



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

# Newburyport, Massachusetts

# 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





# Transit X proposes to build and operate a privately-financed pod network to carry passengers and freight for Newburyport, Massachusetts that makes the Transit X service convenient to 95% 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.

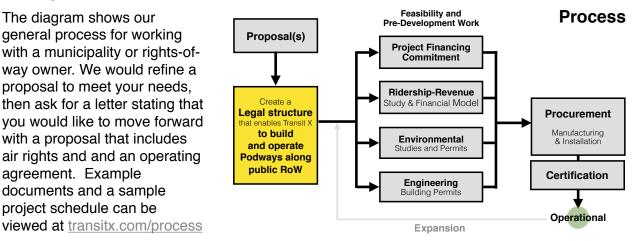
## **Revenue Generator**

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\$2 million per year average over the first 10 years. For specifics, please see the "Taxes and Fees" section of this proposal.

## 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**



# 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.

In parallel, we could refine the routes and meet with project stakeholders.

#### 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 (<u>transitx.com/process/operating\_agreement.html</u>)
- · 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 Newburyport through better transportation.

Sincerely,

Mike Stanley CEO, Transit X

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# **Project Overview**



	SIL X.			
	Transit X network length	18	km	11.0 miles
	People (resident-equivalent) in region	17,987	resident-equivalent p	population
	Route density ratio (route length to service area)	1.16		
	Number of stops	70		
	Triple-speed route length	0	km	
	Water crossing route length	0	km	
	Cost of fixed infrastructure	\$64,089,090		
	per person	\$3,563		
	Mode share of travel on Transit X	81%	(assumes full covera	age outside of region)
	Distance traveled on Transit X, per year	87,147,015	km	54,128,581 miles
	per day	238,759	km	148,297 miles
	Daily potential energy generation with standard panels on tracks	136	MWh	
	Sustainable energy use per day	5	MWh	3% of max capacit
E	Energy storage capital cost for 1 day(s) of supply at \$800 per kWh	\$3,612,428		
	Size (rated power) of solar installation	1,050	KW	
	Cost to generate sustainable energy (at \$2,000 per kW)	\$2,099,580		
	Cost of buying sustainable energy at \$0.15 per kWh	\$677	per day	7% of OPEX
	Daily passengers riding Transit X	14,525	customers	81% of the pop.
	Distance per passenger per day	16	km	10.2 miles
	Average distance per trip (assuming 3 trips per day)	5	km	3.4 miles
	Single passenger fare for shared 5 km trip	\$1.28		
	Passenger distance traveled during peak hour	47,752	km	29,659 miles
	Breakeven		customers per day	
	Broakeren	0,020	(35% of people conv	
	Number of pods for peak demand	353		,
	Number of customers per pod		and 51 people per	r pod
	Distance per pod per year	168,085		0.00/ /
	Two lower and announce area (00/ of route with olde meridian)	000		
	Two-layer pod garage area (3% of route with side-parking)	\$388		
	Cost of pods	\$2,294,500	is \$98 per person	
_	Cost of pods Capital cost of energy generation and storage	\$2,294,500		
Proj	Cost of pods	\$2,294,500	is \$98 per person	
Proj	Cost of pods Capital cost of energy generation and storage	\$2,294,500	is \$98 per person	
Proj	Cost of pods Capital cost of energy generation and storage ect Finances	\$2,294,500 \$7,425,611	is \$98 per person is \$413 per persor	
Proj	Cost of pods Capital cost of energy generation and storage <b>ject Finances</b> Total Project Cost (privately financed)	\$2,294,500 \$7,425,611 \$73,809,201	is \$98 per person is \$413 per persor	n
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# Project Overview p. 2



# Impact of proposed network

1	Reduction in GHG emissions (in metric tons of CO2-eq per year)	8,606 MTCO2-eq
2	Est. cost to maintain 61 km roadway (per year)	\$3,130,380
3	Reduced waste products per year	1,397 metric tons
4	Travel time saved per year	292 hrs/person
5	Cost savings per capita per year from reduced car ownership	\$1,386
6	Increase in household income from time saving and car costs	10%
7	Reported injuries avoided per year	54
8	Lives saved per year	1
9	Land freed from parking (50 acres)	200,438 m <sup>2</sup>
10	and its commercial value	\$200,438 per year
11	Health care savings	High

