



Transit X presents a preliminary proposal for a privately-financed, solar-powered micro-rail network — a fleet of automated electric vehicles (pods) for passengers and freight on a local and regional podway providing public transportation for

# Shanghai, China

This proposal is downloadable at transitx.com/proposals/Transit\_X\_for\_Shanghai,China.pdf

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

A 24-page companion Transit X Handbook is available at transitx.com/transitxhandbook.pdf

# 6,848 km network with 635,345 pods

90% of population within a 5 min. walk

Nonstop 72 km/h service to 27,670 stops



# Transit X proposes to build and operate a green, privately-financed micro-rail podway to carry passengers and freight for Shanghai that makes the Transit X service convenient to 90% 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.

#### **High Capacity**

A single track carries 12,000 pods per hour (20,000 to 50,000 passengers per hour). Two boarding areas fit in a single car space and provide 2,000 boardings per hour.

#### Zero Footprint and Minimal Disruption

Transit X features stops that don't interfere with pedestrians or other forms of transportation. We use easements alongside highway and roads and integrate utility lines and poles Non-stop interchanges fit above existing intersections. Factory-built tracks and posts enable fast installation with minimal disruption. Use of underground tunnels is an option. Posts are typically spaced at 23 m (25 yds).

#### No public funding

Transit X does not require government funding because our revenue from fares, freight, and advertising is greater than our costs. We have reduced or eliminated many costs of transportation including the cost of materials, land, construction, fuel,

debt service, and labor. Our projects are financed by investment banks and private equity firms.

#### **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. The rollout and maiden flight occurred on Oct 29, 2018 in Leominster, Massachusetts. The first Transit X system will be demonstrated by the end of 2019.

#### **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, efficient and have zero 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. Parking lots and roadways can be converted into green space and community paths as they become unnecessary.

#### Sustainable and Efficient

Pods weigh only 45 kg (100 lbs) and achieve over 20 times the efficiency of electric cars. Solar, wind, and storage installed on our tracks and posts can provide 100% of the clean energy needed to power the system.

#### 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 greater use of public transit and fewer cars.

#### **De-risking Projects**

Transit X partners 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 work with local construction firms.

#### Jobs and Workforce Development

Many regional jobs will be created to build a new transportation infrastructure, as well many new types of jobs will be created from economic growth. The majority of the construction jobs will be locally sourced and preferential hiring is given to those displaced by the transition.

#### **Revenue Generator**

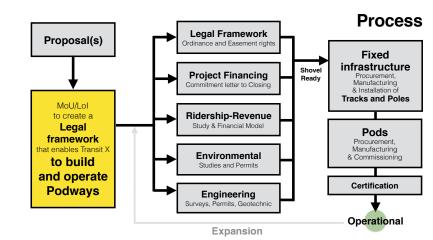
Not only does Transit X not require public financing, but the government and private easement owners receive 4-5% of gross revenue, which would be US\$1,482 million per year average over the first 10 years.

#### 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 process for a project. We submit a project proposal, then ask for a commitment for Transit X to build and operate a podway along rights-of-way easements. 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 ridesharing 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.

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 look to receive a commitment for Transit X to build and operate a podway along rights-of-way easements.

A podway network is rolled out in phases that each take less than 24 months.

#### **Other Resources**

The links below provide general information about Transit X:

- One minute video overview (transitx.com/video)
- <u>Transit X Handbook (transitx.com/transitxhandbook.pdf</u>)
- · Letters of Project Financing, Due Diligence, Contracts (transitx.com/letters.pdf)
- Memorandum of Understanding template (transitx.com/process/mou.html)
- Example Right-of-Way agreement (transitx.com/process/resolution.html)
- Operating Agreement (transitx.com/process/operating\_agreement.html)
- General Q & A (transitx.com/QandA.html)
- Other proposals (transitx.com/proposals)

#### 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 Shanghai through better transportation.

Sincerely,



Email: rodneydixon@transitx.com or hello@transitx.com Telephone: +1 818-855-4106 (WhatsApp connected) Zoom e-room: https://zoom.us/j/8229009123 Website: transitx.com Twitter: http://twitter.com/TransitXCorp Mail: 1127 Commonwealth Ave #30, Boston, MA 02134 USA





