



Transit X, LLC presents a preliminary proposal for a privately-funded fleet of fully-autonomous shared electric vehicles on a local and regional podway network for

# Ontario, Canada

This proposal is downloadable at transitx.com/proposals/Transit X for Ontario,Canada.pdf

# High capacity · High speed · Nonstop · 24/7 Solar powered · Zero Wait · Door-to-door · Resilient

A 26-page companion Transit X Handbook is available at transitx.com/transitxhandbook.pdf





## Transit X proposes to build and operate a privately-financed pod network to carry passengers and freight for Ontario, Canada that makes the Transit X service convenient to 80% of the population.

Transit X efficiently services both suburbs and cities and provides for a higher quality of life. See transitx.com for more details. This 3-minute video (transitx.com/video) describes our innovative solution.

#### **Major benefits**

- · Reduce congestion
- · Provide parking relief
- Reduce pollution
- Improve safety

The Transit X Handbook (<u>transitx.com/</u> <u>transitxhandbook.pdf</u>) answers many questions about our service, the company, our technology, and the way we address:



congestion, parking, road safety, pedestrian safety, ADA compliance, sustainability, fares, solar+storage, construction, aesthetics, operations, economic development, quality of service, security, station footprint, equitability, carbon footprint, transit integration, resiliency, reliability, rights-of-way, and open space.

## Congestion, parking, pollution, and safety

Most regions suffer from traffic congestion, limited parking, air pollution, and unsafe roads. Potential solutions are costly, but Transit X can solve these challenges without public funding. Transit X can integrate into the built environment, providing both short term relief and a long term solution.

## No public funding

We have reduced or eliminated many costs of transportation including the cost of materials, land, construction, fuel, debt service, and labor. Transit X does not require public funding because revenue from fares more than covers our costs. Our business model appeals to investment banks and private equity firms that finance green infrastructure projects.

## **Proven technology**

Our team and partners have built fully automated systems that are now in operation around the world. Transit X may look unique, but the underlying design is very similar to systems that have been operating for 40 years with an exemplary safety record. An in-depth (1000+ hours) technical assessment and feasibility analysis has been completed by Altran, a global engineering firm with

extensive expertise in automated transit systems. The first pilots of Transit X will be deployed by the end of 2018.

Before any groundbreaking, the system will be safety-certified and fully insured.

## Service Quality

Transit X provides on-demand, last-mile service that is superior to cars or buses. An operating agreement will guarantee high levels of availability and reliability. Our use of small vehicles (pods) makes this possible. By reducing car use, Transit X creates walkable and bike-friendly neighborhoods.

## Less pollution: Air, Sound, Light, Visual, Water

Transit X offers a much higher quality of life by eliminating many forms of pollution. Pods are quiet and have no emissions. Pods offer less visual impact than the existing roads and vehicles, and utility lines can be hidden within the track. At night, there is no light pollution from headlights or taillights. Water pollution from road runoff is significantly reduced.

## Sustainable

Transit X runs on 100% sustainable energy. The energy generated from solar panels on the track and stored within the poles is sufficient in most cases, but sustainable power contracts may used to buy and sell power to the grid. Transit X makes it possible to reduce the amount of impervious surfaces and increase green space by reducing the need for parking and roads. By replacing cars, Transit X has a negative carbon footprint.

## More Transit & Fewer Cars

Transit X provides the convenience and privacy that people value in cars, yet without the negative impacts of personal cars. Transit X combines the best of mass transit and personal transportation modes which will lead to higher use of mass transit and less use of personal vehicles.

## **De-risking Projects**

Transit X is working with large, established firms to provide fixed-price contracts for the engineering, certification, construction, and operations of a Transit X system. Theses partnerships enable Transit X to de-risk all of the major elements of the project, and provide performance guarantees.

We would work with regional urban planning and construction firms who are familiar with permitting and applicable codes.

## Jobs and Workforce Development

Many jobs will be created to build a new transportation infrastructure, and many new types of job will be created as transportation becomes more efficient. Municipalities that first embrace Transit X will be offered the opportunity to have Transit X manufacturing and assembly jobs in their area. The vast majority of the construction jobs will be locally sourced. Preferential hiring would be given to those workers displaced by the transition to automated vehicles.

