play an intermediary role with other stakeholders to assist them in negotiating a path forward. By so doing, it will ultimately deliver a benefit to both private sector firms (businesses shipping and receiving freight along with the associated logistics companies and freight carriers), and municipalities with permitting and related responsibilities.

## 2. Recommendations and/or Next Steps

The financial analysis detailed in this report, along with preliminary discussions with identified key stakeholders, has been distilled into the following recommendations:

**Recommendation 1:** That the EOLC share the analysis contained in this report with major stakeholders (ex. municipalities in Eastern Ontario, Ontario Good Roads Association, Ontario Trucking Association, Transnomis Solutions Inc.) to validate the assumptions, projections and analyses contained herein. Further, the EOLC will assess the interest of said parties in an ongoing role with respect to governance oversight, marketing and promotional support, financial backstopping or direct financial contributions to advance start-up of a chosen model.

**Recommendation 2:** That the EOLC advise its major stakeholders in this initiative (as noted in Recommendation 1) that it is recommending exploration of scaling opportunities 1, 2 and 3 (see Section 8) and 2) that it is not recommending the Oversize Overlimit business model for Eastern Ontario alone due to lack of financial sustainability of that model. Further, that the EOLC engage major stakeholders in a group discussion of the strengths, weaknesses and financial implications of each of scaling opportunities 1, 2 and 3. To this end, the EOLC will offer the (private) use of the business/financial modelling tool developed in earlier stages of this project (see appendices for screenshots of components of the modelling tool).

**Recommendation 3:** That the EOLC work with the aforementioned stakeholders to refine and recommend the business model most likely to achieve the shared desirable outcomes of a) moving freight safely and efficiently across and beyond the region, b) net cost savings and/or efficiencies for municipalities, c) net cost savings and/or efficiencies for freight carriers, and d) strong prospects for financial sustainability for an online platform that would support the recommended business model.

**Recommendation 4:** That the EOLC work with the aforementioned partners --- and potentially others --- to execute foundational tasks that will set the stage for launching a fully-functional commercial (not beta or pilot) online platform. These tasks are delineated in an earlier section of this report (page 3).

**Recommendation 5:** That the EOLC's Integrated, Intelligent Transportation Systems Working Group continue its liaison with provincial and/or federal ministries and departments to identify and capitalize on opportunities to bring collaborative support to this initiative.

**Recommendation 6:** That the EOLC provide relationship brokering services to the aforementioned stakeholders to negotiate a Memorandum of Understanding that will implement a negotiated business model and launch a commercial version of the online platform. Note that any external costs (ex. for legal counsel or intellectual property protection guidance/expertise) will be borne by the parties to the Agreement rather than by the EOLC.

**Recommendation 7:** That the EOLC take no long-term business interest in the online platform but it will be credited by whichever organization(s) take it forward on a commercial basis, for leadership in moving the concept of a multi-municipality, multi-carrier permitting platform forward. Further that if the platform does become a fully commercial product, there be a demonstrable 'first year' benefit to municipalities that participated in the pilot (development) phase of the project.

**Recommendation 8:** That the EOLC negotiate with whichever organizations might advance the platform on a commercial basis, to permit the EOLC to provide summary information online (ex. through its website) that would describe the role it has played and given credit to any stakeholders involved in the developmental processes, including but not limited to the Ministry of Municipal Affairs and Housing.

### 3. Introduction: The Issue

Of the large volume of freight movement through Ontario, particularly that share moving through Eastern Ontario, a portion of that traffic moves across multiple municipalities, each with their own permitting requirements as well as related terms and conditions, and compliance expectations.

At the same time, freight carriers are sometime unsure of permitting requirements, might benefit from guidance on route planning, and must coordinate approvals and permit fee payments across multiple municipalities. Their shipments may or may not involve travel on provincial highways; in the event that they do, this adds another layer of complexity, permitting documentation and fee payment.

***For municipalities and freight carriers alike, the absence of an easy-to-use method of managing permitting requirements incurs unnecessary organizational costs and operational inefficiencies. In this digital age, the opportunity to use an online platform through which freight carriers and municipalities interact to expedite freight permits seems worthy of exploration.***

In its 2019 Regional Economic Development Strategy, the Eastern Ontario Leadership Council identified finding a solution to the freight permitting issue as one initiative to be undertaken to help fulfill its aspirational outcome of moving freight safely and efficiently within the region and beyond. Even when beginning exploration of solutions, the Eastern Ontario CoST group (public works leaders in Counties and Single Tier local governments) suggested that the ideal solution might be useful beyond regional boundaries. As a place to start, CoST members discussed permitting for Oversize-Overlimit loads, realizing that permits for these shipments were taking up a significant amount of their time and that the consequences of an inability to manage this responsibility well could lead to non-compliance with municipal expectations and policies, and damage to local transportation infrastructure.

In December of 2019, the Ontario Ministry of Municipal Affairs and Housing received an application to undertake a project to explore whether an online permitting system for a single use case (Oversize Overlimit loads) would yield learning that would be useful if/when a technology solution was brought into use across the region. In this sense, Eastern Ontario served as a 'test bed' for solution development. This report summarizes project findings and suggests next steps to address the freight permitting issue.



#### 4. Essential Characteristics of a Solution

Early discussions related to the development of a digital/online permitting solution suggested the following essential characteristics:

- **Multi-municipality by definition and design.** Single municipality permitting services already existed --- including through Transnomis Solutions Inc. (Ottawa, Ontario) but there did not appear to be any multi-municipality options available. Due to challenges with route planning, this is understood to have significant impact on the cost and efficiency of operations among freight carriers and across municipalities. In addition, the solution should be aligned with Ontario Ministry of Transportation's permitting process for [oversize overweight loads](#) for shipments on roads for which it has oversight.
- **Focused on oversize, overlimit (weight) use case (initial use case).** Anecdotal information from municipalities indicated that the movement of oversize, overlimit loads into or through their jurisdictions were a significant challenge to municipal operations (ex. conflicting uses of specific roads, requirements for escorts and municipal staff oversight, infrastructure limitations and/or damage). This solution is seen as the first initiative to help achieve the EOLC's Aspirational Outcome related to integrated, intelligent transportation systems (*see inset*).
- **Ability to integrate other sources of data important to freight carriers.** Any solution that integrated permitting processes with tightly coupled carrier information requirements was seen as highly advantageous. Examples are municipal designations of truck routes/preclusions by truck traffic, construction and/or other uses, road conditions, weight restrictions, congestion).

##### **Aspirational Outcome:**

Eastern Ontario's transportation systems are moving goods and people safely and efficiently, within the region and beyond.

##### **Examples of Actions:**

- Evaluate the region's transportation systems to identify gaps or cost-effective ways to increase the efficiency of goods movement
- Participate in the development of a commutershed-based strategy to improve mobility of people to/from work or vital appointments
- Continue to monitor (and support) VIA Rail's plans for high-frequency passenger service.

Source: [Eastern Ontario Regional Economic Development Strategy \(2019\)](#)

- **Ability to integrate with municipal operations and information technology.** Any solution for permitting processes was expected to be deployed efficiently and effectively within - -- and across --- municipal environments.
- **Financially sustainable for both freight carriers and municipalities.** It has been clear from the outset of this project that the benefits to any proposed/developed solution would have to outweigh the costs --- for both freight carriers and municipalities. In this sense, the solution was expected to need support from both parties if it is to be sustainable over the longer-term, but that success would only be achievable to net benefits could be demonstrated for both.
- **Oversight and governance through a public or not-for-profit organization.** For credibility, financial integrity, and cybersecurity, and long-term stability, any solution was seen as requiring governance arrangements that incorporated feedback from two primary user groups: municipalities and freight carriers.

## 5. Support for Solution Exploration

In February of 2020, the Province of Ontario announced that the EOLC's application for funding support to assess the feasibility and financial sustainability of a 'one window' approach to freight carrier permits had been successful. The funding support for this multi-municipality submission, which was managed by the County of Frontenac on behalf of the region, was focused on evaluating the potential of any digital/online solution to deliver cost-savings or other efficiencies for municipalities and examine the overall feasibility of the venture.

These funds have been used to undertake specific activities related to cost-benefit analyses for municipalities:

- Establishing a Project Steering Committee.
- Data gathering to establish potential demand for/utilization of a 'one-window' platform in Eastern Ontario.
- Consultations with key stakeholders.
- Setting up and operating a test group to guide early platform development, and later to consult with group members on municipal permit volume and pricing data.
- Development of a business modelling tool with which to assess potential business models and prospects for financial sustainability.
- Analysis of initial proposition and formulation of recommendations.

Details on each task are included in a following section of this report.

***Note that this funding was only used for those tasks that directly contributed to fulfilling the purposes for which the support was offered: understanding and quantifying the potential for municipal cost savings and/or establishing the financial sustainability of the platform. Development costs for the platform itself were born by Transnomis Solutions Inc. and the intellectual property associated with this work remains with that firm.***

## 6. Approach to Developing a Solution

- ***Creation of a test group of municipal representatives*** to work with a developer to create, validate and (presumably) adopt the first release version of the one-window permitting application/platform. It was deemed to be important that the test group be comprised of individuals with public works and permitting experience. The test group for initial development in Eastern Ontario include representatives from the following municipalities:
- ***Establishing a Project Steering Committee.*** Responsibility for providing oversight to the One Window Permitting Project (as it has come to be known) was assigned to the EOLC's Integrated, Intelligent Transportation Systems (I2TS) Working Group. Already formed, the Working Group includes representation from municipal CAOs, public works and economic development leadership as well as from EORN Inc., and (with observer status) the Eastern Region office of the Ontario Ministry of Transportation.
- ***Data gathering to establish potential demand*** for/utilization of a 'one-window' platform in Eastern Ontario. The data gathered was a) Average Annual Daily Traffic data counts (AADT) from municipalities across the region, and (where possible) separating regular passenger traffic from commercial transport traffic, b) numbers of oversize, overlimit permits issued by any/all municipalities and associated annual fees and total revenues, and c) total annual revenues for municipalities for all types of licenses and permits (as documented in annual [Financial Information Returns](#). (See *appendices for a summary of this information*).
- ***Consultations with key stakeholders.*** Project staff sought opportunities to describe the One Window project with stakeholders who expressed interest in being part of either the development of the solution, or its long-term management --- or both. Parties from whom information, data and/or expressions of interest were sought included:
  - [Transnomis Solutions Inc.](#) of Ottawa Ontario. Transnomis already offered the [Municipal511](#) platform, an online view of municipal road information that also incorporates data from the MTO [Ontario511](#) platform for roads under its jurisdiction. Transnomis also offered a *single-municipality* permitting application ([Municipal511 Permit](#)) and a [Road Information Exchange](#) providing *real-time road information* for navigation applications. Transnomis expressed interest in working

with the EOLC and other stakeholders to determine how best to address the oversize, overlimit permitting project's aspirations and led the prototype development processes at no cost to the EOLC or the Province of Ontario.

- [Ontario Good Roads Association](#), based in Oakville, Ontario. Given its mandate of advancing the infrastructure and transportation interests of its members (municipal, First Nations, and corporate), OGRA expressed interest in possible service as a governance/oversight body for an eventual permitting platform. This was especially noteworthy given the possibility that an application developed in/for Eastern Ontario could well have relevance to both municipalities and freight carriers from across the province. In June of 2020, initial discussions were held concerning what a Memorandum of Understanding (MOU) might look like. All parties to this MOU --- particularly Transnomis Inc. and OGRA --- have been keen to continue these discussions once economic modelling is complete and the disruption of the COVID-19 pandemic has subsided.
- [Ontario Trucking Association](#), based in Etobicoke, Ontario. Given the OTA's role in representing all segments of the trucking industry (for-hire carriers, private carriers, intermodal services, and suppliers), the OTA was viewed as a valuable source of insight on how a one-window platform might work to benefit carriers as well as municipalities, and to ensure that economic/financial modelling would be accurate and resonate with carriers and related parties in the freight sector. The OTA's vision includes *"sufficient profitability, an enhanced image, mutually beneficial partnerships with customers, employees, owner-operators, suppliers and the public, while operating in a safe, environmentally and socially responsible manner."* As with the OGRA, the Ontario Trucking Association has been focused on keeping goods moving throughout the COVID-19 pandemic; a re-start to consultations is anticipated in early 2021.
- ***Setting up and operating a test group to guide early platform development.*** Following initial outreach to the region's CoST (County and Single Tier municipal public works) group, six municipalities volunteered to work with Transnomis to develop and test the specifications for a multi-municipality 'one window' permitting platform. This approach gave Transnomis a contiguous group of municipalities with which to test the multi-municipality permit process. While initial discussions took place with municipal public works leaders, operational staff were brought into the discussions when the prototype had been developed to the point of being testable with real-life shipments, routes and common challenges/issues.

These municipalities were (in alphabetical order):

- County of Lanark
- Town of Perth
- Town of Smiths Falls
- United Counties of Leeds and Grenville
- United Counties of Prescott and Russell
- United Counties of Stormont, Dundas and Glengarry

From February to June of 2020, the test group met with Transnomis roughly every two weeks, reviewing iterative developments to the platform prototype and providing feedback on improvements and fine-tuning.

- **Development of a business modelling tool** with which to assess potential business models and prospects for financial sustainability. Once data gathering activities were complete, a business modelling tool was developed by which to answer certain questions related to financial sustainability of the platform:
  - Is there sufficient **volume** across Eastern Ontario of oversize, overload permit applications to confer benefits to freight carriers and/or municipalities from using a One Window platform? If not, would scaling the application to cover the entire province improve the cost-benefit equation?
  - What are the different **business models** that might be considered for pricing use of the platform? Examples include: annual flat fee subscription, combination of flat rate and transaction-based fees, a volume-based transaction-based fee structure, a hybrid of the preceding options, with/without other revenue sources.
  - Under what regime(s) and timeframes would the permit application become financially sustainable?
  - What are the **costs** of providing ongoing **technical support** and **governance oversight** to the platform and how would those costs be recovered?
  - Are there **other types of transportation or mobility-related permits** (beyond oversize, overlimit permits) for which municipalities, carriers or other stakeholders might find attractive to have incorporated into this type of platform?
- **Analysis of initial proposition and formulation of recommendations.** Based on analyses and conclusions drawn from the business modelling tool, the initial proposition (single business use case, pan-regional solution) was reviewed and recommendations were formulated to address the outcomes.
- **Project Report.** The final phase of the project was the preparation of a report summarizing the project and its findings, and offering specific recommendations including any appropriate next steps. This document is the fulfilment of the final project phase.