# **Model Inputs**

15	Ratio of road length to track length	4		
16	Walking speed		km/h	3 mph
17	Width of convenient swath along track	0.82		1 miles
18	Fixed cost per km. Solar+storage not included.	\$2,790,000		
19	Water crossing: additional cost per km	\$8,370,000		
20	Triple-speed: additional cost per km	\$5,580,000		
21	Rate factor for water crossings or high-speed links.	2.2		
	Average distance traveled per person per year			
22	(for trips under 1600 km)	10,000	km	6,211 miles
23	Average distance per day per person	27	km	
24	Mode share % of people convenient to Transit X	85%	at 5 min walk.	
25	Percentage of daily demand during peak hour	20%		
26	Maximum capacity per track	25,380	pph	
27	Average dwell time during peak hour		seconds	
28	% of pods traveling on route with highest demand	18%		
29	Average speed of pod	72	km/h	45 mph
30	Average # of trips for a daily customer	3	per day	
31	Average passengers per pod during peak hours	2.4	passengers	
32	Average passengers per pod		passengers	
	Average discount per passenger	19%		
33	Maximum passengers per pod	5	passengers	
34	Empty pods: Percentage non-revenue	25%		
35	Ex-Factory cost per pod	\$5,000		
36	Worldwide Median Income per Household (US\$)	10,000		
37	Average number of residents per household	2.3		
38	Base fare per km	\$0.39		
39	(per mile)	\$0.63		
40	O&M as % of project cost	5%		
41	Percentage debt financed	70%		
42	Length of loan/debt	10	years	
43	Interest rate for debt	5%		
44	kg CO2 emissions per liter of gasoline	2.37		
45	Monetary value of 1 hour personal time (USD)	\$13		
46	Eat. roadway maintenance per year per km	\$51,000		
47	Area of one parking lot space	23	m <sup>2</sup>	247 sf
48	Commercial income of land (annual)	\$1	per m <sup>2</sup>	
49	Distance from roadway that is convenient	0.25	km	
50	Stops per km	4.0		
51	Solar panel area per meter of track	2.0		
52	Cost of sustainable energy and storage	\$0.15	per kWh	
53	Global Horizontal Irradiance (GHI)		kWh/m²/day	
54	Cost to generate sustainable energy		per kW	
55	Energy storage cost		per kWh	
56	Energy storage capacity		days	
57	Area of parked pod	2.20	m <sup>2</sup>	
58	Distance discount at max distance	40%		
59	Max distance discount	500	km	
60	Max usage discount at 10,000 km per capita	50%		
61	Shared Pod Discount	20%		
62		40%		
02	Shared Pod Compartment Discount	40%		

Model Inputs	(continued)
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57	Name of region or project	Newburyport, Massa
58	Currency name	
59	Equal to US\$1	1
60	Sustainable energy/electricity generation & storage as	CAPEX
61	Land area of region (sq. km)	21.7
62	Number of residents in region	17,987
63	% travel within region	60%
64	% of land area served by roads	70%
65	Coverage: % of pop. convenient (5 min walk) to Transit X	95%
66	Median household income (US\$)	\$50,000
67	Convenient walk time to stop (min)	5
68	Triple-speed route length (km)	0
69	Water crossing route length (km)	0.0
70	Visitors per year	0
71	Average length of visit (days)	2
72	Solar production ratio	1.57
73	Regional Fare Factor	1.0
74	EPC costs & contingency	30%
75	Triple-speed (km/h)	242

# Pod & Car

		Pod	Car
76	Service life (years)	20	12
77	Full cost of vehicle per year	\$200	\$9,000
78	Public cost to maintain infrastructure (per km)	\$0	\$100,000
79	Energy Efficiency in MPGe	1188	24
80	Energy Efficiency in liters/100km	0.20	9.8
81	Energy used (Watt-hours/km)	28	1375
82	mass of CO2 per vehicle per km (kg)	0	0.09875
83	Vehicle mass (kg)	45	1950
84	Average speed of urban travel (km/h)	72	16
85	Typical travel time (in minutes) for 5 km trip	5	21
86	Fare/cost per km	\$0.39	\$0.62
87	Number of deaths per 100M passenger-km	0.00001	1
88	Number of injuries per 100M passenger-km	0.0006	62
89	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).