## **Project Overview**

1	Transit X network length	6,848	km	
2	People (resident-equivalent) in region	34,000,000	resident-equivalent po	opulation
3	Route density ratio (route length to service area)	1.10		
4	Number of stops	27,670		
5	Triple-speed route length	0	km	
6	Water crossing route length	0	km	
7	Cost of fixed infrastructure	\$24,838,711,560		
8	per person	\$731		
9	Mode share of travel on Transit X (25% after first year)		after 10 years	
10	Distance traveled by passengers on Transit X, per year	234,090,000,000		
11	per day	641,342,466		
12	Daily potential energy generation with standard panels on tracks	52,595		<b>5</b> 0/ of many several to
13	Sustainable energy use per day	2,711	MWh	5% of max capacity
14	Energy storage capital cost for 1 day(s) of supply at \$100 per kWh	\$271,080,453		
15	Size (rated power) of solar installation	630,219	KW	
16	Cost to generate sustainable energy (at \$1,000 per kW)	\$630,218,887		
17	Cost of buying sustainable energy at \$0.15 per kWh	\$406,621	1	10% of OPEX 77% of the pop.
18	Daily passengers riding Transit X	26,010,000		77 % of the pop.
19 20	Distance per passenger per day	-	km km	
	Average distance per trip (assuming 3 trips per day)	\$ <b>0.</b> 55		
21 22	Single passenger fare for shared 8 km trip Passenger distance traveled during peak hour	128,268,493	3.72	RMB
				7% of expected and 23%
23	Breakeven			7% of expected and 23% to Transit X)
24	Boarding capacity		passengers per hour	(38% of customers)
25	Number of pods for peak demand	635,345	pods at 77% mo	ode share
25 26	Number of pods for peak demand Number of customers per pod		pods at 77% mo and 54 people per	
	Number of customers per pod Distance per pod per year		and 54 people per	
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## Project Overview p. 2



#### Impact of proposed network

1	Reduction in GHG emissions (metric tons CO2-eq)
2	Estimated cost to maintain public roadways
3	Reduced waste products
4	Travel time saved (non-stop travel and congestion)
5	Cost savings from reduced car ownership
6	Increase in household income (from time savings and car costs)
7	Reported injuries avoided
8	Lives saved (from safety)
9	Land freed from parking (133,039 acres)
12	Temperature reduction (from heat island effect & GHG reductions)
11	Health care savings (from pollution, injuries)

#### **Model Inputs**

	-	
15	Ratio of road length to track length	
16	Walking speed	
17	Width of convenient swath along track	
18	Fixed cost per km (track & posts)	\$2
19	Water crossing: additional cost per km	\$8
20	Triple-speed: additional cost per km	\$5
21	Rate factor for water crossings or high-speed links.	
22	Average distance traveled per person per year	
22	(for trips under 1600 km)	
23	Average distance per day per person	
24	Mode share % of people convenient to Transit X	
25	Percentage of daily demand during peak hour	
26	Maximum capacity per track	
27	Average dwell time during peak hour	
28	% of pods traveling on route with highest demand	
29	Average speed of pod	
30	Average # of trips for a daily customer	
31	Average passengers per pod during peak hours	
32	Average passengers per pod	
	Average discount per passenger	
33	Maximum passengers per pod	
34	Empty pods: Percentage non-revenue	
35	Ex-Factory cost per pod	
36	Worldwide Median Income per Household (US\$)	
37	Average number of residents per household	
38	Base fare per km	
39	(per mile)	
40	O&M as % of project cost	
41	Percentage debt financed	
42	Length of loan/debt	
43	Interest rate for debt	
44	kg CO2 emissions per liter of gasoline	
45	Monetary value of 1 hour personal time (USD)	
46	Eat. roadway maintenance per year per km	
47	Area of one parking lot space Commercial income of land (annual)	
48	Distance from roadway that is convenient	
49	Stops per km	
50	Boarding capacity per stop	
51 52	Solar panel area per meter of track	
52 53	Cost of sustainable energy and storage	
54	Global Horizontal Irradiance (GHI)	
55	Cost to generate sustainable energy	
56	Storage per column	
57	Typical span	
58	Energy storage cost	
59	Energy storage capacity	
60	Area of parked pod	
61	Distance discount at max distance	
62	Max distance discount	
63	Max usage discount at 10,000 km per capita	
64	Shared Pod Discount	
65	Shared Pod Compartment Discount	
66	Mode share starting discount	
00		