## 7. Description of Proposed Initial Solution

### What It Looks Like

As originally envisaged, the One Window Permitting platform was viewed as a conventional double-sided business model --- deployment of digital technology to provide an interaction space for municipalities and freight carriers to transact permitting business efficiently and securely (from a cybersecurity perspective). The expectation was always that the platform would need to confer sufficient benefits to both parties to prompt users to move a significant share of --- if not all ---permitting transactions onto the platform, and justify financial support for the platform to support ongoing operations while still leaving users (municipalities and freight carriers) with net gains in efficiency and/or cost savings.

Achieving this goal would require the platform to fulfill the following conditions:

- Preservation of municipal autonomy in setting its own Terms and Conditions as well as fees.
- Ease of use by both freight carriers and municipalities
- Ability to view any and all municipal permit applications, approvals and certificates through the same digital “window”.

Section seven of this report provides examples of how the proposed initial solution ‘looks’ on-screen. It is important to note that during the development process, several important value-adds were identified that were not contemplated at the beginning of the process, including significant progress on use of a standardized permit application form, seamless integration of Municipal511 and the ability to ensure that mobile navigation services had access to a similar level of ‘on the ground’ information as would be available through the online platform.

### Behind the Scenes

A one-window permit service requires stakeholder governance to oversee service scope, financial management, data and system policies, and the common application forms, (e.g. the Ontario Good Roads Association (OGRA) Ontario Road Information Exchange (ORIE) Governance Committee, that oversees the data exchange behind Municipal511, which can be used without the Municipal511 user interface, e.g. connected to municipal GIS. OGRA has shown an interest in this role.

A one-window permit service requires a stakeholder to manage a payment system for municipalities, and to disburse those payments; and this is preferably handled by a trusted municipal association (e.g. OGRA), that is also serving/supporting the service governing body. OGRA has shown an interest in this role.

### **What the Benefits to Using It Could Be**

1. A one-window permit service can offer carriers significant time savings per single trip and annual multi-municipality permit applications; as it can for regional special event managers, e.g. Rideau Lakes Cycle Tour.
2. A one-window permit service can offer municipalities significant time savings per permit processed; especially if the approval process is the same as the one they are using regularly for their singular (and within County) permits, e.g. oversize load – single trip, oversize load – annual, road entrance, road occupancy, roadside sign, special event, filming, municipal consent, 911 numbers.
3. The business case for a technical service provider to provide a standalone one-window permit service, based only on a single, modest business use case (Oversize-Overlimit shipments) is very weak; however, the case improves significantly if the one-window service is integral to a service adopted by municipalities for their singular permits, e.g. Municipal511 Permit add-on.
4. A one-window permit service requires stakeholder governance to oversee service scope, financial management, data and system policies, and the common application forms, e.g. the Ontario Good Roads Association (OGRA) Ontario Road Information Exchange (ORIE) Governance Committee, that oversees the data exchange behind Municipal511, which can be used without the Municipal511 user interface, e.g. connected to municipal GIS. OGRA has shown an interest in this role.
5. A one-window permit service requires a stakeholder to manage a payment system for municipalities, and to disburse those payments; and this is preferably handled by a trusted municipal association (e.g. OGRA), that is also serving/supporting the service governing body. OGRA has shown an interest in this role.
6. The support of the Ontario Trucking Association (OTA) may be key to the success or failure of one-window permitting in Ontario; and they have approached such initiatives with caution to date, for fear such a service will be focused on generating new revenues for municipalities at the expense of their members.



## 8. Scaling Opportunities

Growth of an online platform can depend heavily upon scaling it (increasing levels of activity, numbers of users, geographic or market segment reach). The main opportunities to scale the One Window Permitting platform are by:

1. **Expanding its geographic reach beyond Eastern Ontario** to include at least all of the province of Ontario. It is also possible that such a platform could have interprovincial appeal given Ontario's geographic centrality.
2. **Expanding the scope of the platform to include multiple types of municipal permits and licenses** (e.g. entrances to properties, special event/road closure permits, building permits). This would suggest an opportunity to serve additional groups of users beyond the freight movement community (ex. community groups, construction firms).
3. **Expanding the functionality of the platform** beyond the transactional focus of specific types of permits. For example, additional functionality might include a simple map to show the jurisdictions with particular types of permitting requirements, route planning, online storage of draft and final applications, data/information 'push' to stakeholders within and outside the permitting arena (navigation companies, first responders) or provision of information about related services or assets (e.g. stopping locations for freight carriers awaiting unloading of their shipment). Much of this work can be done even before a formal launch of a platform.

In a later section of this report, the analysis suggests that all of these scaling opportunities are worth consideration.

## 9. Approach to Modelling Financial Sustainability

### 1. Data Gathering

Three types of data gathering activities were undertaken to provide inputs to the financial sustainability and cost savings modelling work:

- 1. Average Annual Daily Traffic (AADT) Data:** To assist municipalities in applying the most appropriate classifications to specific parts of their road networks (thereby underpinning capital maintenance planning and transportation policies), municipalities may 'count' vehicular traffic on specific roads (e.g. total numbers of vehicles in specific timeframes). Depending on the equipment used, these counts may be able to differentiate between passenger automobiles and commercial vehicles such as transports. The latter data was considered useful in understanding the volumes of commercial traffic moving through the region although not all of the traffic would be oversized or limit freight movement.

This data gathering activity provided several useful insights for the One Window Permitting project:

- Most AADT data collection takes place at the upper or single tier level (e.g. by a County or separated city or town) and only for those roads for which they have responsibility. Relatively few townships gather this information on a regular basis.
- Relatively few of the municipalities in Eastern Ontario can distinguish between passenger and commercial vehicles.
- There is AADT data for less than half of the geographic area of the region, and for the most part, the data is limited to county or city roads.

Based on these insights, project staff invited municipalities to undertake traffic counts in the summer of 2020 (to expand and update existing data sets). While several counties were able to do so, most municipalities were focused on addressing operational challenges due to the COVID-19 pandemic and were therefore unable to respond to the request. Once the pandemic is past, there may be a return to consideration of the value of updating AADT data, but for the purposes of this project, reliance will be placed on other data more directly focused on permit volumes and associated revenues.

- 2. Municipal Permit Revenue – Based on Financial Information Returns:** For all municipalities in Eastern Ontario (excluding the City of Ottawa) total revenue collected each year from licenses, permits, rents and other similar fees is roughly \$59 million (Source: 2019 Financial Information Returns). This calculation does not include any property tax revenue nor any grant revenue from any other source. This non-tax revenue total was up slightly from the 2018 level (\$57 million) although 12 municipalities in Eastern Ontario did not yet have posted FIRs as at January 21, 2021. For those municipalities, the 2018 values were carried forward to avoid underestimating actual revenue with a null response (so far).

By comparison, the City of Ottawa receives \$68 million in non-tax, non-grant revenue (Source: FIRs). Data for 2020 is not yet available and may be anomalous given the COVID-19 pandemic.

The FIRs do provide data for “licenses and permits” which would include but not be limited to oversize overlimit permits but this number would provide a more realistic upper limit to the amount of revenue municipalities might be generating from oversize overlimit permits. Presumably contributions to supporting an online one window permitting platform would have to be weighed against a) the total revenue derived by the municipality, b) the potential for cost-savings by the municipality, and c) the efficiencies or other cost savings that would accrue to freight carriers and their clients who pay these permit fees. For both municipalities and freight carriers, the cost-benefit analysis must justify any fees or charges levied to access the platform.

License and permit revenue for the municipalities in Eastern Ontario totalled \$28 million in 2019. This total will rise slightly once all municipalities have posted their 2019 FIRs.

Note that total revenue *just from permits* is almost certainly much less than the totals noted above. Oversize overlimit permit revenues are not identified separately in the FIR (Schedule 10 1499 01 or 1420 01) so the only way to estimate current revenues from this source is to aggregate data from individual municipalities via direct solicitation.

Jurisdiction	License and Permits (in millions - 2019)
Separated Cites & Towns (10)	\$11.1
County/Upper Tier (13)	\$ 2.5
Townships/Towns/Lower Tier (90)	\$14.6
<b>All Eastern Ontario</b>	<b>\$28.2</b>
City of Ottawa	\$39.3

*Source: Municipal FIRs for 2019 from all municipalities (single, upper and lower tier municipalities in Eastern Ontario)*

- 3. Municipal Permit Revenue – Based on Annual Permits by Volume and Fees as Set Out in Municipal Bylaws:** Enquiries made to municipalities across the region revealed that very few “lower tier” municipalities (e.g. townships or towns within a county structure) monitor or charge for oversize overlimit loads. These permits and the enabling bylaws are typically the responsibility of the upper tier (county) or single tier (could be a county, city, or town).

Data gathered in mid-2020 indicated that:

- The total number of oversize overload permits issued by municipalities in Eastern Ontario is roughly **1,100**. Approximately 400 of these permits are annual in nature, another 600 are single trip permits and the balance are “other” types of permits.
- Available information suggests that **roughly one in five municipalities in Eastern Ontario requires permits for oversize overlimit loads** and these municipalities are a mix of cities, county governments and townships (typically the latter are larger entities). Slightly more than half of the counties/upper tier governments are known to have an oversize, overlimit permit process. Note however that if a county has an oversize overlimit permitting process, it would likely cover just county roads but could involve shipments that pass through multiple municipalities.
- Fees for **annual permits** ranged from **\$100.00 to \$250.00**, with single trip permits in the \$25.00 to \$150.00 range.
- Financial data provided by municipalities suggests that total annual revenue for 2019 from oversize overload permits across all of Eastern Ontario was roughly **\$105,000**. Given the patterns noted above, it is likely that this underestimates actual revenue by 100 per cent. **Actual annual revenue could be in the \$300,000 to \$350,000 range**. This is still a very small share of the license and permit total (\$28.2 million).

## 2. Assessing Municipal Cost Savings Potential

The assessment of potential cost savings for an individual municipality is quite different than the assessment of the financial sustainability of an online platform serving multiple municipalities and other users (ex. carriers). It is entirely possible that each individual municipality might achieve cost savings but the entire platform would be financially unsustainable.

This report estimates and summarizes the following types of potential cost savings to municipalities:

- **Cost avoidance (primarily staff time)** devoted to documentation preparation and provision to freight carriers, receipt and review of completed permit application forms, processing, financial management associated with permit fees, and management oversight of permitting processes. The last of these municipal responsibilities could include the need to oversee the shipment itself not just associated permitting processes as well as details of route planning. This form of cost saving could result in staff being able to spend less time on oversize overlimit permit processes and more time on other value-add tasks.
- **Enhanced compliance with municipal bylaws and policies** including use of designated truck routes, avoiding truck prohibited routes, reducing the need for ticketing for shipments without a valid permit along with associated fine payment processing and receipting, avoiding shipments moving through an area with construction or a conflicting use. Addressing these issues require staff time and sometimes transactional costs and inflict damage to user-municipality relationships.
- **Infrastructure Damage Mitigation** that avoiding routes with known hazards (ex. low/narrow bridges and/or overhead wires, insufficient turn radii) so that neither the municipality or the carrier experience repair costs, shipment delays, traffic backups around incident sites, and repair costs.

It is also likely that use of a digital platform would **reduce physical/space requirements** associated with data and information storage, would dramatically improve the ability to access files/permits/accounts, and would **enhance 'corporate memory'** for permitting activity much of which may only exist in the memory of staff members executing these functions. The opportunity to **enhance data security and/or cybersecurity** as well as **privacy protection** should also be considered when thinking of these types of online platforms.

The modelling tool developed for this project based its estimates of costs being incurred by municipalities on the volume of Oversize Overlimit permits of different types currently being issued by a subset of (surveyed) municipalities in Eastern Ontario, extrapolated to all municipalities in the region (see table below).

**Modest revenue base means limited ROI for a 'standalone' Oversize-Overlimit Platform:**

Based on the permit volumes and associated fees in red below, the calculations suggest that a *single municipality* might *on average* be bringing in roughly \$14,500 a year in Oversize/Overlimit fees. This would be expected to rise to approximately \$16,000 a year on average after years. This is almost certainly the smallest contributor to revenue for an individual municipality, meaning that:

- The likelihood of municipal investment in a platform offering *only* easier Oversize-Overlimit permitting is limited --- even if there are obvious cost savings.
- There is an opportunity for upper tier governments (counties) to provide a service to lower tier municipalities by handling all Oversize-Overlimit permitting for its own road system as well as for lower tier municipalities' roads. In some parts of the province, that might provide sufficient critical mass to make introduction of the platform worthwhile.
- Municipal interest might be heightened by availability of a platform that supported multiple types of municipal permitting processes, particularly if these processes could be accessed through a single portal. In addition to expanding the opportunity for cost savings across a single municipality, a common portal would help municipal departments that are already trying to contain the growth of specialized platforms for each aspect of their business.

**Savings are more likely staff time than cash savings:** As the financial analysis below demonstrates, municipal savings from deployment of a 'standalone' Oversize-Overlimit platform are more likely to come in the form of staff time savings than in cash savings. The exception to this general rule is damage to infrastructure.

To estimate savings, four 'what if' scenarios were tested. What if...

- Simplification of Oversize/Overlimit documentation reduced associated staff costs by 10 per cent.
- Staffing processing time for Oversize/Overlimit permits was reduced by 40 per cent
- Management oversight of Oversize/Overlimit was reduced by 40 per cent (this would include time dedicated to oversight on the 'day of' a shipment.
- Damage to infrastructure in an average year was reduced by 25 per cent.