## **Revenue Generator**

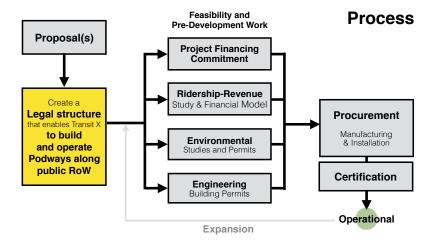
Not only does Transit X not require public financing, but the local municipality and right-of-ways owners receive 5% of gross revenue, which would be US\$360 million per year average over the first 10 years. For specifics, please see the "Taxes and Fees" section of this proposal. These fees and taxes paid by Transit X enables lower taxes or more spending on public services.

## Short and Long Term Solution

A project could be operational within 24 months from the start of a project. Transit X offers a rapidly-deployable solution that provides long term benefits. We would form a local company to build, operate, and maintain the network. At least 75% of the profits would be invested back into the region.

#### **Moving Forward**

The diagram shows our general process for working with a municipality or rights-ofway owner. We would refine a proposal to meet your needs, then ask for a letter stating that you would like to move forward with a proposal that includes air rights and and an operating agreement. Example documents and a sample project schedule can be viewed at transitx.com/process



## Evaluation

Please review our preliminary proposal, and then ask us any questions. We would be happy to provide further information, address specific concerns, or meet with specific people or groups. Any routes or coverage areas shown on the map are only preliminary suggestions and actual routes would be determined based on needs, rights-of-ways, utility corridors, location of trees, and many other factors.

We expect this proposal to be reviewed by one or more committees or working groups. Familiar transportation options, such as buses, light rail, subways, and ride-sharing services (including autonomous vehicles) may have already been considered. Very few options offer the convenience of cars with at least the capacity of buses, and most, if not all, require public funding and subsidies.

Private cars have a dominant mode share because people like the privacy and convenience of a car — despite the significant risks and negative impact associated with them. People won't give up their cars unless the alternative is both better and cheaper. That is what Transit X can provide.

We hope you agree that this proposal offers a way to address your challenges in both the short and long term, providing an option that is better and lower risk than any alternative — including continuing with the status quo.

Whatever process you use to evaluate this proposal, Transit X is open to working with you on refining this proposal to meet your needs. We hope you will conclude that moving forward with Transit X is an excellent opportunity to meet your current and future challenges.

Once we agree to move forward, we need a memorandum of understanding (example at <u>transitx.com/process/mou.html</u>) stating that you intend to pass an ordinance that enables our use of air rights along with an operating agreement.

The buildout of the network would be rolled out in phases, where a first phase could be a 15 to 30 km pilot.

#### Other Resources

The links below provide general information about Transit X:

- · 2 minute video overview (transitx.com/video)
- Transit X Handbook (<u>transitx.com/transitxhandbook.pdf</u>)
- Letters of Project Financing, Due Diligence, Contracts (transitx.com/letters.pdf)
- Example Resolution (transitx.com/process/resolution.html)
- · Operating Agreement (transitx.com/process/operating\_agreement.html)
- General Q & A (transitx.com/QandA.html)

#### Addendum

The remaining pages of this proposal provide project-specific details:

- Project Overview and Impact pages 6 and 7
- Taxes and Fees pages 8 and 9
- Fares page 10 and 11
- Financial Project Summary with Pro Forma pages 12 and 13

We look forward to working with you to improve the quality of life for Ontario through better transportation.