4		
-	km/h	
0.82		
\$2,790,000		BMB
\$8,370,000	10,072,000	
\$5,580,000		
2.2		
<b>LL</b>		
10,000	km	
27	km	
85%	at 5 min walk.	
20%		
37,854	pph	
10	seconds	
18%		
72	km/h	45 mph
3	per day	
3.5	passengers	
2.2	passengers	
25%		
5	passengers	
25%		
\$5,000	34,000	RMB
10,000	68,000	RMB
2.3		RMB
\$0.11	0.8	RMB
\$0.18	1.2	RMB
5%		
70%		
10	years	
7%		
2.37		
\$3.75		RMB
\$51,000	346,800	RMB
	m <sup>2</sup>	
\$0.30	per m <sup>2</sup>	RMB
0.25	km	
4.0		
360	pph	
2.0		
\$0.15		
3.8	kWh/m²/day	
	per kW	
40 23		4.4
23 \$100		44
\$100 1	•	
	m <sup>2</sup>	
40%		
	km	
50%		
20%		
40%		
67%		

23,116,388	MTCO2-eq annually
\$1,280,628,360	annually
3,751,292	metric tons annually
438	hrs/person annually
\$4,582	per person annually
41%	
145,136	annually
1,451	annually
538,407,000	m <sup>2</sup>
0.5 to 2	°C
High	

#### Model Inputs (continued)

68	Name of region or project	Shanghai, China
69	Currency name	RMB
70	Equal to US\$1	6.8
71	Sustainable energy/electricity generation & storage as	CAPEX
72	Land area of region (sq. km)	6,341
73	Number of residents in region	34,000,000
74	% travel within region	90%
75	% of land area served by roads	98%
76	Coverage: % of pop. convenient (5 min walk) to Transit X	90%
77	Annual median household income (US\$)	\$15,000
78	Convenient walk time to stop (min)	5
79	Triple-speed route length (km)	0
80	Water crossing route length (km)	0.0
81	Visitors per year	0
82	Average length of visit (days)	2
83	Solar production ratio	1.57
84	Regional Fare Factor	1.0
85	EPC costs & contingency	30%
86	Triple-speed (km/h)	242
87	Trip Distance Factor	1
88	Number of Stops Factor	1

#### Pod & Car

	Pod	Car
Service life (years)	20	12
Full cost of vehicle per year	\$200	\$9,000
Public cost to maintain infrastructure (per km)	\$0	\$100,000
Energy consumption (MPGe)	3564	24
Energy consumption (liters/100km)	0.07	9.8
Energy consumption (Watt-hours/km)	9	1375
mass of CO2 per vehicle per km (kg)	0	0.09875
Vehicle mass (kg)	45	1950
Average speed of urban travel (km/h)	72	16
Typical travel time (in minutes) for 8 km trip	7	31
Fare/cost per km	\$0.11	\$0.62
Number of deaths per 100M passenger-km	0.00001	1
Number of injuries per 100M passenger-km	0.0006	62
Volume to park (cubic meters)	5.7	70.9
	Full cost of vehicle per year Public cost to maintain infrastructure (per km) Energy consumption (MPGe) Energy consumption (liters/100km) Energy consumption (Watt-hours/km) mass of CO2 per vehicle per km (kg) Vehicle mass (kg) Average speed of urban travel (km/h) Typical travel time (in minutes) for 8 km trip Fare/cost per km Number of deaths per 100M passenger-km Number of injuries per 100M passenger-km	Service life (years)20Full cost of vehicle per year\$200Public cost to maintain infrastructure (per km)\$0Energy consumption (MPGe)3564Energy consumption (liters/100km)0.07Energy consumption (Watt-hours/km)9mass of CO2 per vehicle per km (kg)0Vehicle mass (kg)45Average speed of urban travel (km/h)72Typical travel time (in minutes) for 8 km trip Fare/cost per km\$0.0001Number of deaths per 100M passenger-km0.00061



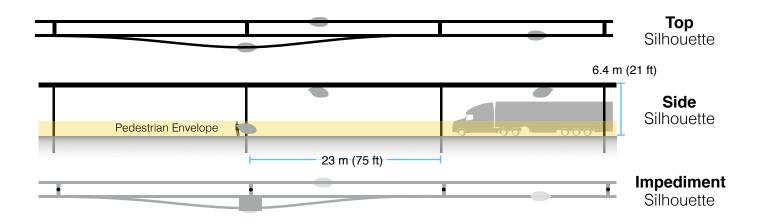
## **Taxes and Fees**

## 5% of gross revenue is paid for air rights and local taxes.

A minimum payment is based on the Footprint and the Transit X Commercial Rate (TXCR).