The accumulated results of these improvements ---- not all of which are strictly cash --- is shown on the last line and is expected to have a cash equivalent value of roughly \$1,250 a year in the first year of full utilization. These scenarios have not been fully validated by municipalities but should be before they are carried forward into use of these savings in business model projections. Nonetheless ***staff time savings are significant and reduced infrastructure damage alone would justify an annual investment in a platform license.***

Municipal Cost-Benefit Analysis (Single Municipality)						Estimate (can be changed)	Derived value based on embedded formula
Based on an individual municipality	2021	2022	2023	2024	2025	Five Year Total	
<b>Permit Revenue</b>							
Annual Permits	50	51	53	54	55		263
Single Trip Permits	50	51	53	54	55		263
[Other Permits- Type 1]	10	10	11	11	11		53
[Other Permits- Type 2]	0	0	0	0	0		0
[Other Permits- Type 3]	0	0	0	0	0		0
<b>Total Permits - All Types</b>	<b>110</b>	<b>113</b>	<b>116</b>	<b>118</b>	<b>121</b>		<b>578</b>
Annual Permit Fee	\$ 200.00	\$ 200.00	\$ 200.00	\$ 200.00	\$ 200.00		\$ 200.00
Single Trip Permit Fee	\$ 50.00	\$ 50.00	\$ 50.00	\$ 50.00	\$ 50.00		\$ 50.00
[Other Permits- Type 1] Fee	\$ 35.00	\$ 35.00	\$ 35.00	\$ 35.00	\$ 35.00		\$ 35.00
[Other Permits- Type 2] Fee	\$ 25.00	\$ 25.00	\$ 25.00	\$ 25.00	\$ 25.00		\$ 25.00
[Other Permits- Type 3] Fee	\$ 25.00	\$ 25.00	\$ 25.00	\$ 25.00	\$ 25.00		\$ 25.00
Annual Permit Revenue	\$ 10,000.00	\$ 10,250.00	\$ 10,506.25	\$ 10,768.91	\$ 11,038.13		\$ 52,563.29
Single Trip Permit Revenue	\$ 2,500.00	\$ 2,562.50	\$ 2,626.56	\$ 2,692.23	\$ 2,759.53		\$ 13,140.82
[Other Permits- Type 1] Revenue	\$ 350.00	\$ 358.75	\$ 367.72	\$ 376.91	\$ 386.33		\$ 1,839.71
[Other Permits- Type 2] Revenue	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -
[Other Permits- Type 3] Revenue	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -
<b>Total Revenue - All Permit Types (HST excluded)</b>	<b>\$ 12,850.00</b>	<b>\$ 13,171.25</b>	<b>\$ 13,500.53</b>	<b>\$ 13,838.04</b>	<b>\$ 14,184.00</b>		<b>\$ 67,543.82</b>
HST on Permit Revenues (@ 13%)	\$ 1,670.50	\$ 1,712.26	\$ 1,755.07	\$ 1,798.95	\$ 1,843.92		\$ 8,780.70
<b>Total Revenue - All Permit Types (HST included)</b>	<b>\$ 14,520.50</b>	<b>\$ 14,883.51</b>	<b>\$ 15,255.60</b>	<b>\$ 15,636.99</b>	<b>\$ 16,027.92</b>		<b>\$ 76,324.52</b>
<b>Permit Expenses without One Window Platform</b>							
Documentation preparation, uploading, updating	\$ 1,040.00	\$ 1,066.00	\$ 1,092.65	\$ 1,119.97	\$ 1,147.97		\$ 5,466.58
Processing individual permit applications	\$ 1,925.00	\$ 2,022.45	\$ 2,073.01	\$ 2,124.84	\$ 2,177.96		\$ 10,323.27
Management oversight of permitting processes	\$ 3,809.52	\$ 3,895.24	\$ 3,982.88	\$ 4,072.50	\$ 4,164.13		\$ 19,924.27
<b>Total Expenses - Staff</b>	<b>\$ 6,774.52</b>	<b>\$ 6,983.69</b>	<b>\$ 7,148.55</b>	<b>\$ 7,317.30</b>	<b>\$ 7,490.05</b>		<b>\$ 35,714.12</b>
Financial processing charges (@3% of gross fees)	\$ 385.50	\$ 446.51	\$ 457.67	\$ 469.11	\$ 480.84		\$ 2,239.62
Bad debt or unanticipated refunds (@2% of fees)	\$ 257.00	\$ 263.43	\$ 270.01	\$ 276.76	\$ 283.68		\$ 1,350.88
<b>Net Revenue (Expense) from Permitting Revenue</b>	<b>\$ 5,689.98</b>	<b>\$ 5,741.05</b>	<b>\$ 5,894.32</b>	<b>\$ 6,051.63</b>	<b>\$ 6,213.11</b>		<b>\$ 29,590.09</b>
Maintenance of Damaged Infrastructure	\$ 5,000.00	\$ 5,100.00	\$ 5,202.00	\$ 5,306.04	\$ 5,412.16		\$ 26,020.20
<b>What if...</b>							
Documentation was simplified by 10%	\$ 104.00	\$ 106.60	\$ 109.27	\$ 112.00	\$ 114.80		\$ 546.66
Staff processing time was reduced by 40%	\$ 770.00	\$ 808.98	\$ 829.21	\$ 849.94	\$ 871.18		\$ 4,129.31
Management oversight was reduced by 40%	\$ 1,523.81	\$ 1,558.10	\$ 1,593.15	\$ 1,629.00	\$ 1,665.65		\$ 7,969.71
Damage to infrastructure reduced by 25%	\$ 1,250.00	\$ 1,275.00	\$ 1,300.50	\$ 1,326.51	\$ 1,353.04		\$ 6,505.05
<b>Total Changes to Circumstances</b>	<b>\$ 3,647.81</b>	<b>\$ 3,748.68</b>	<b>\$ 3,832.12</b>	<b>\$ 3,917.44</b>	<b>\$ 4,004.67</b>		<b>\$ 19,150.72</b>



#### 4. Assessing Freight Carrier Cost Savings Potential

For an online permitting platform to be financially sustainable over the medium and longer term, it must confer benefits on freight carriers. Just as the beta version of the platform confers specific types of benefits on municipalities, so too are there equal if not greater benefits for carriers:

- **Cost avoidance (primarily staff time)** devoted to route planning, documentation preparation and provision to municipalities --- and often multiple municipalities --- for the same trip, completing and submitting permit applications, monitoring approvals by various municipalities, calculating and making payments for specific types of shipments (primarily single trip permits), being able to download terms and conditions associated with each approved permit as well as the certificate for the specific trip involved. This type of cost saving could result in staff being able to spend less time on logistics planning and more time on other value-add tasks for carriers' customers (ex. ability to provide relevant documentation, ease of quote preparation and invoicing).
- **Enhanced compliance with municipal bylaws and policies** including use of designated truck routes, avoiding truck prohibited routes, reducing tickets for shipments that did not have valid permit along with associated fine payment processing and receipting, avoiding shipments moving through an area with construction or a conflicting use. Addressing these issues requires staff time and sometimes transactional costs and inflicts damage to carrier-municipality relationships.
- **Infrastructure Damage Mitigation that** avoiding routes with known hazards (ex. low/narrow bridges and/or overhead wires, insufficient turn radii) so that neither the municipality or the carrier experience repair costs, shipment delays, traffic backups around incident sites, and repair costs.

As is shown in the analysis found in the following spreadsheet screenshot, an individual carrier is likely paying, on average, more than \$30,000 a year in Oversize Overlimit permitting fees in Eastern Ontario plus another \$13,000 a year in associated administrative costs --- a significant share of which might be avoided with an online platform.

**Savings are more likely staff time than cash savings:** As the financial analysis below demonstrates, carrier savings from deployment of a 'standalone' Oversize-Overlimit platform are more likely to come in the form of staff time savings than in cash savings. As with municipalities, the exception to this general rule is damage to infrastructure.



To estimate savings, four 'what if' scenarios were tested. What if...

- Simplification of Oversize/Overlimit documentation reduced associated staff costs by 20 per cent.
- Staffing processing time for Oversize/Overlimit permits was reduced by 30 per cent
- Management oversight of Oversize/Overlimit was reduced by 30 per cent (this would include time dedicated to oversight on the 'day of' a shipment.
- Damage to infrastructure in an average year was reduced by 25 per cent.

***Total annual savings are estimated to be roughly \$4,800 a year in the first year of operation. Rising to \$5,400 in year five. Roughly 20 per cent of these savings (\$1,250) would come in reduced costs due to damage to infrastructure or the carrier's vehicles. (Note that this an average amount per year not a 'single incident' amount.)***

These scenarios have not been fully validated by freight carriers but should be before they are carried forward into use of these savings in business model projections. Nonetheless ***staff time savings are significant and reduced infrastructure damage alone would justify an annual investment in a platform license.***

<b>Freight Carrier Cost Benefit</b>						
	2022	2023	2024	2025	2026	Five Year Total
<b>Permit Volumes (For A Single Carrier)</b>						
Annual Shipments Requiring Permit	120	123	126	129	132	631
Single Trip Permits	120	123	126	129	132	631
[Other Permits- Type 1]	10	10	11	11	11	53
[Other Permits- Type 2]	0	0	0	0	0	0
[Other Permits- Type 3]	0	0	0	0	0	0
<b>Total Permits - All Types</b>	<b>250</b>	<b>256</b>	<b>263</b>	<b>269</b>	<b>276</b>	<b>1,314</b>
Annual Permit Fee	\$ 200.00	\$ 200.00	\$ 200.00	\$ 200.00	\$ 200.00	\$ 200.00
Single Trip Permit Fee	\$ 50.00	\$ 50.00	\$ 50.00	\$ 50.00	\$ 50.00	\$ 50.00
[Other Permits- Type 1] Fee	\$ 35.00	\$ 35.00	\$ 35.00	\$ 35.00	\$ 35.00	\$ 35.00
[Other Permits- Type 2] Fee	\$ 25.00	\$ 25.00	\$ 25.00	\$ 25.00	\$ 25.00	\$ 25.00
[Other Permits- Type 3] Fee	\$ 25.00	\$ 25.00	\$ 25.00	\$ 25.00	\$ 25.00	\$ 25.00
Annual Permit Cost	\$ 24,000.00	\$ 24,600.00	\$ 25,215.00	\$ 25,845.38	\$ 26,491.51	\$ 126,151.88
Single Trip Permit Cost	\$ 6,000.00	\$ 6,150.00	\$ 6,303.75	\$ 6,461.34	\$ 6,622.88	\$ 31,537.97
[Other Permits- Type 1] Cost	\$ 350.00	\$ 358.75	\$ 367.72	\$ 376.91	\$ 386.33	\$ 1,839.71
[Other Permits- Type 2] Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
[Other Permits- Type 3] Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Cost - All Permit Types (HST excluded)</b>	<b>\$ 30,350.00</b>	<b>\$ 31,108.75</b>	<b>\$ 31,886.47</b>	<b>\$ 32,683.63</b>	<b>\$ 33,500.72</b>	<b>\$ 159,529.57</b>
HST on Permit Revenues (@ 13%)	\$ 3,945.50	\$ 4,044.14	\$ 4,145.24	\$ 4,248.87	\$ 4,355.09	\$ 20,738.84
<b>Total Cost - All Permit Types (HST included)</b>	<b>\$ 34,295.50</b>	<b>\$ 35,152.89</b>	<b>\$ 36,031.71</b>	<b>\$ 36,932.50</b>	<b>\$ 37,855.81</b>	<b>\$ 180,268.41</b>
<b>Additional Permit Expenses without One Window Platform</b>						
Route development, permit form completion	\$ 5,000.00	\$ 5,125.00	\$ 5,253.13	\$ 5,384.45	\$ 5,519.06	\$ 26,281.64
Route negotiation, liaison with driver/clients	\$ 5,000.00	\$ 5,253.13	\$ 5,384.45	\$ 5,519.06	\$ 5,657.04	\$ 26,813.68
Management oversight of permitting processes	\$ 3,809.52	\$ 3,895.24	\$ 3,982.88	\$ 4,072.50	\$ 4,164.13	\$ 19,924.27
<b>Total Expenses - Staff</b>	<b>\$ 13,809.52</b>	<b>\$ 14,273.36</b>	<b>\$ 14,620.46</b>	<b>\$ 14,976.01</b>	<b>\$ 15,340.23</b>	<b>\$ 73,019.59</b>
Financial processing charges (@3% of gross fees)	\$ 910.50	\$ 1,054.59	\$ 1,080.95	\$ 1,107.98	\$ 1,135.67	\$ 5,289.69
Bad debt or unanticipated refunds (@2% of fees)	\$ 607.00	\$ 622.18	\$ 637.73	\$ 653.67	\$ 670.01	\$ 3,190.59
<b>Net Revenue (Expense) from Permitting Revenue</b>	<b>\$ 15,629.98</b>	<b>\$ 15,780.80</b>	<b>\$ 16,185.06</b>	<b>\$ 16,599.64</b>	<b>\$ 17,024.81</b>	<b>\$ 81,220.29</b>
Payments for Damaged Infrastructure	\$ 5,000.00	\$ 5,100.00	\$ 5,202.00	\$ 5,306.04	\$ 5,412.16	\$ 26,020.20
<b>What if...</b>						
Documentation was simplified by 20%	\$ 1,000.00	\$ 1,025.00	\$ 1,050.63	\$ 1,076.89	\$ 1,103.81	\$ 5,256.33
Staff processing time was reduced by 30%	\$ 1,500.00	\$ 1,575.94	\$ 1,615.34	\$ 1,655.72	\$ 1,697.11	\$ 8,044.11
Management oversight was reduced by 30%	\$ 1,142.86	\$ 1,168.57	\$ 1,194.86	\$ 1,221.75	\$ 1,249.24	\$ 5,977.28
Damage to infrastructure reduced by 25%	\$ 1,250.00	\$ 1,275.00	\$ 1,300.50	\$ 1,326.51	\$ 1,353.04	\$ 6,505.05
<b>Total Changes to Circumstances</b>	<b>\$ 4,892.86</b>	<b>\$ 5,044.51</b>	<b>\$ 5,161.33</b>	<b>\$ 5,280.87</b>	<b>\$ 5,403.20</b>	<b>\$ 25,782.76</b>

## 10. Possible Operating Models

There are multiple potential options for how an online One Window Permitting platform might operate:

- **Licensing:** A public or private organization with a transportation-focused mandate could negotiate a long-term contractual relationship or license with the platform developer (assuming the current owner wished to enter into such a licensing arrangement) In this event, the contractor would be responsible for marketing and sales, promotion, sub-licensing by subscription or one-off permits, financial management related to all transactions, strategy, relationship development with other potential partners. The role of the developer would be to maintain the platform and presumably maintain a watchful eye on the need for future technology upgrades or improvements.
- **Acquisition:** A public or private organization might negotiate an acquisition of the platform (assuming the current owner wished to sell). In this case, the purchaser would take responsibility for all the matters listed above under licensing plus system platform maintenance as well as long-term R&D. The platform developer would have no further involvement in service provision or maintenance unless this was negotiated as part of the sale.
- **Joint Venture:** A public or private organization might create a joint venture firm --- or a new not-for-profit entity --- with the platform developer to commercialize, operate and maintain the platform. The intellectual property associated with the platform as well as human and financial resources from multiple partners would presumably be transferred into the new firm/NFP. The new organization would move the platform into full commercial operation with responsibility for all of the preceding matters. The market relationship would be one of a private firm with its clients (municipalities, freight carriers and other users). Any and all revenues and expenses --- along with distribution of any profits, and assignment of liabilities would be the responsibility of the joint venture organization.

- **Private Venture:** The developer/owner of the platform could move the platform into full commercial operation with responsibility for all of the preceding matters. The market relationship would be one of a private firm with its clients (municipalities, freight carriers and other users). Any and all revenues and expenses would be borne by the private venture.

**Note that no public investment has been made in the actual development of the online platform to date. Any of the options noted on the preceding page would have to be negotiated with the platform developer. This firm has not indicated a preference or an exclusion for any of the options described.**

## 11. Designing a Governance Model for One Window Permitting

Short-term commercialization success as well as long-term financial sustainability suggest multiple governance models. As key stakeholders evaluate which --- if any --- might be the best, the following principles should be kept in mind:

**Principle 1:** The expectation that both municipalities and freight carriers be represented either directly (with Board representation for example) or indirectly (ex officio representation on a Board or with significant representation on an advisory body to the Board).