Sincerely,

Tank

Mike Stanley CEO, Transit X

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## **Project Overview**

	<b>-</b>	4 405		
1	Transit X network length	4,495	km	
2	People (resident-equivalent) in region		resident-equivalent p	opulation
3	Route density ratio (route length to service area)	0.08		
4	Number of stops	1,510		
5	Triple-speed route length	-	km	
6	Water crossing route length		km	
7	Cost of fixed infrastructure	\$16,303,575,218		
8	per person	\$1,134		
9	Mode share of travel on Transit X (4% after first year)		after 10 years	
10	Distance traveled on Transit X, per year	16,388,094,406		
11 12	per day	44,898,889		
13	Daily potential energy generation with standard panels on tracks	34,522		2% of max capacity
13	Sustainable energy use per day		MWh	
15	Energy storage capital cost for 1 day(s) of supply at \$100 per kWh	\$84,915,156	KW	
16	Size (rated power) of solar installation Cost to generate sustainable energy (at \$1,000 per kW)	197,414 \$107,414,216		
17	Cost of buying sustainable energy at \$0.15 per kWh	\$197,414,216 \$127,373	per day	5% of OPEX
18	Daily passengers riding Transit X	1,725,063		12% of the pop.
19			km	
20	Distance per passenger per day Average distance per trip (assuming 3 trips per day)	-	km	
21	Single passenger fare for shared 9 km trip	\$2.21		CAD
21	Passenger distance traveled during peak hour	8,979,778		CAD
23	Breakeven	/91,44/	customers per day	
24			(7% of people conve	nient to Transit X)
		~ ~ ~ ~ ~		
25	Number of pods for peak demand		pods at 12% m	
26	Number of customers per pod	26.0	and 217 people pe	
26 27	Number of customers per pod Distance per pod per year	26.0 168,192	and 217 people pe km	er pod
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## Project Overview p. 2



## Impact of proposed network

1	Reduction in GHG emissions (metric tons CO2-eq)	1,618,324 MTCO2-eq annually
2	Estimated cost to maintain public roadways	\$945,647,818 annually
3	Reduced waste products	262,619 metric tons annually
4	Travel time saved	462 hrs/person annually
5	Cost savings from reduced car ownership	\$1,862 per person annually
6	Increase in household income from time savings and car costs	15%
7	Reported injuries avoided	10,161 annually
8	Lives saved	102 annually
9	Land freed from parking (9,314 acres)	37,692,617 m <sup>2</sup>
11	Health care savings	High

## **Model Inputs**

	•	
	Ratio of road length to track length	15
4	Walking speed	16
	Width of convenient swath along track	17
\$2,790,00	Fixed cost per km. Solar+storage not included.	18
\$8,370,00	Water crossing: additional cost per km	19
\$5,580,00	Triple-speed: additional cost per km	20
2	Rate factor for water crossings or high-speed links.	21
10,00	Average distance traveled per person per year (for trips under 1600 km)	22
1	Average distance per day per person	23
85	Mode share % of people convenient to Transit X	24
20	Percentage of daily demand during peak hour	25
25,38	Maximum capacity per track	26
	Average dwell time during peak hour	27
18	% of pods traveling on route with highest demand	28
	Average speed of pod	29
-	Average # of trips for a daily customer	30
2	Average passengers per pod during peak hours	31
1	Average passengers per pod	32
19	Average discount per passenger	
	Maximum passengers per pod	33
25	Empty pods: Percentage non-revenue	34
\$5,00	Ex-Factory cost per pod	35
10,00	Worldwide Median Income per Household (US\$)	36
2	Average number of residents per household	37
\$0.4	Base fare per km	38
\$0.0	(per mile)	39
	O&M as % of project cost	40
70	Percentage debt financed	41
	Length of loan/debt	42
5	Interest rate for debt kg CO2 emissions per liter of gasoline	43
2.v \$`	Monetary value of 1 hour personal time (USD)	44
		45
\$51,00	Eat. roadway maintenance per year per km Area of one parking lot space	46
	Commercial income of land (annual)	47
2.9	Distance from roadway that is convenient	48
2.3	Stops per km	49
2	Solar panel area per meter of track	50
ے \$0.1	Cost of sustainable energy and storage	51 52
φ0. 3	Global Horizontal Irradiance (GHI)	52 53
\$1,00	Cost to generate sustainable energy	53
ψ1,00	Storage per column	54 55
	Typical span	50
\$1	Energy storage cost	57
ψι	Energy storage capacity	57
2.3	Area of parked pod	59
40	Distance discount at max distance	59 60
	Max distance discount	61
50	Max usage discount at 10,000 km per capita	62
	Shared Pod Discount	63
	Shared Pod Compartment Discount	64
	Mode share starting discount	65
o,Canada.p		00
2,0011000.p	ONE	