1	Air-rights and Local Taxes	S	(for calcul	ating minimums)
2	Total commercial land (estimated)	621,418,000	m <sup>2</sup>	acres
3	Total commercial gov't revenue (US\$)	\$186,425,400		1,267,692,720 RMB
4	TXCR (Transit X Commercial Rate)	\$0.30	per m²	2.0 RMB
5	TXCR is the yearly tax rate per land area. Calculation: total land area of commercial properties in the governmental region, divided by all the governmental income generated by those properties. The TXCR is used to calculate the minimum tax/fee.			
7	Private Easement Fees	For example		
8	4% of gross revenue	\$54.27	per route- meter	
9	Minimum per year	\$0.45	per route- meter	
10	Government Fees a	nd Taxes		
11	% of route on government easements	98%		
12	5% on government easements	\$1,821,216,854		12,384,274,606 RMB
13	1% on private easements	\$7,433,538		
	Total air-rights and local taxes	\$1,828,650,392	per year	12,434,822,666 RMB
14	Iotal all-fights and local taxes			
14 16	per resident	\$54		366 RMB

## Footprint calculations for minimum fee



1	Footprint Calculations	Metric	Imperial
2	Track width	<u>0.30</u> m	
3	Track height	<u>0.60</u> m	
4	Post diameter	<u>0.3</u> m	
5	Post cross section	<u>0.07</u> m <sup>2</sup>	
6	Stop landing area	<u>3.75</u> m²	
7	width	<u>1.5</u> m	
8	length	<u>2.5</u> m	
9	Ramp length	<u>21</u> m	
10	Typical Span	<u>23</u> m	
11	Number of posts per unit length	<u>43.5</u> poles pe	er km
12	Post height	<u>6</u> m	
13			
14	Single track	1022.1 m <sup>2</sup>	
15	Area of Side Silhouette	678.3 m <sup>2</sup>	
16	Area of Top Silhouette	313.1 m <sup>2</sup>	
17	Impediment Area (adjusted)	30.7 m <sup>2</sup>	
18			
19	Dual track	1322.1 m <sup>2</sup>	
20	Area of Side Silhouette	678.3 m <sup>2</sup>	
21	Area of Top Silhouette	613.1 m <sup>2</sup>	
22	Impediment Area (adjusted)	30.7 m <sup>2</sup>	
23			
24	Stop	82.1 m <sup>2</sup>	
25	Area of Side Silhouette	25.2 m <sup>2</sup>	
26	Area of Top Silhouette	19.4 m <sup>2</sup>	
27	Impediment Area (adjusted)	37.5 m <sup>2</sup>	
28			
		0 - +	
29 30	Stops with dedicated landing areas % of dual track	2 stops pe	er km
	% of dual track	100%	
31			
32	Average area per unit length	1,486 m² per r	oute-km
33			
34	Contract values		
35	% gross revenue for government on private prop.	1%	
36	% gross revenue for private easement	4%	
37	% gross revenue for government easement	5%	
38	Impediment Factor	10	

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Summary

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

At 0.45 RMB per km, a typical commute on Transit X is 17% less than public transit and 74% less than a Taxi.\*

				_	Trip Length									
All	price	s in	RME	<u> </u>		2 k	m			1	0	٢m	)	40 km
Transit X					<b>0.90</b> to 1.51 2 min., 3.6x faster				<b>4.46</b> <b>to 7.48</b> 8 min., 3.6x faster			ster	<b>17.14</b> to 29.20 33 min., 3.4x faster	
Public transit average			I		5.0	06			8	<b>3.C</b>	)5		11.80	
nodes		Тах	i		<b>7.01</b> 2 to 6 minutes					<b>30.55</b> 8 to 30 minutes				<b>118.79</b> 30 to 120 minutes
Common public modes	Uber/Lyft				<b>5.34</b> 2 to 6 minutes				<b>21.99</b> 8 to 30 minutes			es	<b>84.44</b> 30 to 120 minutes	
d uou	Pul	olic	Bus		<b>4.07</b> 3 to 12 minutes				<b>4.07</b> 15 to 60 minutes			tes	<b>6.24</b> 60 to 240 minutes	
Com		Trai	n		<b>6.11</b> 2 to 12 minutes				<b>7.20</b> 8 to 60 minutes			es	<b>11.27</b> 30 to 240 minutes	
Pe	erso	nal	car		2 t	<b>5.4</b>	<b>19</b> ninute	es		<b>1</b> 8 to 3	<b>6.</b> 30 m			<b>58.27</b> 30 to 120 minutes
Travel mod		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		shar 70%	-	* All numbers on mode shares, speeds, and cos are rough estimates
Taxi		30	20	80	4.07	1	2.04	0.5	100	1.81	5%	4%	1%	
Uber/Lyft		30	20	80	3.26	1		0.5		0.91		10%		
Public Bu	S	15	10	40	4.07	20	0.11	0.5	50	0	50%	50%	40%	