**Principle 2:** Recognition that the service provider (Transnomis Solutions Inc.) retains ownership/holds the intellectual property associated with the online permitting platform including any related intellectual property held by the firm that is integrated into the platform at the time of commercialization or developed subsequently to that time.

**Principle 3:** The understanding that because the platform's users will be dispersed across the province of Ontario, there is merit in ensuring that an organization with at least a province-wide mandate is chosen to provide governance oversight for the platform's deployment in Ontario.

**Principle 4:** Recognition that freight carriers and the service provider will rely on public infrastructure and related digital data to conduct business, and municipalities are the owners of significant shares of the infrastructure and data, the governance body must provide oversight for financial transactions through the platform separately from the financial interests of any individual private sector firm. The ideal situation would therefore be a not-for-profit organization in a transportation-related sector that would commit to the other Principles noted here.

**Principle 5:** The understanding that current, accurate information about public infrastructure (ex. ownership of roads and bridges, policy regimes and bylaws) is vital to the functioning of both an online permitting system and increasingly prevalent mobility navigation systems. As a result, the governance model should include a forum through which all stakeholders can share information and exchange data for mutual benefit.

**Through this project, several organizations were identified that might be good candidates for service in provision of governance oversight. Negotiations should be undertaken to understand the level of interest these organizations might have in governance service.**

## 12. Scenarios Tested for Financial Sustainability of the Platform Itself

**Oversize-Overlimit:** The first business use case selected for consideration in this analysis was Oversize Overlimit loads --- freight shipments that are known in advance will exceed either the dimensions (height, width, length) or exceed the weight of a load that may be legally moved along a highway/road route. Some shipments may exceed both conditions (size, weight).

Typically, these shipments require careful transportation management including route planning and scheduling, escort vehicles and personnel, and lane/road closures to accommodate loading/unloading and/or positioning at the destination. These conditions pose additional safety, vehicle configuration, travel time and other costs for both a municipality and the freight carrier. If inappropriately handled, the shipments may cause damage to physical infrastructure, the vehicle(s) involved and/or the load itself.

Some but not all municipalities recover costs through specific permits, and of course, freight carriers must build these costs into their pricing to customers. Any mechanisms by which the costs could be mitigated for both parties (municipalities and freight carriers) will enable shipments to move through/in and out of a region more efficiently and safely. Suppliers who are moving goods and end customers who are receiving them also benefit, both financially and potentially in better on-time performance by carriers.

As development work unfolded in Eastern Ontario, based on work by Transnomis Solutions Inc. and six pilot municipalities, it became clear that three factors were key to understanding prospects for long-term financial sustainability:

- a) the volume of permitting activity for each municipality and/or carrier
- b) the total number of municipalities and/or carriers that might use the platform, and
- c) the prospects for either cost savings or cost avoidance for either (or both) parties.

***A financial modelling tool was built based on parameters that would allow us to test the sensitivity of the platform's ability to generate benefits to municipalities and carriers, as well as the prospects for financial sustainability. These parameters have been subjected to some validation with municipalities but must be validated with freight carriers before financial sustainability can be confirmed. To that end, the financial modelling tool is assumptions-based and can be used to test any number of different scenarios including but not limited to permit volumes by type and associated fees, subscription versus single trip permit types, different numbers of participating municipalities and carriers over time (five years), different pricing scenarios and so on.***

***Appendices to this report contain screenshots of the tool so assumptions are easily visible and fruitful discussions can be held with stakeholders to validate assumptions and allow key stakeholders to do “what if” testing with immediate availability of bottom-line results. Readers must understand that none of the key stakeholders (municipalities, freight carriers or platform developer) have signed off on the assumptions that were used to populate this initial analysis.***

It also became clear that while oversize-overlimit permitting might confer cost-savings for an individual municipality, the overall volume of permitting activity across the region was insufficient to support the ongoing operation of a digital platform. This conclusion focused on the initial scenario (first business use case) has generated interest in several other scenarios:

- Making the One Window Permitting Platform for Oversize-Overlimit loads available to municipalities across the entire province.
- Adding value to the One Window Platform for Oversize-Limit loads by integrating direct/online route planning capability and reporting near-term factors that would influence these routes (ex. construction, designated truck routes, conflicting events etc.)
- Expanding the scope of online permitting options available through a One Window Permitting Platform beyond Oversize-Overlimit loads.

### 13. What Does the Proposed Initial Version of the Online Platform Look Like?

The screenshot displays the 'One-Window Permit' website interface. The top navigation bar is blue with the 'One-Window Permit' logo on the left, a home icon and 'About' link in the center, and 'Log in' and 'New User' links on the right. The main content area is titled 'Permit Types' and lists four categories of permits, each with a description and an 'Apply' button. The first category, 'Oversize Load - Annual/Project', includes a link to the 'Highway Traffic Act'. The second, 'Oversize Load - Route Restricted Project Permit', and the third, 'Oversize Load - Seasonal Restriction Exception', each have a single 'Apply' button. The fourth, 'Oversize Load - Single Trip', includes a link to the 'Highway Traffic Act'. The footer contains copyright information for 2021, mentioning 'One-Window' and 'Transnomis Solutions Inc.', and stating that the 'Municipal511 Permit' is powered by 'Transnomis'.

One-Window Permit [Home](#) [About](#) [Log in](#) [New User](#)

## Permit Types

**Oversize Load - Annual/Project**  
This annual/project permit is required for commercial vehicles to carry loads larger or heavier than the maximum limits established in the Highway Traffic Act (HTA) during a calendar year or defined project period.

[Apply](#) [Highway Traffic Act](#)

**Oversize Load - Route Restricted Project Permit**  
This permit is required for commercial vehicles to carry a load larger or heavier than the posted load restrictions of a route through a defined project period.

[Apply](#)

**Oversize Load - Seasonal Restriction Exception**  
This permit is required for commercial vehicles to carry loads heavier than the posted load restriction limits during seasonal load restrictions.

[Apply](#)

**Oversize Load - Single Trip**  
This permit is required for commercial vehicles to carry a load larger or heavier than the maximum limits established in the Highway Traffic Act.

[Apply](#) [Highway Traffic Act](#)

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Figure 1 - The initial permitting platform offers significant digital efficiency opportunities for both carriers and municipalities, including online applications and processing, preservation of distinct terms and conditions at the municipal level, requests for exemptions, the ability to check the status of cross-boundary applications (multiple municipal approval requirements, printing/downloading of certificates) as well as other time and money-saving features. Note the built-in link to the Highway Traffic Act for easy reference. This platform also incorporates a link to the MTO Oversize-Overlimit permit application process for those shipments travelling over both municipal and provincial roads.



## 2. One Window Permitting

Route planning integrated into permit application, approvals



Figure 2 - Route planning is now possible within the One Window Platform through direct integration of Municipal511 information. This information is visible to both municipalities and carriers thereby allowing the two parties to negotiate any challenges that might arise for a particular shipment at a particular time or using a particular route. Drag and drop features of route planning will dramatically reduce the 'back and forth' of route planning associated with any particular shipment.

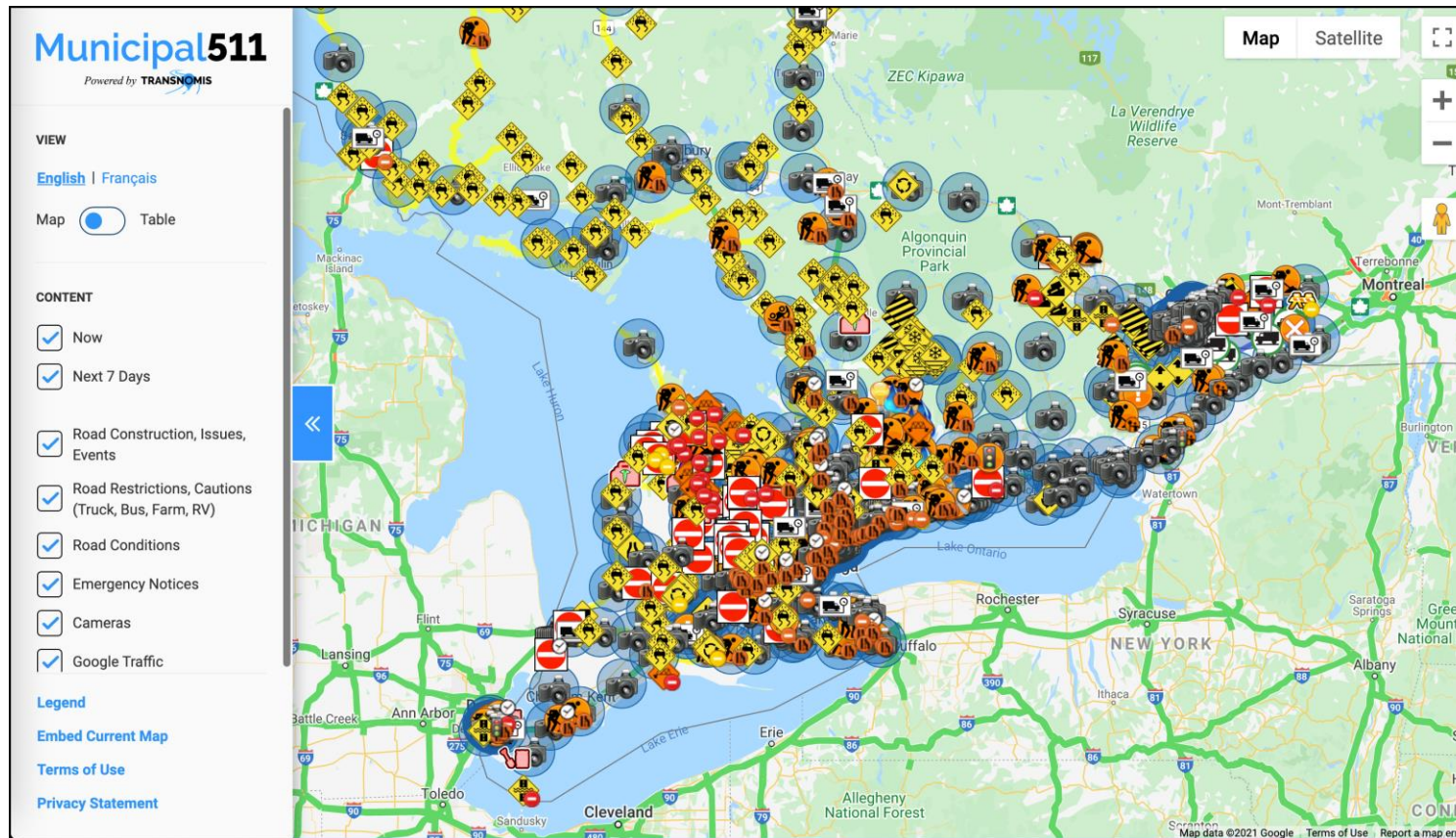


Figure 3 - Recent upgrades to Municipal511 provide better access to essential data for freight carriers and other travellers. Note the ability to toggle on or off a wide range of information vital to efficient, safe movement of goods. Navigation companies can also access this information, providing in-transit guidance to freight carriers as well as to municipalities that are monitoring the execution of a specific Oversize-Overlimit permit.

## 14. Initial Observations from Financial Modelling

Financial modelling carried out for this project covered two business models with a basic/low end estimate of revenues, expenses and profit/loss, and a progressive/high end estimate of revenues, expenses and profit/loss. These models are summarized in the matrix below:

<b>Oversize-Overlimit Platform Only</b> (Standalone – Eastern Ontario Only) Basic/Low End of Estimate Range	<b>Oversize-Overlimit Platform Only</b> (Standalone- Eastern Ontario Only) Progressive/High End of Estimate Range
<b>Oversize-Overlimit Platform Only</b> (Standalone – Province-wide) Basic/Low End of Estimate Range	<b>Oversize-Overlimit Platform Only</b> (Standalone-Province-wide) Progressive/High End of Estimate Range

While the following pages contain screenshots of the financial modelling for each of the four business models, the overall observations and conclusions are as follows:

- It is highly unlikely that the first option (Low end of estimate range for Oversize Overlimit platform for Eastern Ontario alone) would ever even break even let alone recover early year losses of nearly a half million dollars.
- The high end of the estimate range for the same business model (high end of estimate range for Oversize Overlimit platform for Eastern Ontario alone) is somewhat better but would still incur losses of more than \$200,000 in the first two years and would require a significantly higher rate of customer acquisition in years 3 to 5 in order to recoup early losses.
- The basic/low end estimate for the second option (Oversize Overlimit platform for province-wide deployment) would not break even at any point in the first five years, leading to losses in the range of \$750,000. This assessment is based on an assumption of stronger --- but relatively ineffective --- marketing programs and associated higher costs.
- The high end of the estimate range for the same business model (high end of estimate range for Oversize Overlimit platform for province-wide deployment) could reach breakeven in the second year of operation, and recover first year losses mid-way through the third year. This assessment is based on an assumption of stronger --- and much more effective --- marketing programs despite associated higher costs.