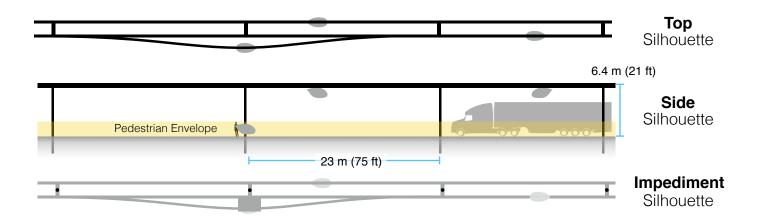
#### **Municipal rates** 1

2	Total commercial land (estimated)	1,519,000 m <sup>2</sup>	16,348,997 sq ft. (375.4 acres)
3	Total commercial muni revenue (US\$)	\$1,519,000	
4	TXCR (Transit X Commercial Rate)	\$1.00 per m <sup>2</sup>	
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	18 km	11 miles
8	Estimated gross revenue per unit length	\$2,966,405 per km	
9			
10	Government Tax	% of gross revenue with minimum.	
11	1% gross revenue	\$29,664 per route-km	
12	Minimum per year	\$1,652 per route-km	\$2,665 per route-mile
13	Air Rights Leasing Fee	% of gross revenue with minimum. Pr	oportioned based on length.
14	% of route on municipal land	90%	
15	4% gross revenue	\$118,656 per route-km	
16	Minimum per year	\$1,652 per route-km	\$2,665 per route-mile
17	Taxes, Fees		_
18	Paid to Municipality	<b>\$2,411,154</b> per year	
19	with minimum	\$55,477	

20	Paid to Private land owners	<b>\$209,666</b> if 10% of RoW is over private property
21	with minimum	\$2,920

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# Footprint calculations for minimum fee



1	Footprint Calculations	Metric	Imperial
2	Track width	<u>0.41</u> m	16.1 inches
3	Track height	<u>0.61</u> m	24.0 inches
4	Pole diameter	<u>0.3</u> m	11.8 inches
5	Pole cross section	<u>0.07</u> m <sup>2</sup>	0.8 sf
6	Stop landing area	2 m <sup>2</sup>	21.5 sf
7	width	<u>2</u> m	78.7 inches
	length	1 m	39.4 inches
9	Ramp length	<u>21</u> m	68.9 feet
	Pole span	<u>23</u> m	75.5 feet
11	Number of poles per unit length	<u>43.5</u> poles per k	m 70.0 poles per mile
12	Pole height	<u>6</u> m	19.7 feet
13			
14	Single track	1126.7 m <sup>2</sup>	12124 sf
	Area of Side Silhouette	688.3 m <sup>2</sup>	7406 sf
16	Area of Top Silhouette	423.1 m <sup>2</sup>	4553 sf
	Impediment Area (adjusted)	15.4 m <sup>2</sup>	165 sf
18			
19	Dual track	1536.7 m <sup>2</sup>	16535 sf
20	Area of Side Silhouette	688.3 m <sup>2</sup>	7406 sf
	Area of Top Silhouette	833.1 m <sup>2</sup>	8964 sf
	Impediment Area (adjusted)	15.4 m <sup>2</sup>	165 sf
23			
24	Stop	57.8 m <sup>2</sup>	622 sf
	Area of Side Silhouette	25.6 m <sup>2</sup>	276 sf
	Area of Top Silhouette	22.2 m <sup>2</sup>	239 sf
	•		
27	Impediment Area (adjusted)	10.0 m <sup>2</sup>	108 sf
28			
29	Stops	2 stops per k	m 3.2 stops per mile
30	% of dual track	100%	
31			
32	Average area per unit length	1,652 m <sup>2</sup> per rout	e-km 28,678 sf per route-mile
33			
34	Contract values		
35	% gross revenue for muni tax/fee	1%	
	% gross revenue for air rights (RoW)	4%	
	% gross revenue for RoW+tax+fee	5%	
	Impediment Factor	5	