4			
	km/h		
	km		
790,000	26	627,000	CAD
,790,000	3,0	527,000	CAD
,580,000 2.2			
2.2			
10,000	km		
27	km		
85%	at 5 mir	walk	
20%	at 5 mil	i waik.	
25,380	nnh		
10	second	c	
18%	Second	0	
	km/h		45 mph
	per day		40 mpn
2.4			
	passen	•	
19%	pubberr	gerð	
	passen	ners	
25%	paccon	9010	
\$5,000		6,500	CAD
10,000		13,000	
2.3		10,000	CAD
\$0.42		0.6	CAD
\$0.68			CAD
5%		0.0	O/ LD
70%			
	years		
5%	jouro		
2.37			
\$13		16	CAD
\$51,000		66,300	
	m <sup>2</sup>	,	
\$1	per m <sup>2</sup>		CAD
2.97	km		
0.3			
2.0			
\$0.15	per kW	h	
3.8	kWh/m <sup>2</sup>	2/day	
\$1,000	per kW		
40	kWh		
23	m c	ols/km:	44
\$100	per kW	h	
1	days		
2.20	m <sup>2</sup>		
40%			
500	km		
50%			
20%			
40%			
67%			
nada.pdf			

## Model Inputs (continued)

66	Name of region or project	Ontario, Canada
67	Currency name	CAD
68	Equal to US\$1	1.3
69	Sustainable energy/electricity generation & storage as	CAPEX
70	Land area of region (sq. km)	917,741
71	Number of residents in region	14,374,084
72	% travel within region	95%
73	% of land area served by roads	6%
74	Coverage: % of pop. convenient (60 min walk) to Transit X	80%
75	Median household income (US\$)	\$50,000
76	Convenient walk time to stop (min)	60
77	Triple-speed route length (km)	0
78	Water crossing route length (km)	0.0
79	Visitors per year	0
80	Average length of visit (days)	2
81	Solar production ratio	1.57
82	Regional Fare Factor	1.0
83	EPC costs & contingency	30%
84	Triple-speed (km/h)	242

## Pod & Car

		Pod	Car
85	Service life (years)	20	12
86	Full cost of vehicle per year	\$200	\$9,000
87	Public cost to maintain infrastructure (per km)	\$0	\$100,000
88	Energy Efficiency in MPGe	1188	24
89	Energy Efficiency in liters/100km	0.20	9.8
90	Energy used (Watt-hours/km)	28	1375
91	mass of CO2 per vehicle per km (kg)	0	0.09875
92	Vehicle mass (kg)	45	1950
93	Average speed of urban travel (km/h)	72	16
94	Typical travel time (in minutes) for 9 km trip	7	33
95	Fare/cost per km	\$0.42	\$0.62
96	Number of deaths per 100M passenger-km	0.00001	1
97	Number of injuries per 100M passenger-km	0.0006	62
98	Volume to park (cubic meters)	5.7	70.9



4% of gross revenue proportioned to air rights owners and a municipal fee/tax of 1% of gross revenue. Both air rights and fee/tax have a minimum payment based on the Footprint and the Transit X Commercial Rate (TXCR).