**Subject to validation with stakeholders that can validate assumptions leading to a refined analysis, a business model that goes beyond Eastern Ontario and incorporates value-added services and/or multiple types of permitting is strongly recommended. Examples of other models are set out in a following section of this report.**

Business Model Projections	Business Model Name: A. Oversize Overlimit Only - Standalone EO					
	2022	2023	2024	2025	2026	Five-Year Total
<b>Revenue - Basic/Low End of Estimate Range</b>						
Total Subscription Revenue (HST included)	\$ 7,515	\$ 15,405	\$ 32,173	\$ 64,130	\$ 99,535	\$ 218,758
Total One-Time Fee & Transaction Revenue - HST Incl.	\$ 1,667	\$ 4,325	\$ 13,289	\$ 40,361	\$ 91,863	\$ 151,505
Total Membership Revenue from Municipalities	\$ 9,040	\$ 14,362	\$ 20,325	\$ 26,304	\$ 31,942	\$ 101,974
Sponsorship Revenue	\$ 7,200	\$ 7,560	\$ 7,938	\$ 8,335	\$ 8,752	\$ 39,785
Advertising Revenue	\$ 4,800	\$ 5,040	\$ 5,292	\$ 5,557	\$ 5,834	\$ 26,523
[Other Revenue]						\$ -
[Other Revenue]						\$ -
<b>Total Revenue</b>	\$ 30,222	\$ 46,692	\$ 79,017	\$ 144,687	\$ 237,926	\$ 538,544
<b>Expenses</b>						
Advertising and Marketing	\$ 20,000	\$ 20,600	\$ 21,218	\$ 21,855	\$ 22,510	\$ 106,183
Audit, Legal and Accounting	\$ 15,000	\$ 15,450	\$ 15,914	\$ 16,391	\$ 16,883	\$ 79,637
Data Acquisition Costs	\$ 25,000	\$ 25,750	\$ 26,523	\$ 27,318	\$ 28,138	\$ 132,728
Depreciation on any fixed assets	\$ 4,000	\$ 4,120	\$ 4,244	\$ 4,371	\$ 4,502	\$ 21,237
Financial Transaction Costs	This financial information is redacted to avoid appearing to commit future partners to specific numbers. Furthermore, these data are being validated in discussions with potential partners and may well change.					
Governance Costs						
Insurance (E&O/Commercial Liability)						
Platform Maintenance - Labour						
Platform Maintenance - Servers, Software						
Subscription Processing						
[Other Expenses]						\$ -
[Other Expenses]						\$ -
[Other Expenses]						\$ -
<b>Total Expenses</b>	\$ 194,392	\$ 200,682	\$ 207,615	\$ 215,711	\$ 224,805	\$ 1,043,205
<b>Profit/Loss for the Year</b>	<b>-\$ 164,170</b>	<b>-\$ 153,990</b>	<b>-\$ 128,598</b>	<b>-\$ 71,024</b>	\$ 13,121	<b>-\$ 504,661</b>
Cost Escalation Factor (YOY) %		3.00	3.00	3.00	3.00	
Transaction costs as percentage of revenue (%)	2.95	2.95	2.95	2.95	2.95	



Business Model Projections	Business Model Name: <b>A. Oversize Overlimit Only - Standalone EO</b>					
	2022	2023	2024	2025	2026	Five-Year Total
<b>Revenue - Progressive/High End of Estimate Range</b>						
Total Subscription Revenue (HST included)	\$ 17,131	\$ 35,118	\$ 105,139	\$ 212,614	\$ 277,651	\$ 647,653
Total One-Time Fee & Transaction Revenue - HST Incl.	\$ 2,501	\$ 8,806	\$ 17,407	\$ 53,815	\$ 122,484	\$ 205,013
Total Membership Revenue from Municipalities	\$ 33,900	\$ 53,859	\$ 78,890	\$ 110,962	\$ 152,646	\$ 430,257
Sponsorship Revenue (+50% higher than basic)	\$ 10,800	\$ 11,340	\$ 11,907	\$ 12,502	\$ 13,127	\$ 59,677
Advertising Revenue (+50% higher than basic)	\$ 7,200	\$ 7,560	\$ 7,938	\$ 8,335	\$ 8,752	\$ 39,785
[Other Revenue]						\$ -
[Other Revenue]						\$ -
<b>Total Revenue</b>	<b>\$ 71,531.75</b>	<b>\$ 116,683.12</b>	<b>\$ 221,280.91</b>	<b>\$ 398,228.12</b>	<b>\$ 574,659.84</b>	<b>\$ 1,382,383.74</b>
<b>Expenses</b>						
Advertising and Marketing	\$ 20,000	\$ 20,600	\$ 21,218	\$ 21,855	\$ 22,510	\$ 106,183
Audit, Legal and Accounting	\$ 15,000	\$ 15,450	\$ 15,914	\$ 16,391	\$ 16,883	\$ 79,637
Data Acquisition Costs	\$ 25,000	\$ 25,750	\$ 26,523	\$ 27,318	\$ 28,138	\$ 132,728
Depreciation on any fixed assets	\$ 4,000	\$ 4,120	\$ 4,244	\$ 4,371	\$ 4,502	\$ 21,237
Financial Transaction Costs	This financial information is redacted to avoid appearing to commit future partners to specific numbers. Furthermore, these data are being validated in discussions with potential partners and may well change.					
Governance Costs						
Insurance (E&O/Commercial Liability)						
Platform Maintenance - Labour						
Platform Maintenance - Servers, Software						
Subscription Processing						
[Other Expenses]						\$ -
[Other Expenses]						\$ -
[Other Expenses]						\$ -
<b>Total Expenses</b>	<b>\$ 195,610</b>	<b>\$ 202,747</b>	<b>\$ 211,812</b>	<b>\$ 223,190</b>	<b>\$ 234,738</b>	<b>\$ 1,068,098</b>
<b>Profit/Loss for the Year</b>	<b>-\$ 124,078</b>	<b>-\$ 86,064</b>	<b>\$ 9,469</b>	<b>\$ 175,038</b>	<b>\$ 339,921</b>	<b>\$ 314,286</b>
Cost Escalation Factor (YOY) %		3.00	3.00	3.00	3.00	
Transaction costs as percentage of revenue (%)	2.95	2.95	2.95	2.95	2.95	

Business Model Projections	Business Model Name: <b>E. Oversize Overlimit Only - Standalone Ontario-wide</b>					
	2022	2023	2024	2025	2026	Five-Year Total
<b>Revenue - Basic/Low End of Estimate Range</b>						
Total Subscription Revenue (HST included)	\$ 17,289	\$ 26,582	\$ 51,347	\$ 91,571	\$ 136,892	\$ 647,653
Total One-Time Fee & Transaction Revenue - HST Incl.	\$ 1,667	\$ 4,325	\$ 13,289	\$ 40,361	\$ 91,863	\$ 151,505
Total Membership Revenue from Municipalities	\$ 40,680	\$ 91,270	\$ 135,686	\$ 143,225	\$ 134,234	\$ 545,095
Sponsorship Revenue	\$ 14,400	\$ 15,120	\$ 15,876	\$ 16,670	\$ 17,503	\$ 79,569
Advertising Revenue	\$ 9,600	\$ 10,080	\$ 10,584	\$ 11,113	\$ 11,669	\$ 53,046
[Other Revenue]						\$ -
[Other Revenue]						\$ -
<b>Total Revenue</b>	<b>\$ 83,636</b>	<b>\$ 147,377</b>	<b>\$ 226,781</b>	<b>\$ 302,939</b>	<b>\$ 392,161</b>	<b>\$ 1,476,868</b>
<b>Expenses</b>						\$ -
Advertising and Marketing	\$ 50,000	\$ 51,500	\$ 53,045	\$ 54,636	\$ 56,275	\$ 265,457
Audit, Legal and Accounting	\$ 25,000	\$ 25,750	\$ 26,523	\$ 27,318	\$ 28,138	\$ 132,728
Data Acquisition Costs	\$ 75,000	\$ 77,250	\$ 79,568	\$ 81,955	\$ 84,413	\$ 398,185
Depreciation on any fixed assets	\$ 8,000	\$ 8,240	\$ 8,487	\$ 8,742	\$ 9,004	\$ 42,473
Financial Transaction Costs	This financial information is redacted to avoid appearing to commit future partners to specific numbers. Furthermore, these data are being validated in discussions with potential partners and may well change.					
Governance Costs						
Insurance (E&O/Commercial Liability)						
Platform Maintenance - Labour						
Platform Maintenance - Servers, Software						
Subscription Processing						
[Other Expenses]						\$ -
[Other Expenses]						\$ -
[Other Expenses]						\$ -
<b>Total Expenses</b>	<b>\$ 421,967</b>	<b>\$ 436,433</b>	<b>\$ 451,738</b>	<b>\$ 467,336</b>	<b>\$ 483,720</b>	<b>\$ 2,261,193</b>
<b>Profit/Loss for the Year</b>	<b>-\$ 338,331</b>	<b>-\$ 289,055</b>	<b>-\$ 224,956</b>	<b>-\$ 164,396</b>	<b>-\$ 91,558</b>	<b>-\$ 784,324</b>
Cost Escalation Factor (YOY) %		3.00	3.00	3.00	3.00	
Transaction costs as percentage of revenue (%)	2.95	2.95	2.95	2.95	2.95	

Business Model Projections	Business Model Name: <b>E. Oversize Overlimit Only - Standalone Ontario-wide</b>					
	2022	2023	2024	2025	2026	Five-Year Total
<b>Revenue - Progressive/High End of Estimate Range</b>						
Total Subscription Revenue (HST included)	\$ 61,924	\$ 97,061	\$ 196,601	\$ 378,695	\$ 582,244	\$ 1,316,525
Total One-Time Fee & Transaction Revenue - HST Incl.	\$ 15,117	\$ 32,051	\$ 98,498	\$ 300,373	\$ 686,635	\$ 1,132,674
Total Membership Revenue from Municipalities	\$ 189,840	\$ 326,627	\$ 492,216	\$ 702,606	\$ 974,540	\$ 2,685,828
Sponsorship Revenue (+50% higher than basic)	\$ 21,600	\$ 22,680	\$ 23,814	\$ 25,005	\$ 26,255	\$ 119,354
Advertising Revenue (+50% higher than basic)	\$ 14,400	\$ 15,120	\$ 15,876	\$ 16,670	\$ 17,503	\$ 79,569
[Other Revenue]						\$ -
[Other Revenue]						\$ -
<b>Total Revenue</b>	<b>\$ 302,881</b>	<b>\$ 493,539</b>	<b>\$ 827,006</b>	<b>\$ 1,423,348</b>	<b>\$ 2,287,177</b>	<b>\$ 5,333,950</b>
<b>Expenses</b>						\$ -
Advertising and Marketing	\$ 50,000	\$ 51,500	\$ 53,045	\$ 54,636	\$ 56,275	\$ 265,457
Audit, Legal and Accounting	\$ 25,000	\$ 25,750	\$ 26,523	\$ 27,318	\$ 28,138	\$ 132,728
Data Acquisition Costs	\$ 75,000	\$ 77,250	\$ 79,568	\$ 81,955	\$ 84,413	\$ 398,185
Depreciation on any fixed assets	\$ 8,000	\$ 8,240	\$ 8,487	\$ 8,742	\$ 9,004	\$ 42,473
Financial Transaction Costs	This financial information is redacted to avoid appearing to commit future partners to specific numbers. Furthermore, these data are being validated in discussions with potential partners and may well change.					
Governance Costs						
Insurance (E&O/Commercial Liability)						
Platform Maintenance - Labour						
Platform Maintenance - Servers, Software						
Subscription Processing						
[Other Expenses]						\$ -
[Other Expenses]						\$ -
[Other Expenses]						\$ -
<b>Total Expenses</b>	<b>\$ 428,435</b>	<b>\$ 446,644</b>	<b>\$ 469,444</b>	<b>\$ 500,388</b>	<b>\$ 539,623</b>	<b>\$ 2,384,534</b>
<b>Profit/Loss for the Year</b>	<b>-\$ 125,554</b>	<b>\$ 46,894</b>	<b>\$ 357,561</b>	<b>\$ 922,961</b>	<b>\$ 1,747,554</b>	<b>\$ 2,949,416</b>
Cost Escalation Factor (YOY) %		3.00	3.00	3.00	3.00	
Transaction costs as percentage of revenue (%)	2.95	2.95	2.95	2.95	2.95	

## 15. Opportunities to Achieve/Enhance Financial Sustainability

The preceding analyses suggest that while there could well be savings for both municipalities and freight carriers, the total volume of Oversize-Overlimit permitting activity in Eastern Ontario is insufficient to support ongoing operations of the platform. This report therefore identifies at least six other strategies that could be considered to achieve financial sustainability without imposing extraordinary costs on either municipalities or freight carriers (Doing so would obviously reduce the inclination of either stakeholder to become or remain a platform user.) The chart below identifies alternative paths to sustainability and assesses each across five criteria (gross and net cost savings to municipalities, cost and net savings to freight carriers, and likelihood of financial sustainability in three to five years time. While beyond the scope of this project, the financial modelling tool should be used to explore and refine opportunities for financial sustainability.

Business Model Descriptions						
(These are possible rather than recommended models, and there may be other business model options currently unexplored.						
Business Model Name	Description	Gross Cost Savings to Individual Municipalities?	Gross Cost Savings to Individual Carriers?	Net Cost Savings to Individual Municipalities (After Membership Fee)	Net Cost Savings to Individual Carriers (After Subscription Fee)	Likelihood of Financial Sustainability of Platform in 3 to 5 Years
A. Oversize Overlimit Only - Standalone EO	Membership and Subscription-based online portal for multiple municipality trip permits (O/O only)	Probable	Probable	Probable	Probable	Unlikely
B. Oversize Overlimit Only - M511 Integrated EO	Membership and Subscription-based online portal for multiple municipality trip permits including route planning and in-transit notifications (O/O only)	Probable	Likely	Probable	Probable	Unlikely
C. Multiple Permits - Standalone EO	Membership and Subscription-based online portal for multiple municipality trip permits (O/O plus at least two other types of municipal permits with higher volumes than O/O)	Probable	Possible	Possible	Possible	Possible but would require further validation
D. Multiple Permits - M511 Integrated EO	Membership and Subscription-based online portal for multiple municipality trip permits and at least two other types of municipal permits with higher volumes than O/O; including route planning and in-transit notifications (O/O only)	Probable	Likely	Probable	Possible	Possible but would require further validation
E. Oversize Overlimit Only - Standalone Ontario-wide	Membership and Subscription-based online portal for multiple municipality trip permits (O/O only)	Probable	Probable but would require further validation	Probable	Probable	Possible but would require further validation
E. Oversize Overlimit Only - M511 Integrated Ontario-wide	Membership and Subscription-based online portal for multiple municipality trip permits including route planning and in-transit notifications (O/O only)	Probable	Probable but would require further validation	Probable	Likely	Possible but would require further validation
F. Multiple Permits - Standalone Ontario-wide	Membership and Subscription-based online portal for multiple municipality trip permits (O/O plus at least two other types of municipal permits with higher volumes than O/O)	Likely	Possible but would require further validation	Probable	Probable	Probable but would require further validation
F. Multiple Permits - M511 Integrated Ontario-wide	Membership and Subscription-based online portal for multiple municipality trip permits and at least two other types of municipal permits with higher volumes than O/O; including route planning and in-transit notifications (O/O only)	Likely	Possible but would require further validation	Likely	Likely	Probable but would require further validation



## 16. Recommendations and Next Steps

**Recommendation 1:** That the EOLC share the analysis contained in this report with major stakeholders (ex. municipalities in Eastern Ontario, Ontario Good Roads Association, Ontario Trucking Association, Transnomis Solutions Inc.) to validate the assumptions, projections and analyses contained herein. Further, that the EOLC assess the interest of said parties in an ongoing role with respect to governance oversight, marketing and promotional support, financial backstopping or direct financial contributions to advance start-up of a chosen model.

**Recommendation 2:** That the EOLC advise its major stakeholders in this initiative (as noted in Recommendation 1) that it is recommending exploration of scaling opportunities 1, 2 and 3 (see Section 8) and 2) that it is not recommending the Oversize Overlimit business model for Eastern Ontario alone due to lack of financial sustainability of that model. Further, that the EOLC engage major stakeholders in a group discussion of the strengths, weaknesses and financial implications of each of scaling opportunities 1, 2 and 3. To this end, the EOLC will offer the (private) use of the business/financial modelling tool developed in earlier stages of this project (see appendices for screenshots of components of the modelling tool).