Summary	The average commute would be 3.5 times faster saving each commuter 295 hours per year.*
Cummary	At 0.23 USD per km, a typical commute on Transit X is 17% less than public transit and 74% less than a Taxi.*

			Trip Length	
AI	I prices in USD	2 km	10 km	40 km
	Transit X	<b>0.47</b> to 0.78	<b>2.30</b> to 3.86	<b>8.84</b> to 15.06
P	ublic transit average	2 min., 3.6x faster	8 min., 3.6x faster	33 min., 3.4x faster
odes	Taxi	<b>3.62</b> 2 to 6 minutes	<b>15.75</b> 8 to 30 minutes	<b>61.27</b> 30 to 120 minutes
Common public modes	Uber/Lyft	<b>2.75</b> 2 to 6 minutes	<b>11.34</b> 8 to 30 minutes	<b>43.55</b> 30 to 120 minutes
non pi	Public Bus	<b>2.10</b> 3 to 12 minutes	<b>2.10</b> 15 to 60 minutes	<b>3.22</b> 60 to 240 minutes
Com	Train	<b>3.15</b> 2 to 12 minutes	<b>3.71</b> 8 to 60 minutes	<b>5.81</b> 30 to 240 minutes
P	Personal car	<b>1.73</b> 2 to 6 minutes	<b>5.60</b> 8 to 30 minutes	<b>20.13</b> 30 to 120 minutes
Travel m	Avg. Low Higt Speed Speed spee ode km/h km/h km/h	d Dist D	ax Time Mode share ist. cost 6% 70% 24% m per min 2 10 40	* All numbers on mode shares, speeds, and cos are rough estimates

	Speed	Speed	speed				Dist	Dist.	COST	6%	70%	24%
Travel mode	km/h	km/h	km/h	Base	Includ es km	Over per-km	km	km	per min	2	10	40
Тахі	30	20	80	2.10	1	1.05	0.5	100	0.93	5%	4%	1%
Uber/Lyft	30	20	80	1.68	1	0.84	0.5	100	0.47	10%	10%	2%
Public Bus	15	10	40	2.10	20	0.06	0.5	50	0	50%	50%	40%
Train	30	10	80	3.15	2	0.07	2	100	0	35%	36%	57%
Transit X	72	72	72	0	0	0.23	0.1	50	0	-	-	-
Personal car	30	20	80	0.76	0	0.38	0.1	400	0.21	-	-	-

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.

# 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	10,000	USD	Global median household income. Updated annually based on most recent
1	Clobalitorito	10,000	000	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	0.09	USD/km	Global rate: Globalincome * PercentincomeForTransport / AliTravel
5	MedianIncomeOrigin	\$50,000	USD	Median household income at origin. External input. Based on reliable public data source updated annually.
6	MedianIncomeDest	\$50,000	USD	Median household income at destination. External input. Based on reliable public data updated annually.
7	RegionalRate	0.43	USD/km	Regional rate based on median income: MedianIncomeOrigin * PercentIncomeForTransport / AllTravel
8	UnderIncomeRate	0.00	USD/km	Under global income adjustment: if (RegionalRate < GlobalRate, GlobalRate - RegionalRate, 0)
9	NominalRate	0.43	USD/km	Nominal rate: RegionalRate + UnderIncomeRate
10	RegionalFactor	1.00		Regional Fare Factor. Negotiated upfront to make network financially viable.
11	AdjustedRate	0.43	USD/km	Regional adjusted rate: NominalRate * RegionalFactor
13	Population	17,987		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	87,147,015	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	21%		Percent of Total Travel Per Capita on Transit X: PassengerTravel / (Population x AllTravel)
16	BaseRate	0.39	USD/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	0.86	USD/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	0.000311	USD/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	0.31	USD/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	0.31	USD/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	0.23	USD/km	Rate for shared compartment BaseRate x (1 - SharedCompartmentDiscount)
29		0.26	USD/km	Rate for 500 km in single-passenger pod.
30	Senior + SharedCompartmentRate	0.11	USD/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	64,488,791	km	Passenger distance under base fare. Audited value from operational data.
			NIT .	Percent of passenger distance under base fare:
32	PercentBase	74%		DistanceBase / PassengerTravel
33	BaseRevenue	20,342,710	USD	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	12,192,381	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	\$74 million				
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	\$2,411,154				
Benefits to society and environment	Extremely high				