## 1 Municipal rates

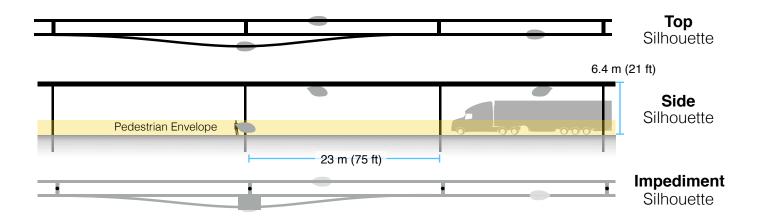
	•		
2	Total commercial land (estimated)	5,506,446,000 m <sup>2</sup>	
3	Total commercial muni revenue (US\$)	\$5,506,446,000	7,158,379,800 CAD
4	TXCR (Transit X Commercial Rate)	\$1.00 per m <sup>2</sup>	1.3 CAD
5	TXCR is the yearly tax rate per land area. Calculation: total land area of commercial properties in the municipality, divided by all the municipal income generated by those properties. The TXCR is used to calculate the minimum tax/ fee.		
6	Project Revenue		
7	Length of Transit X route	4,495 km	
8	Estimated gross revenue per unit length	\$2,390,250 per km	3,107,325 CAD
9			
10	Government Tax	% of gross revenue with minimum.	
10 11	Government Tax 1% gross revenue	% of gross revenue with minimum. \$23,902 per route-km	31,073 CAD
			31,073 CAD
11	1% gross revenue	\$23,902 per route-km	
11 12	1% gross revenue Minimum per year	\$23,902 per route-km \$1,652 per route-km	
11 12 13	1% gross revenue Minimum per year Air Rights Leasing Fee	\$23,902 per route-km \$1,652 per route-km % of gross revenue with minimum. F	
11 12 13 14	1% gross revenue Minimum per year Air Rights Leasing Fee % of route on municipal land	\$23,902 per route-km \$1,652 per route-km % of gross revenue with minimum. F 90%	Proportioned based on length.
<ol> <li>11</li> <li>12</li> <li>13</li> <li>14</li> <li>15</li> </ol>	1% gross revenue Minimum per year Air Rights Leasing Fee % of route on municipal land 4% gross revenue	\$23,902 per route-km \$1,652 per route-km % of gross revenue with minimum. F 90% \$95,610 per route-km	Proportioned based on length.
11 12 13 14 15 16	1% gross revenue Minimum per year Air Rights Leasing Fee % of route on municipal land 4% gross revenue Minimum per year	\$23,902 per route-km \$1,652 per route-km % of gross revenue with minimum. F 90% \$95,610 per route-km	Proportioned based on length.
11 12 13 14 15 16 17	1% gross revenue Minimum per year Air Rights Leasing Fee % of route on municipal land 4% gross revenue Minimum per year Taxes, Fees	\$23,902 per route-km \$1,652 per route-km % of gross revenue with minimum. F 90% \$95,610 per route-km \$1,652 per route-km	Proportioned based on length. 124,293 CAD

21

...with minimum

\$742,773

## Footprint calculations for minimum fee



1	Footprint Calculations	Metric	Imperial
2	Track width	<u>0.41</u> m	
3	Track height	<u>0.61</u> m	
4	Pole diameter	<u>0.3</u> m	
5	Pole cross section	<u>0.07</u> m <sup>2</sup>	
6	Stop landing area	2 m <sup>2</sup>	
7	width	<u>2</u> m	
8	length	1 m	
9	Ramp length	<u>21</u> m	
10	Pole span	<u>23</u> m	
11	Number of poles per unit length	<u>43.5</u> poles per km	1
12	Pole height	<u>6</u> m	
13			
14	Single track	1126.7 m <sup>2</sup>	
15	Area of Side Silhouette	688.3 m <sup>2</sup>	
16	Area of Top Silhouette	423.1 m <sup>2</sup>	
17	Impediment Area (adjusted)	15.4 m <sup>2</sup>	
18			
19	Dual track	1536.7 m <sup>2</sup>	
20	Area of Side Silhouette	688.3 m <sup>2</sup>	
21	Area of Top Silhouette	833.1 m <sup>2</sup>	
22	Impediment Area (adjusted)	15.4 m <sup>2</sup>	
23			
24	Stop	57.8 m <sup>2</sup>	
25	Area of Side Silhouette	25.6 m <sup>2</sup>	
26	Area of Top Silhouette	22.2 m <sup>2</sup>	
27	Impediment Area (adjusted)	10.0 m <sup>2</sup>	
28			
29	Stops	2 stops per kn	l
30	% of dual track	100%	
31			
32	Average area per unit length	1,652 m <sup>2</sup> per route	-km
33			
34	Contract values		
35	% gross revenue for muni tax/fee	1%	
36	% gross revenue for air rights (RoW)	4%	
37	% gross revenue for RoW+tax+fee	5%	
38	Impediment Factor	5	
		-	



Summary

The average commute would be 3.5 times faster saving each commuter 295 hours per year.\*

At 0.33 CAD per km, a typical commute on Transit X is 17% less than public transit and 74% less than a Taxi.\*