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 less than the amount of discounted fares. Transit X Fair Fare Formula and Fair Freight Formula is universal and applies to all regions and all times.

50

0

0

0.06

35% 36% 57%

0.14 2 100

1.36 0.1 400

0.45 0.1

30

72

30

10

72

20

80

72

80

6.11

2.72

0

2

0

0

Train

Transit X

Personal car



## **Fair Fare Formula**

## Fare rates are updated annually using this formula

	IT GHOID X.			
	Formula Name	Value	Units	Description of the value or model input
-1	GlobalIncome	<u> </u>		Global median household income. Updated annually based on most recent
1	Giobalincome	68,000	RMB	standard published data.
2	AllTravel	23,000	km	Travel distance per household per year on any mode for trips under 1600 km. A global constant
3	PercentIncomeForTransport	20%		% of median household income for all transportation under 1600 km trips. A global constant.
4	GlobalRate	0.59	RMB/km	Global rate: GlobalIncome * PercentIncomeForTransport / AllTravel
5	IncomeFirst	\$102,000	RMB	Median household income at first stop (per person per day). External input. Based on reliable public data source updated annually.
6	IncomeDest	\$153,000	RMB	Median household income at destination per trip. External input. Based on reliable public data updated annually.
7	RegionalRate	0.89	RMB/km	Regional rate based on median income: MedianIncomeFirst * PercentIncomeForTransport / AllTravel
8	UnderIncomeRate	0.00	RMB/km	Under global income adjustment: if (RegionalRate < GlobalRate, GlobalRate - RegionalRate, 0)
9	NominalRate	0.89	RMB/km	Nominal rate: RegionalRate + UnderIncomeRate
10	RegionalFactor	1.00		Regional Fare Factor. Negotiated upfront to make network financially viable.
11	AdjustedRate	0.89	RMB/km	Regional adjusted rate: NominalRate * RegionalFactor
13	Population	34,000,000		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	234,090,000,000	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	30%		Percent of Total Travel Per Capita on Transit X: PassengerTravel / (Population x AllTravel)
16	BaseRate	0.75	RMB/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	1.66	RMB/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	0.000603	RMB/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	0.60	RMB/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	0.60	RMB/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	0.45	RMB/km	Rate for shared compartment BaseRate x (1 - SharedCompartmentDiscount)
29	SingleOccupancyMaxDistance	0.51	RMB/km	Rate for 500 km in single-passenger pod. Rate for a Senior taking a 500 km trip in a shared compartment.
30	Senior + SharedCompartmentRate	0.22	RMB/km	BaseRate x (1 - SeniorDiscountAmount) x (1 - SharedCompartmentDiscount) x (1 - MaxDistanceDiscount)
31	50PctIncomeAtDest	25%		% Higher fare rate if Destination has 50% higher median income than First (IncomeDest / IncomeFirst - 1) / 2
32	DistanceBase	173,226,600,000	km	Passenger distance under base fare. Audited value from operational data.
33	PercentBase	74%		Percent of passenger distance under base fare: DistanceBase / PassengerTravel
34	BaseRevenue	98,088,084,637	RMB	Annual revenue from all travel under base rate. Audited value from operational data.
35	AverageDiscount	25%		Average fare discount from Base Rate: 1 - (BaseRevenue / (DIstanceDase x BaseRate))
36	MarketFactor	1.0		Market rate factor. Negotiated value for setting ratio of AverageDiscount
37	MarketRateCap	25%		Cap on passenger travel distance at market rate: AverageDiscount x MarketFactor
38	MarketTravelCap	43,171,190,805	km	Cap on passenger travel distance at market rate: DistanceBase x MarketRateCap