# **Financials**

(US\$ in millions)

	Year 1	Total Years 1-12		
Gross Revenues	18	427		
Taxes and fees	1	21		
Debt service	\$7	\$67		

# ESG (Environmental, Social, Governance) Benefits

Clean energy	yes	Resiliency	yes
Energy security	yes	Sustainable	yes
Emissions-free	yes	Equitable	yes
GHG-free	yes	Recyclable mat.	yes
Lowers pollution	yes	Affordable housing	yes
Clean water	yes	Improved Health	yes
Improved Safety	yes	Economic Devel.	yes
Fixe Infrastructure	yes	Food security	yes



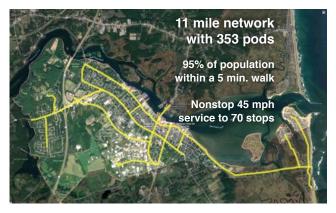


Transit X, LLC presents a preliminary proposal for a privately-funded fleet of fully-autonomous shared electric vehicles on local and regional podway network for

# Newburyport, Massachusetts

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
Project financing	Letter of Interest	Yes
Demonstration system	In development	Yes
Rider-Revenue study	Proposals	Yes
Environmental study		Yes
Air rights	Resolution	Ordinance
Permits	Known process	Yes
Safety certification	Guar. fixed price	Yes
Installation	Letter of intent	Guar. fixed price
<b>Operations &amp; Maint</b>	Letter of intent	Guar. fixed price
Project Management	Appointed	Yes
EPC	Appointed	Yes

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

# 12-year Pro Forma



# **Model Inputs and Assumptions**

Route length (km)	18
Starting number of pods	118
Projected revenue growth	15%
Project Cost (Privately funded)	\$73,809,201
% Debt financed	70%
Debt	\$51,666,441
Equity	\$22,142,760
Capital return per year	\$4,428,552
Debt payment (per year)	\$6,691,040

#### Travel per year per pod (km) 168,085

- Revenue per vehicle-km (US\$) 0.88
  - 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

٢	ears (	0	1	2	3	4	5	6	7	8	9	10	11	12
Revenue		0	17,521,624	20,149,868	23,172,348	26,648,200	30,645,430	35,242,245	40,528,581	46,607,869	53,599,049	61,638,906	70,884,742	81,517,453
5% RoW+tax+fee	<b>e</b> 0	)%	876,081	1,007,493	1,158,617	1,332,410	1,532,272	1,762,112	2,026,429	2,330,393	2,679,952	3,081,945	3,544,237	4,075,873
Debt service		0	\$6,691,040	\$6,691,040	\$6,691,040	\$6,691,040	\$6,691,040	\$6,691,040	\$6,691,040	\$6,691,040	\$6,691,040	\$6,691,040	0	0
Investor balance	•		-\$16,801,278	-\$11,008,391	-\$4,976,916	\$1,328,934	\$7,950,317	\$14,934,561	\$18,793,255	\$23,131,834	\$28,022,280	\$33,547,374	\$40,471,417	\$48,234,781

#### **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 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 cannot be predicted with certainty. There can be no assurance that unforeseen events will not occur or that the Company's business plan will 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.