			_	Trip Length									
All prices in CAD				2 km				10 km				40 km	
Transit X				<b>0.66</b> to 1.10 2 min., 3.6x faster				<b>3.26</b> to 5.47 8 min., 3.6x faster			ster	<b>12.52</b> to 21.34 33 min., 3.4x faster	
Public transit average				3.70				5.88				8.62	
				2	<b>5.</b> to 6 n	-	S			<b>22.3</b> 30 m		es	<b>86.82</b> 30 to 120 minutes
Common public modes	Jber/L	_yft		2	<b>3.9</b> to 6 n	ninute	S			<b>16.(</b> 30 m	ninut	es	<b>61.71</b> 30 to 120 minutes
d uou	ublic	Bus		<b>2.98</b> 3 to 12 minutes				<b>2.98</b> 15 to 60 minutes			tes	<b>4.56</b> 60 to 240 minutes	
Com	Trai	n		2	<b>4.4</b> to 12 r		es		8 to	<b>5.2</b> 60 m	-	es	<b>8.24</b> 30 to 240 minutes
Personal car				2 t	<b>4</b> .*		es		<b>1</b> 8 to 3	<b>2.</b> 9			<b>45.84</b> 30 to 120 minutes
Travel mode	Avg. Speed km/h	Low Speed km/h	High speed km/h	Base	Includ es km	Over per-km		Max Dist. km	Time cost per min	6%	de sha 70% 10		* All numbers on mode shares, speeds, and cost are rough estimates
Тахі	30	20	80	2.98	1	1.49	0.5	100	1.32	5%	4%	1%	
Uber/Lyft	30	20	80	2.38	1	1.19	0.5	100	0.66	10%	10%	2%	
Public Bus	15	10	40	2.98	20	0.08	0.5	50	0	50%	50%	40%	
Train	30	10	80	4.46	2	0.10	2	100	0	35%	36%	57%	
Transit X	72	72	72	0	0	0.33	0.1	50	0	-	-	-	

Base fares are set for first 5 years, then adjusted by formula. A 20% discount on a shared pod and a 40% discount on a shared compartment. Trips are discounted proportional to their length reaching a maximum of a 40% discount on a 500 km trip. No congestion–based pricing. Fares are proportional to the median income of the area and inversely proportional to per capita use, so the more use of Transit X, the lower the base fare up a to 50% discount. The amount of market–rate fares must be equal or less than the amount of discounted fares. Transit X Fair Fare is a universal passenger fare formula that applies to all regions and all times.