## **Project Summary**

Project Description	A fully-automated, solar-powered, micro- rail network. A transportation utility.									
Project type	<b>Privately-funded Public Transit</b> Design, Build, Finance, Own, Operate, Maintain (DBFOOM)									
Project cost	US\$30.14 billion									
Cost to Gov't	\$0									
Structure	Privately financed equity and debt									
Debt term	10 years @ 7%									
Equity terms	<ul><li>A waterfall profit distribution per year with:</li><li>1. 90% until capital payback,</li><li>2. then 50% until Target% is reached</li><li>3. then 10%</li></ul>									
Taxes & Fees	\$1,828,650,392 per year									
Benefits to society and environment	Extremely high									

### **Financials**

(US\$ in millions)

	Year 1	Total Years 1-12
Gross Revenues	12,265	355,716
Taxes and fees	613	17,786
Debt service	\$1,477	\$16,246

#### 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

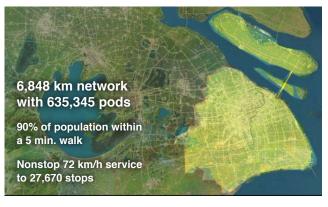




Transit X presents a preliminary proposal for a privately-financed, solarpowered public transit network — a fleet of fully-autonomous, shared, electric, 4-passenger vehicles (pods) on a local and regional podway

#### Shanghai, China

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



#### About Transit X

Transit X finances, designs, builds, and operates solar-electric micro-rail public transit podways to supplant buses, trains, cars, and trucks. Transit X offers its service to governments and commercial developers. Maiden Flight was on Oct 29, 2018 and pilot projects started in 2018. First pilots will break ground in 2019 and begin operations in 2020. Transit X is a privately held company founded in 2015, based in Boston, Massachusetts.

#### Status

	Now	Prior to close
Project financing	Letter of intent	Yes
Outdoor test system	Dec, 2019	Yes
Rider-Revenue study	Preliminary	Yes
Environmental study	Per region	Yes
Air rights	Per project	Yes
Permitting	Per project	Yes
Safety certification	In process	Yes
Construction firm	Per project	Yes
Design and major subs	Per project	Yes
<b>Operations &amp; Maint</b>	Yes	Yes
Utility relocation	Per project	Agreements

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)	6,848
Starting number of pods	209,664
Projected revenue growth	15%
Project Cost (Privately funded)	\$30,140,143,201
% Debt financed	70%
Debt	\$21,098,100,241
Equity	\$9,042,042,960
Debt payment (per year)	\$1,476,867,017

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

- Revenue per vehicle-km (US\$) 0.35
  - OPEX as % of project cost 5%
    - Debt Interest rate 7%
      - Debt term (yrs) 10
- Profit share when below capital return 90%
  - Profit share when below Target IRR 50%
  - Profit share when above Target IRR 10%

#### Pro Forma

Years	0	1	2	3	4	5	6	7	8	9	10	11	12
Revenue	0	12,265,346,770	14,105,148,786	16,220,921,103	18,654,059,269	21,452,168,159	24,669,993,383	28,370,492,391	32,626,066,249	37,519,976,187	43,147,972,615	49,620,168,507	57,063,193,783
5% RoW+tax+fee	0%	613,267,339	705,257,439	811,046,055	932,702,963	1,072,608,408	1,233,499,669	1,418,524,620	1,631,303,312	1,875,998,809	2,157,398,631	2,481,008,425	2,853,159,689
Debt service	0	\$1,476,867,017	\$1,476,867,017	\$1,476,867,017	\$1,476,867,017	\$1,476,867,017	\$1,476,867,017	\$1,476,867,017	\$1,476,867,017	\$1,476,867,017	\$1,476,867,017	\$1,476,867,017	\$1,476,867,017

Investor share	0	7,021,246,256	4,022,938,808	2,159,644,351	2,340,771,935	2,549,068,657	2,788,609,887	3,064,082,301	3,380,875,578	3,745,187,846	4,164,146,954	4,645,949,928	5,200,023,349
Investor share (%)		90%	44%	20%	19%	17%	16%	15%	15%	14%	14%	13%	13%
Share / Orig Capital	0%	78%	44%	24%	26%	28%	31%	34%	37%	41%	46%	51%	58%

#### **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.