**Recommendation 3:** That the EOLC work with the aforementioned stakeholders to refine and recommend the business model most likely to achieve the shared desirable outcomes of a) moving freight safely and efficiently across and beyond the region, b) net cost savings and/or efficiencies for municipalities, c) net cost savings and/or efficiencies for freight carriers, and d) strong prospects for financial sustainability for an online platform that would support the recommended business model.

**Recommendation 4:** That the EOLC work with the aforementioned partners --- and potentially others --- to execute foundational tasks that will set the stage for launching a fully-functional commercial (not beta or pilot) online platform. These tasks are delineated in an earlier section of this report (page 3).

**Recommendation 5:** That the EOLC's Integrated, Intelligent Transportation Systems Working Group continue its liaison with provincial and/or federal ministries and departments to identify and capitalize on opportunities to bring collaborative support to this initiative.

**Recommendation 6:** That the EOLC provide relationship brokering services to the aforementioned stakeholders to negotiate a Memorandum of Understanding that will implement a negotiated business model and launch a commercial version of the online platform. Note that any external costs (ex. for legal counsel or intellectual property protection guidance/expertise) will be borne by the parties to the Agreement rather than by the EOLC.

**Recommendation 7:** That the EOLC take no long-term business interest in the online platform but it will be credited by whichever organization(s) take it forward on a commercial basis, for leadership in moving the concept of a multi-municipality, multi-carrier permitting platform forward. Further that if the platform does become a fully commercial product, there be a demonstrable 'first year' benefit to municipalities that participated in the pilot (development) phase of the project.

**Recommendation 8:** That the EOLC negotiate with whichever organizations might advance the platform on a commercial basis, to permit the EOLC to provide summary information online (ex. through its website) that would describe the role it has played and given credit to any stakeholders involved in the developmental processes, including but not limited to the Ministry of Municipal Affairs and Housing.

## Appendices

## **17. Appendix A – Financial Analyses**

## A1. Overall Financial Projections – A. Oversize Overlimit Only – Standalone Eastern Ontario Only

Business Model Projections	Business Model Name: A. Oversize Overlimit Only - Standalone EO					
	2022	2023	2024	2025	2026	Five-Year Total
<b>Revenue - Basic/Low End of Estimate Range</b>						
Total Subscription Revenue (HST included)	\$ 7,515	\$ 15,405	\$ 32,173	\$ 64,130	\$ 99,535	\$ 218,758
Total One-Time Fee & Transaction Revenue - HST Incl.	\$ 1,667	\$ 4,325	\$ 13,289	\$ 40,361	\$ 91,863	\$ 151,505
Total Membership Revenue from Municipalities	\$ 9,040	\$ 14,362	\$ 20,325	\$ 26,304	\$ 31,942	\$ 101,974
Sponsorship Revenue	\$ 7,200	\$ 7,560	\$ 7,938	\$ 8,335	\$ 8,752	\$ 39,785
Advertising Revenue	\$ 4,800	\$ 5,040	\$ 5,292	\$ 5,557	\$ 5,834	\$ 26,523
[Other Revenue]						\$ -
[Other Revenue]						\$ -
<b>Total Revenue</b>	<b>\$ 30,222</b>	<b>\$ 46,692</b>	<b>\$ 79,017</b>	<b>\$ 144,687</b>	<b>\$ 237,926</b>	<b>\$ 538,544</b>
<b>Expenses</b>						
Advertising and Marketing	\$ 20,000	\$ 20,600	\$ 21,218	\$ 21,855	\$ 22,510	\$ 106,183
Audit, Legal and Accounting	\$ 15,000	\$ 15,450	\$ 15,914	\$ 16,391	\$ 16,883	\$ 79,637
Data Acquisition Costs	\$ 25,000	\$ 25,750	\$ 26,523	\$ 27,318	\$ 28,138	\$ 132,728
Depreciation on any fixed assets	\$ 4,000	\$ 4,120	\$ 4,244	\$ 4,371	\$ 4,502	\$ 21,237
Financial Transaction Costs	This financial information is redacted to avoid appearing to commit future partners to specific numbers. Furthermore, these data are being validated in discussions with potential partners and may well change.					
Governance Costs						
Insurance (E&O/Commercial Liability)						
Platform Maintenance - Labour						
Platform Maintenance - Servers, Software						
Subscription Processing						
[Other Expenses]						\$ -
[Other Expenses]						\$ -
[Other Expenses]						\$ -
<b>Total Expenses</b>	<b>\$ 194,392</b>	<b>\$ 200,682</b>	<b>\$ 207,615</b>	<b>\$ 215,711</b>	<b>\$ 224,805</b>	<b>\$ 1,043,205</b>
<b>Profit/Loss for the Year</b>	<b>-\$ 164,170</b>	<b>-\$ 153,990</b>	<b>-\$ 128,598</b>	<b>-\$ 71,024</b>	<b>\$ 13,121</b>	<b>-\$ 504,661</b>
Cost Escalation Factor (YOY) %		3.00	3.00	3.00	3.00	
Transaction costs as percentage of revenue (%)	2.95	2.95	2.95	2.95	2.95	

Business Model Projections	Business Model Name: A. Oversize Overlimit Only - Standalone EO					
	2022	2023	2024	2025	2026	Five-Year Total
<b>Revenue - Progressive/High End of Estimate Range</b>						
Total Subscription Revenue (HST included)	\$ 17,131	\$ 35,118	\$ 105,139	\$ 212,614	\$ 277,651	\$ 647,653
Total One-Time Fee & Transaction Revenue - HST Incl.	\$ 2,501	\$ 8,806	\$ 17,407	\$ 53,815	\$ 122,484	\$ 205,013
Total Membership Revenue from Municipalities	\$ 33,900	\$ 53,859	\$ 78,890	\$ 110,962	\$ 152,646	\$ 430,257
Sponsorship Revenue (+50% higher than basic)	\$ 10,800	\$ 11,340	\$ 11,907	\$ 12,502	\$ 13,127	\$ 59,677
Advertising Revenue (+50% higher than basic)	\$ 7,200	\$ 7,560	\$ 7,938	\$ 8,335	\$ 8,752	\$ 39,785
[Other Revenue]						\$ -
[Other Revenue]						\$ -
<b>Total Revenue</b>	<b>\$ 71,531.75</b>	<b>\$ 116,683.12</b>	<b>\$ 221,280.91</b>	<b>\$ 398,228.12</b>	<b>\$ 574,659.84</b>	<b>\$ 1,382,383.74</b>
<b>Expenses</b>						
Advertising and Marketing	\$ 20,000	\$ 20,600	\$ 21,218	\$ 21,855	\$ 22,510	\$ 106,183
Audit, Legal and Accounting	\$ 15,000	\$ 15,450	\$ 15,914	\$ 16,391	\$ 16,883	\$ 79,637
Data Acquisition Costs	\$ 25,000	\$ 25,750	\$ 26,523	\$ 27,318	\$ 28,138	\$ 132,728
Depreciation on any fixed assets	\$ 4,000	\$ 4,120	\$ 4,244	\$ 4,371	\$ 4,502	\$ 21,237
Financial Transaction Costs	\$ 2,110	\$ 3,442	\$ 6,528	\$ 11,748	\$ 16,952	\$ 40,780
Governance Costs						
Insurance (E&O/Commercial Liability)						
Platform Maintenance - Labour						
Platform Maintenance - Servers, Software						
Subscription Processing						
[Other Expenses]						
[Other Expenses]						\$ -
[Other Expenses]						\$ -
<b>Total Expenses</b>	<b>\$ 195,610</b>	<b>\$ 202,747</b>	<b>\$ 211,812</b>	<b>\$ 223,190</b>	<b>\$ 234,738</b>	<b>\$ 1,068,098</b>
<b>Profit/Loss for the Year</b>	<b>-\$ 124,078</b>	<b>-\$ 86,064</b>	<b>\$ 9,469</b>	<b>\$ 175,038</b>	<b>\$ 339,921</b>	<b>\$ 314,286</b>
Cost Escalation Factor (YOY) %		3.00	3.00	3.00	3.00	
Transaction costs as percentage of revenue (%)	2.95	2.95	2.95	2.95	2.95	

This financial information is redacted to avoid appearing to commit future partners to specific numbers. Furthermore, these data are being validated in discussions with potential partners and may well change.

## A2. Overall Financial Projections – E. Oversize Overlimit Only – Standalone Ontario-Wide

Business Model Projections	Business Model Name: E. Oversize Overlimit Only - Standalone Ontario-wide					
	2022	2023	2024	2025	2026	Five-Year Total
<b>Revenue - Basic/Low End of Estimate Range</b>						
Total Subscription Revenue (HST included)	\$ 17,289	\$ 26,582	\$ 51,347	\$ 91,571	\$ 136,892	\$ 647,653
Total One-Time Fee & Transaction Revenue - HST Incl.	\$ 1,667	\$ 4,325	\$ 13,289	\$ 40,361	\$ 91,863	\$ 151,505
Total Membership Revenue from Municipalities	\$ 40,680	\$ 91,270	\$ 135,686	\$ 143,225	\$ 134,234	\$ 545,095
Sponsorship Revenue	\$ 14,400	\$ 15,120	\$ 15,876	\$ 16,670	\$ 17,503	\$ 79,569
Advertising Revenue	\$ 9,600	\$ 10,080	\$ 10,584	\$ 11,113	\$ 11,669	\$ 53,046
[Other Revenue]						\$ -
[Other Revenue]						\$ -
<b>Total Revenue</b>	<b>\$ 83,636</b>	<b>\$ 147,377</b>	<b>\$ 226,781</b>	<b>\$ 302,939</b>	<b>\$ 392,161</b>	<b>\$ 1,476,868</b>
<b>Expenses</b>						\$ -
Advertising and Marketing	\$ 50,000	\$ 51,500	\$ 53,045	\$ 54,636	\$ 56,275	\$ 265,457
Audit, Legal and Accounting	\$ 25,000	\$ 25,750	\$ 26,523	\$ 27,318	\$ 28,138	\$ 132,728
Data Acquisition Costs	\$ 75,000	\$ 77,250	\$ 79,568	\$ 81,955	\$ 84,413	\$ 398,185
Depreciation on any fixed assets	\$ 8,000	\$ 8,240	\$ 8,487	\$ 8,742	\$ 9,004	\$ 42,473
Financial Transaction Costs	\$ 2,467	\$ 4,348	\$ 6,690	\$ 8,937	\$ 11,569	\$ 34,010
Governance Costs						
Insurance (E&O/Commercial Liability)						
Platform Maintenance - Labour						
Platform Maintenance - Servers, Software						
Subscription Processing						
[Other Expenses]						\$ -
[Other Expenses]						\$ -
[Other Expenses]						\$ -
<b>Total Expenses</b>	<b>\$ 421,967</b>	<b>\$ 436,433</b>	<b>\$ 451,738</b>	<b>\$ 467,336</b>	<b>\$ 483,720</b>	<b>\$ 2,261,193</b>
<b>Profit/Loss for the Year</b>	<b>-\$ 338,331</b>	<b>-\$ 289,055</b>	<b>-\$ 224,956</b>	<b>-\$ 164,396</b>	<b>-\$ 91,558</b>	<b>-\$ 784,324</b>
Cost Escalation Factor (YOY) %		3.00	3.00	3.00	3.00	
Transaction costs as percentage of revenue (%)	2.95	2.95	2.95	2.95	2.95	

This financial information is redacted to avoid appearing to commit future partners to specific numbers. Furthermore, these data are being validated in discussions with potential partners and may well change.

Business Model Projections	Business Model Name: <b>E. Oversize Overlimit Only - Standalone Ontario-wide</b>					
	2022	2023	2024	2025	2026	Five-Year Total
<b>Revenue - Progressive/High End of Estimate Range</b>						
Total Subscription Revenue (HST included)	\$ 61,924	\$ 97,061	\$ 196,601	\$ 378,695	\$ 582,244	\$ 1,316,525
Total One-Time Fee & Transaction Revenue - HST Incl.	\$ 15,117	\$ 32,051	\$ 98,498	\$ 300,373	\$ 686,635	\$ 1,132,674
Total Membership Revenue from Municipalities	\$ 189,840	\$ 326,627	\$ 492,216	\$ 702,606	\$ 974,540	\$ 2,685,828
Sponsorship Revenue (+50% higher than basic)	\$ 21,600	\$ 22,680	\$ 23,814	\$ 25,005	\$ 26,255	\$ 119,354
Advertising Revenue (+50% higher than basic)	\$ 14,400	\$ 15,120	\$ 15,876	\$ 16,670	\$ 17,503	\$ 79,569
[Other Revenue]						\$ -
[Other Revenue]						\$ -
<b>Total Revenue</b>	<b>\$ 302,881</b>	<b>\$ 493,539</b>	<b>\$ 827,006</b>	<b>\$ 1,423,348</b>	<b>\$ 2,287,177</b>	<b>\$ 5,333,950</b>
<b>Expenses</b>						\$ -
Advertising and Marketing	\$ 50,000	\$ 51,500	\$ 53,045	\$ 54,636	\$ 56,275	\$ 265,457
Audit, Legal and Accounting	\$ 25,000	\$ 25,750	\$ 26,523	\$ 27,318	\$ 28,138	\$ 132,728
Data Acquisition Costs	\$ 75,000	\$ 77,250	\$ 79,568	\$ 81,955	\$ 84,413	\$ 398,185
Depreciation on any fixed assets	\$ 8,000	\$ 8,240	\$ 8,487	\$ 8,742	\$ 9,004	\$ 42,473
Financial Transaction Costs	\$ 8,935	\$ 14,559	\$ 24,397	\$ 41,989	\$ 67,472	\$ 157,352
Governance Costs	This financial information is redacted to avoid appearing to commit future partners to specific numbers. Furthermore, these data are being validated in discussions with potential partners and may well change.					
Insurance (E&O/Commercial Liability)						
Platform Maintenance - Labour						
Platform Maintenance - Servers, Software						
Subscription Processing						
[Other Expenses]						\$ -
[Other Expenses]						\$ -
[Other Expenses]						\$ -
<b>Total Expenses</b>	<b>\$ 428,435</b>	<b>\$ 446,644</b>	<b>\$ 469,444</b>	<b>\$ 500,388</b>	<b>\$ 539,623</b>	<b>\$ 2,384,534</b>
<b>Profit/Loss for the Year</b>	<b>-\$ 125,554</b>	<b>\$ 46,894</b>	<b>\$ 357,561</b>	<b>\$ 922,961</b>	<b>\$ 1,747,554</b>	<b>\$ 2,949,416</b>
Cost Escalation Factor (YOY) %		3.00	3.00	3.00	3.00	
Transaction costs as percentage of revenue (%)	2.95	2.95	2.95	2.95	2.95	