0.21

0.99 0.1 400

20

30

Personal car

1.98

0

80

# Transit X.

## Fair Fare Formula

## Fare rates are updated annually using this formula

	Formula Name	Value	Units	Description of the value or model input
1	GlobalIncome	13,000	CAD	Global median household income. Updated annually based on most recent
I		10,000	0/12	standard published data. Travel distance per household per year on any mode for trips under 1600 km. A
2	AllTravel	23,000	km	global constant
3	PercentIncomeForTransport	20%		% of median household income for all transportation under 1600 km trips. A global constant.
4	GlobalRate	0.11	CAD/km	Global rate: GlobalIncome * PercentIncomeForTransport / AllTravel
5	MedianIncomeOrigin	\$65,000	CAD	Median household income at origin. External input. Based on reliable public data source updated annually.
6	MedianIncomeDest	\$65,000	CAD	Median household income at destination. External input. Based on reliable public data updated annually.
7	RegionalRate	0.57	CAD/km	Regional rate based on median income: MedianIncomeOrigin * PercentIncomeForTransport / AllTravel
8	UnderIncomeRate	0.00	CAD/km	Under global income adjustment: if (RegionalRate < GlobalRate, GlobalRate - RegionalRate, 0)
9	NominalRate	0.57	CAD/km	Nominal rate: RegionalRate + UnderIncomeRate
10	RegionalFactor	1.00		Regional Fare Factor. Negotiated upfront to make network financially viable.
11	AdjustedRate	0.57	CAD/km	Regional adjusted rate: NominalRate * RegionalFactor
13	Population	14,374,084		Population in region. Updated annually based on trusted public data source.
12	UsageMaxDiscount	50%		Fare Discount when Transit X travel per household equals AllTravel. Global constant.
14	PassengerTravel	16,388,094,406	km	Total passenger distance traveled previous calendar year. Based on expected mode share for first 3 years. Based on actual passenger trips. Audited.
15	ModeShare	5%		Percent of Total Travel Per Capita on Transit X: PassengerTravel / (Population x AllTravel)
16	BaseRate	0.55	CAD/km	Base rate for single-passenger pod (without discounts) (1 - UsageMaxDiscount x min(1,ModeShare)) x AdjustedRate
17	SpecialRateFactor	2.20		Rate factor for water crossings or high-speed links. Global constant.
18	SpecialBaseRate	1.21	CAD/km	Base rate for high-speed travel or water crossings: BaseRate * SpecialRateFactor
19	DistanceDiscount	40%		Distance discount at max distance. Global constant.
20	MaxDistanceDiscount	500	km	Max distance discount. Global constant.
21	DistanceDiscountPerKm	0.000441	CAD/km	Discount amount per km: BaseRate x DistanceDiscount / MaxDistanceDiscount
22	SeniorDiscount	20%		Senior discount set according to local regulations
23	StudentDiscount	20%		Student discount set according to local regulations
	DisabilityDiscount	20%		Disability discount set according to local regulations
24	DiscountBaseRate	0.44	CAD/km	Discounted base rate: BaseRate x (1 - SeniorDiscount)
25	SharedPodDiscount	20%		Discount for a shared pod. Set by Transit X per year. 15% minimum and 30% maximum. Maximum yearly change is one percentage point.
26	SharedPodRate	0.44	CAD/km	Rate for a shared pod: BaseRate x (1 - SharedPodDiscount)
27	SharedCompartmentDiscount	40%		Discount for shared compartment. Set by Transit X per year. 25% minimum and 40% maximum. Maximum yearly change is one percentage point.
28	SharedCompartmentRate	0.33	CAD/km	Rate for shared compartment BaseRate x (1 - SharedCompartmentDiscount)
29		0.37	CAD/km	Rate for 500 km in single-passenger pod.
30	Senior + SharedCompartmentRate	0.16	CAD/km	Rate for a Senior taking a 500 km trip in a shared compartment. BaseRate x (1 - SeniorDiscountAmount) x (1 - SharedCompartmentDiscount) x (1 - MaxDistanceDiscount)
31	DistanceBase	12,127,189,860	km	Passenger distance under base fare. Audited value from operational data.
32	PercentBase	74%		Percent of passenger distance under base fare: DistanceBase / PassengerTravel
33	BaseRevenue	5,420,803,582	CAD	Annual revenue from all travel under base rate. Audited value from operational data.
34	AverageDiscount	19%		Average fare discount from Base Rate: 1 - (BaseRevenue / (DIstanceDase x BaseRate))
35	MarketFactor	1.0		Market rate factor. Negotiated value for setting ratio of AverageDiscount
36	MarketRateCap	19%		Cap on passenger travel distance at market rate: AverageDiscount x MarketFactor
37	MarketTravelCap	2,292,790,936	km	Cap on passenger travel distance at market rate: DistanceBase x MarketRateCap

## **Project Summary**

Project Description	Solar-powered automated transportation network infrastructure				
Project type	Privately-funded Green Infrastructure				
Project cost	\$17.10 billion				
Cost to Gov't	\$0				
Structure	Privately financed equity and debt				
Debt term	10 years @ 5%				
Equity terms	<ul> <li>A waterfall profit distribution with:</li> <li>90/10 split until Return of Capital,</li> <li>then 50/50 until Target IRR met</li> <li>then 10/90 onwards</li> </ul>				
Yearly fees & taxes	\$494,238,292				
Benefits to society and environment	Extremely high				

## **Financials**

(US\$ in millions)

	Year 1	Total Years 1-12
Gross Revenues	3,546	86,333
Taxes and fees	177	4,317
Debt service	\$1,550	\$15503

#### ESG (Environmental, Social, Governance) Benefits

Clean energy	yes	Resiliency	yes
Energy security	yes	Sustainable	yes
Emissions-free	yes	Equitable	yes
GHG-free	yes	Recyclable materials	yes
Lowers pollution	yes	Affordable housing	yes
Clean water	yes	Improved Health	yes
Improved Safety	yes	Econ. Development	yes
New infrastructure	yes	Access to Food	yes
Equitable transport	yes	New job creation	yes





Transit X, LLC presents a preliminary proposal for a privately-funded fleet of fully-autonomous shared electric vehicles on a local and regional podway network for

## Ontario, Canada

High capacity · High speed · Nonstop · 24/7 Solar powered · Wait-free · Door-to-door · Resilient

26-page companion Transit X Handbook is available at transitx.com/transitxhandbook.pdf



#### About Transit X

Transit X designs, builds, and operates solar-electric shared mobility infrastructure to supplant buses, trains, cars, and trucks. Transit X offers its service to municipalities and commercial developers. First pilots will begin operations by 2019. Transit X is a privately held company founded in 2015, based in Boston, Mass, and intends to be certified as a public benefit company.

## Status

Now	Prior to close
Letter of Interest	Yes
In development	Yes
Proposals	Yes
Expedited request	Yes
Proposal	Ordinance
Known process	Yes
Expedited request	Yes
High interest	Contracted
High interest	Contracted
Identified	Agreements
Identified	Contracted
	Letter of Interest In development Proposals Expedited request Proposal Known process Expedited request High interest High interest Identified

General information available at transitx.com. Detailed information and references can be provided under appropriate nondisclosure/non-compete/non-circumvent agreements. Contact: Mike Stanley, CEO, Transit X, mike@transitx.com, 508-596-7024

## 12-year Pro Forma



## **Model Inputs and Assumptions**

Route length (km)	4,495		
Starting number of pods	21,892		
Projected revenue growth	15%		
Project Cost (Privately funded)	\$17,101,813,402		
% Debt financed	70%		
Debt	\$11,971,269,382		
Equity	\$5,130,544,021		
Capital return per year	\$1,026,108,804		
Debt payment (per year)	\$1,550,334,153		

#### Travel per year per pod (km) 168,192

- Revenue per vehicle-km (US\$) 0.96
  - OPEX as % of project cost 5%
    - Debt Interest rate 5%
      - Debt term (yrs) 10
- Years to return equity capital 5
- Profit share when below capital return 90%
  - Profit share when below Target IRR 50%
  - Profit share when above Target IRR 10%

#### Pro Forma

Yea	rs O	1	2	3	4	5	6	7	8	9	10	11	12
Revenue	0	3,545,590,1	<b>6</b> 4,077,428,656	4,689,042,955	5,392,399,398	6,201,259,308	7,131,448,204	8,201,165,435	9,431,340,250	10,846,041,287	12,472,947,480	14,343,889,602	16,495,473,043
5% RoW+tax+fee	0%	177,279,5	203,871,433	234,452,148	269,619,970	310,062,965	356,572,410	410,058,272	471,567,012	542,302,064	623,647,374	717,194,480	824,773,652
Debt service	0	\$1,550,334,1	\$1,550,334,153	\$1,550,334,153	\$1,550,334,153	\$1,550,334,153	\$1,550,334,153	\$1,550,334,153	\$1,550,334,153	\$1,550,334,153	\$1,550,334,153	0	0
Investor balance		-\$4,150,017,8	3 -\$2,967,704,205	-\$1,638,199,381	-\$255,321,774	\$1,188,934,533	\$2,703,776,346	\$3,478,904,448	\$4,347,381,880	\$5,323,211,044	\$6,422,494,698	\$7,818,784,432	\$9,378,342,730

#### **Important Notices**

The information contained in this document is not an offer to sell or a solicitation to buy any security. These materials and documents and information from which they are derived or which are referred to by or accessible from them may contain forward looking statements within the meaning of Section 27A of the Securities Act of 1933, Section 2E of the Securities Exchange Act of 1934 and the Private Securities Litigation Reform Act of 1995. All statements other than statements of historical fact are forward looking statements and are subject to risks and uncertainties. Forward looking statements generally can be identified by the use of forward looking terminology such as "may," "will," "expect," "intend," "estimate," "project," "anticipate," "believe" or "plan" or the negative thereof or variations thereon or similar terminology. Although Transit X believes that the expectations reflected in such forward looking statements are reasonable, it can give no assurance that such expectations will prove to be correct. All forward looking statements or the date made. Except as required by law, Transit X undertakes no obligation to update any forward looking statement to reflect events or circumstances after the date on which it is made or to reflect the occurrence of anticipated or unanticipated events or circumstances. These materials and documents and information from which they are derived or which are referred to by or accessible from them represent Transit X's best estimate as to the allocation of the funding proceeds based upon its present business plan and financial condition. The costs and expenses to be incurred in pursuing the Company's business plan awill be achieved or that it will not be changed, and it is possible that the funding proceeds may be applied in a manner other than that described herein.