### A3. Subscription Revenue from Carriers – A. Oversize Overlimit Only – Standalone Eastern Ontario Only

Subscription Revenue - Carriers	A. Oversize Overlimit Only - Standalone EO			Assumption	Formula based	
	2022	2023	2024	2025	2026	Five Year Total
<b>Basic/Low End of Estimate Range</b>						
Number of Full Year Subscribers	10	20	40	80	120	120
Total Months of Subscription	12	12	12	12	12	12
Number of Partial Year Subscribers	6	12	18	30	48	48
Average Months of Subscription	4	4	6	6	6	6
Average Annual Cost of Subscription (HST excl.)	\$ 500.00	\$ 512.50	\$ 525.31	\$ 538.45	\$ 551.91	
Average Annual Cost of Subscription (HST incl.)	\$ 565.00	\$ 579.13	\$ 593.60	\$ 608.44	\$ 623.65	\$ 623.65
Average Cost of Partial Year Subscription (HST incl.)	\$ 188.33	\$ 193.04	\$ 296.80	\$ 304.22	\$ 311.83	\$ 311.83
Total Annual Revenue - Full Year Subs.	\$ 6,384.50	\$ 13,088.23	\$ 26,830.86	\$ 55,003.27	\$ 84,567.52	\$ 185,874.37
Total Annual Revenue - Partial Year Subs.	\$ 1,130.00	\$ 2,316.50	\$ 5,342.43	\$ 9,126.65	\$ 14,967.70	\$ 32,883.28
<b>Total Subscription Revenue (HST included)</b>	<b>\$ 7,514.50</b>	<b>\$ 15,404.73</b>	<b>\$ 32,173.29</b>	<b>\$ 64,129.91</b>	<b>\$ 99,535.22</b>	<b>\$ 218,757.65</b>
HST included in preceding amounts	\$ 864.50	\$ 1,772.23	\$ 3,701.35	\$ 7,377.78	\$ 11,450.95	\$ 25,166.81
<b>Total Subscription Revenue (HST excluded)</b>	<b>\$ 6,650.00</b>	<b>\$ 13,632.50</b>	<b>\$ 28,471.94</b>	<b>\$ 56,752.14</b>	<b>\$ 88,084.27</b>	<b>\$ 193,590.84</b>
Could envisage tiered subscriptions based on shipment volumes or dollar values thereof						
Note that one-time set up fee could be considered included in the base \$400 annual subscription						

Subscription Revenue - Carriers	A. Oversize Overlimit Only - Standalone EO			Assumption	Formula based	
Progressive/High End of Estimate Range	2022	2023	2024	2025	2026	Five Year Total
Number of Full Year Subscribers	15	30	90	180	225	225
Total Months of Subscription	12	12	12	12	12	12
Number of Partial Year Subscribers	6	12	18	30	48	48
Average Months of Subscription	4	4	6	6	6	6
Average Annual Cost of Subscription (HST excl.)	\$ 800.00	\$ 820.00	\$ 840.50	\$ 861.51	\$ 883.05	
Average Annual Cost of Subscription (HST incl.)	\$ 904.00	\$ 926.60	\$ 949.77	\$ 973.51	\$ 997.85	\$ 997.85
Average Cost of Partial Year Subscription (HST incl.)	\$ 301.33	\$ 308.87	\$ 474.88	\$ 486.75	\$ 498.92	\$ 498.92
Total Annual Revenue - Full Year Subs.	\$ 15,322.80	\$ 31,411.74	\$ 96,591.10	\$198,011.76	\$253,702.56	\$ 595,039.96
Total Annual Revenue - Partial Year Subs.	\$ 1,808.00	\$ 3,706.40	\$ 8,547.89	\$ 14,602.64	\$ 23,948.32	\$ 52,613.25
<b>Total Subscription Revenue (HST included)</b>	<b>\$ 17,130.80</b>	<b>\$ 35,118.14</b>	<b>\$ 105,138.99</b>	<b>\$212,614.39</b>	<b>\$277,650.89</b>	<b>\$ 647,653.21</b>
HST included in preceding amounts	\$ 1,970.80	\$ 4,040.14	\$ 12,095.64	\$ 24,460.06	\$ 31,942.14	\$ 74,508.78
<b>Total Subscription Revenue (HST excluded)</b>	<b>\$ 15,160.00</b>	<b>\$ 31,078.00</b>	<b>\$ 93,043.35</b>	<b>\$188,154.33</b>	<b>\$245,708.75</b>	<b>\$ 573,144.43</b>
Could envisage tiered subscriptions based on shipment volumes or dollar values thereof						
Note that one-time set up fee could be considered included in the base \$400 annual subscription						

### A3. Subscription Revenue from Carriers – . Oversize Overlimit Only – Standalone Ontario-Wide

Subscription Revenue - Carriers	E. Oversize Overlimit Only - Standalone Ontario-			Assumption	Formula based	
	2022	2023	2024	2025	2026	Five Year Total
<b>Basic/Low End of Estimate Range</b>						
Number of Full Year Subscribers	20	30	50	100	150	150
Total Months of Subscription	12	12	12	12	12	12
Number of Partial Year Subscribers	24	36	60	75	100	48
Average Months of Subscription	4	4	6	6	6	6
Average Annual Cost of Subscription (HST excl.)	\$ 500.00	\$ 512.50	\$ 525.31	\$ 538.45	\$ 551.91	
Average Annual Cost of Subscription (HST incl.)	\$ 565.00	\$ 579.13	\$ 593.60	\$ 608.44	\$ 623.65	\$ 623.65
Average Cost of Partial Year Subscription (HST incl.)	\$ 188.33	\$ 193.04	\$ 296.80	\$ 304.22	\$ 311.83	\$ 311.83
Total Annual Revenue - Full Year Subs.	\$ 12,769.00	\$ 19,632.34	\$ 33,538.58	\$ 68,754.08	\$ 105,709.40	\$ 240,403.40
Total Annual Revenue - Partial Year Subs.	\$ 4,520.00	\$ 6,949.50	\$ 17,808.09	\$ 22,816.62	\$ 31,182.71	\$ 83,276.93
<b>Total Subscription Revenue (HST included)</b>	<b>\$ 17,289.00</b>	<b>\$ 26,581.84</b>	<b>\$ 51,346.67</b>	<b>\$ 91,570.70</b>	<b>\$ 136,892.12</b>	<b>\$ 323,680.33</b>
HST included in preceding amounts	\$ 1,989.00	\$ 3,058.09	\$ 5,907.14	\$ 10,534.68	\$ 15,748.65	\$ 37,237.56
<b>Total Subscription Revenue (HST excluded)</b>	<b>\$ 15,300.00</b>	<b>\$ 23,523.75</b>	<b>\$ 45,439.53</b>	<b>\$ 81,036.02</b>	<b>\$ 121,143.46</b>	<b>\$ 286,442.77</b>
Could envisage tiered subscriptions based on shipment volumes or dollar values thereof						
Note that one-time set up fee could be considered included in the base \$400 annual subscription						

Subscription Revenue - Carriers	E. Oversize Overlimit Only - Standalone Ontario			Assumption	Formula based	
Progressive/High End of Estimate Range	2022	2023	2024	2025	2026	Five Year Total
Number of Full Year Subscribers	50	75	150	300	450	450
Total Months of Subscription	12	12	12	12	12	12
Number of Partial Year Subscribers	36	60	75	100	150	48
Average Months of Subscription	4	4	6	6	6	6
Average Annual Cost of Subscription (HST excl.)	\$ 800.00	\$ 820.00	\$ 840.50	\$ 861.51	\$ 883.05	
Average Annual Cost of Subscription (HST incl.)	\$ 904.00	\$ 926.60	\$ 949.77	\$ 973.51	\$ 997.85	\$ 997.85
Average Cost of Partial Year Subscription (HST incl.)	\$ 301.33	\$ 308.87	\$ 474.88	\$ 486.75	\$ 498.92	\$ 498.92
Total Annual Revenue - Full Year Subs.	\$ 51,076.00	\$ 78,529.35	\$ 160,985.17	\$330,019.59	\$507,405.12	\$ 1,128,015.24
Total Annual Revenue - Partial Year Subs.	\$ 10,848.00	\$ 18,532.00	\$ 35,616.19	\$ 48,675.46	\$ 74,838.51	\$ 188,510.16
<b>Total Subscription Revenue (HST included)</b>	<b>\$ 61,924.00</b>	<b>\$ 97,061.35</b>	<b>\$ 196,601.36</b>	<b>\$378,695.05</b>	<b>\$582,243.64</b>	<b>\$ 1,316,525.39</b>
HST included in preceding amounts	\$ 7,124.00	\$ 11,166.35	\$ 22,617.85	\$ 43,566.69	\$ 66,983.78	\$ 151,458.67
<b>Total Subscription Revenue (HST excluded)</b>	<b>\$ 54,800.00</b>	<b>\$ 85,895.00</b>	<b>\$ 173,983.50</b>	<b>\$335,128.36</b>	<b>\$515,259.86</b>	<b>\$ 1,165,066.72</b>
Could envisage tiered subscriptions based on shipment volumes or dollar values thereof						
Note that one-time set up fee could be considered included in the base \$400 annual subscription						

#### A4. One time and Transaction Revenue – A. Oversize Overlimit Standalone – Eastern Ontario Only

Transaction Revenue to Municipalities - Eastern Ontario Only Model				Assumption	Formula based	
<b>Basic/Low End of Estimate Range</b>				Numbers in red are speculative only to illustrate modelling		
	2022	2023	2024	2025	2026	Five Year Total
<b>Transaction Revenue Paid by Carriers</b>						
Number of Transaction Customers	10	15	30	60	90	90
Setup Fee (one time) HST included	\$ 31.13	\$ 31.13	\$ 31.13	\$ 31.13	\$ 31.13	\$ 31.13
<b>Total Setup Fee Revenue (HST Included)</b>	\$ 311.30	\$ 155.65	\$ 466.95	\$ 933.90	\$ 933.90	\$ 2,801.70
Average Transactions Per Month	2	4	6	9	13.5	32
Average Months of Activity In Year	6	6	6	6	6	6
Average Cost of Transaction (HST included)	\$ 11.30	\$ 11.58	\$ 11.87	\$ 12.17	\$ 12.47	\$ 12.47
<b>Total Transaction Revenue HST included)</b>	\$ 1,356.00	\$ 4,169.70	\$ 12,821.83	\$ 39,427.12	\$ 90,928.79	\$ 148,703.44
<b>Total One-Time Fee &amp; Transaction Revenue - HST Incl.</b>	<b>\$ 1,667.30</b>	<b>\$ 4,325.35</b>	<b>\$ 13,288.78</b>	<b>\$ 40,361.02</b>	<b>\$ 91,862.69</b>	<b>\$ 151,505.14</b>
HST included in preceding calculations	\$ 191.81	\$ 497.61	\$ 1,528.80	\$ 4,643.30	\$ 10,568.27	\$ 17,429.80
<b>Total One-Time Fee &amp; Transaction Revenue - HST Excl.</b>	<b>\$ 1,475.49</b>	<b>\$ 3,827.74</b>	<b>\$ 11,759.98</b>	<b>\$ 35,717.72</b>	<b>\$ 81,294.42</b>	<b>\$ 134,075.35</b>
Total Annual Average Cost Per Customer	\$ 166.73	\$ 288.36	\$ 442.96	\$ 672.68	\$ 1,020.70	
Average Transactions Per Year Per Customer	22	39	66	114	171	
Cost Per Transaction Per Customer Per Year	\$ 13.89	\$ 12.01	\$ 12.30	\$ 12.46	\$ 12.60	
Growth in Number of Transaction Customers (YOY) (%)		50	100	100	50	
Growth in Average Transactions Per Month Per Customer		100	50	50	50	
Escalation Factor for Cost of Transaction		2.5	2.5	2.5	2.5	
<i>Ideal point for freight carrier to transition to subscription based on...</i>						
Carrier Subscription	\$ 500.00	\$ 512.50	\$ 525.31	\$ 538.45	\$ 551.91	
Number of Transactions Per Year Per Customer						
100				See F21		
200					See G21	
300 or more					Not foreseeable	

### Transaction Revenue to Municipalities - Eastern Ontario Only Model

Assumption

Formula based

#### Progressive - High End of Estimate Range

Numbers in red are speculative only to illustrate modelling

	2022	2023	2024	2025	2026	Five Year Total
<b>Transaction Revenue Paid by Carriers</b>						
Number of Transaction Customers	15	30	40	80	120	120
Setup Fee (one time) HST included	\$ 31.13	\$ 31.13	\$ 31.13	\$ 31.13	\$ 31.13	\$ 31.13
<b>Total Setup Fee Revenue (HST Included)</b>	\$ 466.95	\$ 466.95	\$ 311.30	\$ 1,245.20	\$ 1,245.20	\$ 3,735.60
Average Transactions Per Month	2	4	6	9	13.5	32
Average Months of Activity In Year	6	6	6	6	6	6
Average Cost of Transaction (HST included)	\$ 11.30	\$ 11.58	\$ 11.87	\$ 12.17	\$ 12.47	\$ 12.47
<b>Total Transaction Revenue HST included)</b>	\$ 2,034.00	\$ 8,339.40	\$ 17,095.77	\$ 52,569.49	\$ 121,238.39	\$ 201,277.06
<b>Total One-Time Fee &amp; Transaction Revenue - HST Incl.</b>	<b>\$ 2,500.95</b>	<b>\$ 8,806.35</b>	<b>\$ 17,407.07</b>	<b>\$ 53,814.69</b>	<b>\$ 122,483.59</b>	<b>\$ 205,012.66</b>
HST included in preceding calculations	\$ 287.72	\$ 1,013.12	\$ 2,002.58	\$ 6,191.07	\$ 14,091.03	\$ 23,585.53
<b>Total One-Time Fee &amp; Transaction Revenue - HST Excl.</b>	<b>\$ 2,213.23</b>	<b>\$ 7,793.23</b>	<b>\$ 15,404.49</b>	<b>\$ 47,623.62</b>	<b>\$ 108,392.56</b>	<b>\$ 181,427.13</b>
Total Annual Average Cost Per Customer	\$ 166.73	\$ 293.55	\$ 435.18	\$ 672.68	\$ 1,020.70	
Average Transactions Per Year Per Customer	27	54	76	134	201	
Cost Per Transaction Per Customer Per Year	\$ 13.89	\$ 12.23	\$ 12.09	\$ 12.46	\$ 12.60	
Growth in Number of Transaction Customers (YOY) (%)		50	100	100	50	
Growth in Average Transactions Per Month Per Customer		100	50	50	50	
Escalation Factor for Cost of Transaction		2.5	2.5	2.5	2.5	
<i>Ideal point for freight carrier to transition to subscription based on...</i>						
Carrier Subscription	\$ 800.00	\$ 820.00	\$ 840.50	\$ 861.51	\$ 883.05	
Number of Transactions Per Year Per Customer						
100				See F21		
200					See G21	
300 or more					Not foreseeable	

#### A4. One time and Transaction Revenue – E. Oversize Overlimit Standalone – Ontario-Wide

Transaction Revenue to Municipalities - Province Wide Business Model				Assumption	Formula based	
Progressive - High End of Estimate Range		Numbers in red are speculative only to illustrate modelling				
Transaction Revenue Paid by Carriers	2022	2023	2024	2025	2026	Five Year Total
Number of Transaction Customers	50	75	150	300	450	450
Setup Fee (one time) HST included	\$ 31.13	\$ 31.13	\$ 31.13	\$ 31.13	\$ 31.13	\$ 31.13
Total Setup Fee Revenue (HST Included)	\$ 1,556.50	\$ 778.25	\$ 2,334.75	\$ 4,669.50	\$ 4,669.50	\$ 14,008.50
Average Transactions Per Month	4	6	9	13.5	20.25	32
Average Months of Activity In Year	6	6	6	6	6	6
Average Cost of Transaction (HST included)	\$ 11.30	\$ 11.58	\$ 11.87	\$ 12.17	\$ 12.47	\$ 12.47
Total Transaction Revenue HST included)	\$13,560.00	\$31,272.75	\$ 96,163.71	\$ 295,703.40	\$ 681,965.96	\$1,118,665.81
Total One-Time Fee & Transaction Revenue - HST Incl.	\$15,116.50	\$32,051.00	\$ 98,498.46	\$ 300,372.90	\$ 686,635.46	\$1,132,674.31
HST included in preceding calculations	\$ 1,739.07	\$ 3,687.28	\$ 11,331.68	\$ 34,556.17	\$ 78,993.46	\$ 130,307.66
Total One-Time Fee & Transaction Revenue - HST Excl.	\$13,377.43	\$28,363.72	\$ 87,166.78	\$ 265,816.72	\$ 607,642.00	\$1,002,366.65
Total Annual Average Cost Per Customer	\$ 302.33	\$ 427.35	\$ 656.66	\$ 1,001.24	\$ 1,525.86	
Average Transactions Per Year Per Customer	74	111	204	381	572	
Cost Per Transaction Per Customer Per Year	\$ 12.60	\$ 11.87	\$ 12.16	\$ 12.36	\$ 12.56	
Growth in Number of Transaction Customers (YOY) (%)		50	100	100	50	
Growth in Average Transactions Per Month Per Customer		100	50	50	50	
Escalation Factor for Cost of Transaction		2.5	2.5	2.5	2.5	
Ideal point for freight carrier to transition to subscription based on...						
Carrier Subscription	\$ 800.00	\$ 820.00	\$ 840.50	\$ 861.51	\$ 883.05	
Number of Transactions Per Year Per Customer						
100			See O21 and P21			
200			See O21 and P21			
300 or more			See P21 and Q21			

### Transaction Revenue to Municipalities - Province Wide Business Model

Assumption

Formula based

#### Progressive - High End of Estimate Range

Numbers in red are speculative only to illustrate modelling

	2022	2023	2024	2025	2026	Five Year Total
<b>Transaction Revenue Paid by Carriers</b>						
Number of Transaction Customers	50	75	150	300	450	450
Setup Fee (one time) HST included	\$ 31.13	\$ 31.13	\$ 31.13	\$ 31.13	\$ 31.13	\$ 31.13
<b>Total Setup Fee Revenue (HST Included)</b>	\$ 1,556.50	\$ 778.25	\$ 2,334.75	\$ 4,669.50	\$ 4,669.50	\$ 14,008.50
Average Transactions Per Month	4	6	9	13.5	20.25	32
Average Months of Activity In Year	6	6	6	6	6	6
Average Cost of Transaction (HST included)	\$ 11.30	\$ 11.58	\$ 11.87	\$ 12.17	\$ 12.47	\$ 12.47
<b>Total Transaction Revenue HST included)</b>	\$13,560.00	\$31,272.75	\$ 96,163.71	\$ 295,703.40	\$ 681,965.96	\$1,118,665.81
<b>Total One-Time Fee &amp; Transaction Revenue - HST Incl.</b>	<b>\$15,116.50</b>	<b>\$32,051.00</b>	<b>\$ 98,498.46</b>	<b>\$ 300,372.90</b>	<b>\$ 686,635.46</b>	<b>\$1,132,674.31</b>
HST included in preceding calculations	\$ 1,739.07	\$ 3,687.28	\$ 11,331.68	\$ 34,556.17	\$ 78,993.46	\$ 130,307.66
<b>Total One-Time Fee &amp; Transaction Revenue - HST Excl.</b>	<b>\$13,377.43</b>	<b>\$28,363.72</b>	<b>\$ 87,166.78</b>	<b>\$ 265,816.72</b>	<b>\$ 607,642.00</b>	<b>\$1,002,366.65</b>
Total Annual Average Cost Per Customer	\$ 302.33	\$ 427.35	\$ 656.66	\$ 1,001.24	\$ 1,525.86	
Average Transactions Per Year Per Customer	74	111	204	381	572	
Cost Per Transaction Per Customer Per Year	\$ 12.60	\$ 11.87	\$ 12.16	\$ 12.36	\$ 12.56	
Growth in Number of Transaction Customers (YOY) (%)		50	100	100	50	
Growth in Average Transactions Per Month Per Customer		100	50	50	50	
Escalation Factor for Cost of Transaction		2.5	2.5	2.5	2.5	
<i>Ideal point for freight carrier to transition to subscription based on...</i>						
Carrier Subscription	\$ 800.00	\$ 820.00	\$ 840.50	\$ 861.51	\$ 883.05	
Number of Transactions Per Year Per Customer						
100			See O21 and P21			
200			See O21 and P21			
300 or more				See P21 and Q21		



## A5. Membership Revenues from Municipalities – A. Oversize Overlimit Standalone – Eastern Ontario Only

Membership Revenue from Municipalities			Assumption	Formula based		
<b>One Window Standalone - Eastern Ontario Only - Basic/Low End of Estimate Range</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>Five Year</b>
Renewal Ratio (Percentage Renewing From the Previous Year)	80%	80%	80%	80%	80%	
Renewing Members (from Previous Year)	6	13	20	27	35	35
Growth Rate of New Members (from Previous Year)	20%	20%	20%	10%	5%	
New Members	10	12	14	16	17	69
Number of Members	16	25	34	43	51	51
Total Months of Membership	12	12	12	12	12	12
Average Annual Cost of Membership (HST excl.)	\$ 500	\$ 513	\$ 525	\$ 538	\$ 552	\$ 552
Average Annual Cost of Membership (HST incl.)	\$ 565	\$ 579	\$ 594	\$ 608	\$ 624	\$ 624
<b>Total Membership Revenue from Municipalities (HST included)</b>	\$ 9,040	\$ 14,362	\$ 20,325	\$ 26,304	\$ 31,942	\$ 101,974
Average Revenue from Each Municipality (HST Included)	\$ 565	\$ 579	\$ 594	\$ 608	\$ 624	\$ 624
HST included in preceding amounts	\$ 1,040	\$ 1,652	\$ 2,338	\$ 3,026	\$ 3,675	\$ 11,731
<b>Total Membership Revenue from Municipalities (HST excluded)</b>	<b>\$ 8,000</b>	<b>\$ 12,710</b>	<b>\$ 17,987</b>	<b>\$ 23,278</b>	<b>\$ 28,267</b>	<b>\$ 90,242</b>

Membership Revenue from Municipalities			Assumption	Formula based		
<b>One Window Standalone - Eastern Ontario Only - Progressive/High End of Estimate Range</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>Five Year</b>
Renewal Ratio (Percentage Renewing From the Previous Year)	80%	80%	80%	80%	80%	
Renewing Members (from Previous Year)	12	24	37	53	73	199
Growth Rate of New Members (from Previous Year)	20%	25%	30%	30%	30%	
New Members	18	23	29	38	49	157
Number of Members	30	47	66	91	122	122
Total Months of Membership	12	12	12	12	12	12
Average Annual Cost of Membership (HST excl.)	\$ 1,000	\$ 1,025	\$ 1,051	\$ 1,077	\$ 1,104	\$ 1,104
Average Annual Cost of Membership (HST incl.)	\$ 1,130	\$ 1,158	\$ 1,187	\$ 1,217	\$ 1,247	\$ 1,247
<b>Total Membership Revenue from Municipalities (HST included)</b>	\$ 33,900	\$ 53,859	\$ 78,890	\$ 110,962	\$ 152,646	\$ 430,257
Average Revenue from Each Municipality (HST Included)	\$ 1,130	\$ 1,158	\$ 1,187	\$ 1,217	\$ 1,247	
HST included in preceding amounts	\$ 3,900	\$ 6,196	\$ 9,076	\$ 12,766	\$ 17,561	\$ 49,499
<b>Total Membership Revenue from Municipalities (HST excluded)</b>	<b>\$ 30,000</b>	<b>\$ 47,663</b>	<b>\$ 69,814</b>	<b>\$ 98,196</b>	<b>\$ 135,085</b>	<b>\$ 380,758</b>

## A6. Membership Revenue From Municipalities – E. Oversize Overlimit Standalone – Ontario Wide

Membership Revenue from Municipalities			Assumption	Formula based		
	2022	2023	2024	2025	2026	Five Year Total
<b>One Window Standalone - Province-wide - Basic/Low End of Estimate Range</b>						
Renewal Ratio (Percentage Renewing From the Previous Year)	80%	80%	80%	80%	80%	
Renewing Members (from Previous Year) (4X EO only)	24	58	126	183	188	188
Growth Rate of New Members (from Previous Year)	20%	20%	20%	10%	5%	
New Members	48	100	103	53	27	330
Number of Members	72	158	229	235	215	215
Total Months of Membership	12	12	12	12	12	12
Average Annual Cost of Membership (HST excl.)	\$ 500	\$ 513	\$ 525	\$ 538	\$ 552	\$ 552
Average Annual Cost of Membership (HST incl.)	\$ 565	\$ 579	\$ 594	\$ 608	\$ 624	\$ 624
<b>Total Membership Revenue from Municipalities (HST included)</b>	\$ 40,680	\$ 91,270	\$ 135,686	\$ 143,225	\$ 134,234	\$ 545,095
Average Revenue from Each Municipality (HST Included)	\$ 565	\$ 579	\$ 594	\$ 608	\$ 624	
HST included in preceding amounts	\$ 4,680	\$ 10,500	\$ 15,610	\$ 16,477	\$ 15,443	\$ 62,710
<b>Total Membership Revenue from Municipalities (HST excluded)</b>	<b>\$ 36,000</b>	<b>\$ 80,770</b>	<b>\$ 120,076</b>	<b>\$ 126,747</b>	<b>\$ 118,791</b>	<b>\$ 482,385</b>
<i>Note: membership numbers for the province-wide deployment of the application are 4X those of Eastern Ontario</i>						

## Membership Revenue from Municipalities

			Assumption	Formula based		
	2022	2023	2024	2025	2026	Five Year Total
<b>One Window Standalone - Province-wide - Progressive/High End of Estimate Range</b>						
Renewal Ratio (Percentage Renewing From the Previous Year)	80%	80%	80%	80%	80%	
Renewing Members (from Previous Year)	48	96	149	213	292	797
Growth Rate of New Members (from Previous Year)	20%	25%	30%	30%	30%	
New Members	120	186	266	365	490	490
Number of Members	168	282	415	577	781	781
Total Months of Membership	12	12	12	12	12	12
Average Annual Cost of Membership (HST excl.)	\$ 1,000	\$ 1,025	\$ 1,051	\$ 1,077	\$ 1,104	\$ 1,104
Average Annual Cost of Membership (HST incl.)	\$ 1,130	\$ 1,158	\$ 1,187	\$ 1,217	\$ 1,247	\$ 1,247
<b>Total Membership Revenue from Municipalities (HST included)</b>	\$ 189,840	\$ 326,627	\$ 492,216	\$ 702,606	\$ 974,540	\$ 2,685,828
Average Revenue from Each Municipality (HST Included)	\$ 1,130	\$ 1,158	\$ 1,187	\$ 1,217	\$ 1,247	
HST included in preceding amounts	\$ 21,840	\$ 37,577	\$ 56,627	\$ 80,831	\$ 112,115	\$ 308,989
<b>Total Membership Revenue from Municipalities (HST excluded)</b>	<b>\$ 168,000</b>	<b>\$ 289,050</b>	<b>\$ 435,589</b>	<b>\$ 621,775</b>	<b>\$ 862,424</b>	<b>\$ 2,376,839</b>

Note: membership numbers for the province-wide deployment of the application are 4X those of Eastern Ontario

## A7. Third Party Revenue - Oversize Overlimit Standalone - Eastern Ontario Only

Third Party Revenue - Eastern Ontario Only							
Revenue Type	Assumptions	2022	2023	2024	2025	2026	Five Year Total
Number of Sponsors/Year	6						
Average value of sponsorship (\$)	\$1,200						
Escalation factor (audience growth) (%)	0.05						
Number of Advertising 'Spots'/Year	24						
Average value of advertisement/spot	\$200						
Sponsorship Revenue		\$ 7,200	\$ 7,560	\$ 7,938	\$ 8,335	\$ 8,752	\$ 39,785
Advertising Revenue		\$ 4,800	\$ 5,040	\$ 5,292	\$ 5,557	\$ 5,834	\$ 26,523
[Other Revenue]							
[Other Revenue]							
Total Third Party Revenue		\$ 12,000	\$ 12,600	\$ 13,230	\$ 13,892	\$ 14,586	\$ 66,308

## A8. Third Party Revenue - Oversize Overlimit Standalone – Ontario-Wide

Third Party Revenue - Province-Wide							
Revenue Type	Assumptions	2022	2023	2024	2025	2026	Five Year Total
Number of Sponsors/Year	12						
Average value of sponsorship (\$)	\$1,200						
Escalation factor (audience growth) (\$)	0.05						
Number of Advertising 'Spots'/Year	48						
Average value of advertisement/spot	\$200						
Sponsorship Revenue		\$ 14,400	\$ 15,120	\$ 15,876	\$ 16,670	\$ 17,503	\$ 79,569
Advertising Revenue		\$ 9,600	\$ 10,080	\$ 10,584	\$ 11,113	\$ 11,669	\$ 53,046
[Other Revenue]							
[Other Revenue]							
Total Third Party Revenue		\$ 24,000	\$ 25,200	\$ 26,460	\$ 27,783	\$ 29,172	\$ 132,615