



Transit X presents a preliminary proposal for a sustainable micro-rail network a fleet of automated electric vehicles (pods) for passengers and freight on a local and regional podway providing equitable public transportation for

# Adelaide, Australia

This proposal is downloadable at transitx.com/proposals/Transit X for Adelaide,Australia.pdf

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

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

# 1,516 km network with 39,243 pods

95% of population within a 5 min. walk

Nonstop 72 km/h service to 6,130 stops



### Transit X proposes to finance, build and operate a sustainable microrail podway to carry passengers and freight for Adelaide 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.

### **High Capacity & High Speed**

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. For urban commutes, pods trips are 3 times faster than car trips and the high-speed podway provides faster door-to-door trips than air travel for distances of 1,000 miles or less.

### 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. There are options for long crossings using bridges or underground tunnels. Posts are typically spaced at 23 m (25 yds).

### Low-cost Infrastructure & equitable fares

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 typically financed by investment banks, private equity firms, banks, and governments.

### **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 55 kg (121 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 for Government**

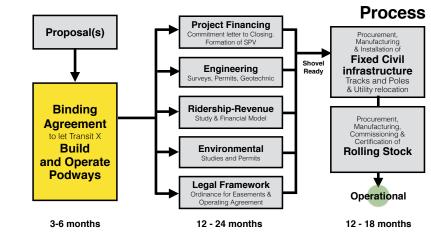
Not only does Transit X not require public financing, but the government and private easement owners receive 4-5% of gross revenue, which would be US\$219 million per year average over the first 10 years.

### 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</u> (transitx.com/transitxhandbook.pdf)
- · 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 (<u>transitx.com/process/resolution.html</u>)
- · 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 Adelaide through better transportation.

Sincerely,



Email: hello@transitx.com

Telephone: +1 508-596-7024 (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	1,516	km	
2	People (resident-equivalent) in region	1,333,927	resident-equivalent p	opulation
3	Route density ratio (route length to service area)	1.16		
4	Number of stops	6,130		
5	Triple-speed route length	0	km	
6	Water crossing route length	0	km	
7	Cost of fixed infrastructure	\$5,498,413,567		
8	per person	\$4,122		
9	Mode share of travel on Transit X (27% after first year)	81%	after 10 years	
10	Distance traveled by passengers on Transit X, per year	9,694,314,473	km	
11	per day	26,559,766		
12	Daily potential energy generation with standard panels on tracks	11,642.6		
13	Sustainable energy use per day	167.4	MWh	1.0% of max capacity
14	Energy storage capital cost for 1 day(s) of supply at \$250 per kWh	\$41,859,363		
15	Size (rated power) of solar installation	38,927	KW	
16	Cost to generate sustainable energy (at \$1,000 per kW)	\$38,926,541		
17	Cost of buying sustainable energy at \$0.15 per kWh	\$25,116		3% of OPEX
18	Daily passengers riding Transit X	1,077,146		81% of the pop.
19	Distance per passenger per day	-	km	
20	Average distance per trip (assuming 3 trips per day)		km	
21	Single passenger fare for shared 8 km trip	\$1.81	2.65	AUD
22	Passenger distance traveled during peak hour	5,311,953		
23	Breakeven	383,775	customers per day (3 of people convenient	6% of expected and 30% to Transit X)
24	Boarding capacity	2,206,800	passengers per hour	(205% of customers)
25	Number of pods for peak demand	39,243	pods at 81% mo	ode share
26	Number of customers per pod		and 34 people per	
27	Distance per pod per year	168,193		
28	Two-layer pod garage area (4% of route with side-parking)	43,167	m²	0.2% of car parking
29	Cost of pods	\$255,079,500	is \$147 per person	I
30	Capital cost of energy generation and storage		is \$79 per person	
	oject Finances			
32	Total Project Cost	\$5,858,514,742	8,612,016,671	AUD
33	Project cost per km	\$3,864,539		
34	Equity financing	\$1,757,554,423		-
35	Debt financing	\$4,100,960,320	6,028,411,670	AUD
36				
37 38				
39	Debt service (per year)	\$697,163,254	1,024,829,984	AUD
40	Yearly fees and taxes (US\$206 per capita)	\$274,381,340	403,340,570	
41	OPEX + Debt service + Tax + Fees	\$1,264,470,332		AUD
42				
43				
44	Project costs — per person	\$4,392		AUD
45	Number of motor vehicles displaced		motor vehicles	
46	Yearly cost of cars displaced — per person	\$6,541	9,615	AUD
	Operating costs per passenger-km	\$0.03		
47	Full costs per passenger-km	\$0.13		
48	Breakeven revenue distance per day	9,462,936	km	
49	Number of tracks in one direction needed to satisfy peak demand	0.28		



# Project Overview p. 2

q)	957,314 MTCO2-eq annually
ys	\$268,565,584 annually
ts	155,351 metric tons annually
n)	438 hrs/person annually
ip	\$2,285 per person annually
s)	16%
ed	6,010 annually

60 annually 22,296,923 m<sup>2</sup> 0.5 to 2 °C High

#### Model Inputs (continued)

68	Name of region or project	Adelaide, Australia
69	Currency name	AUD
70	Equal to US\$1	1.47
71	Sustainable energy/electricity generation & storage as	CAPEX
72	Land area of region (sq. km)	3,258
73	Number of residents in region	1,333,927
74	% travel within region	90%
75	% of land area served by roads	40%
76	Coverage: % of pop. convenient (5 min walk) to Transit X	95%
77	Annual median household income (US\$)	\$50,000
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	Daily Passengers Adjustment	100%
88	Number of Stops Adjustment	100%
89	Mode Share Adjustment	100%

## Pod & Car

		Pod	Car
87	Service life (years)	20	12
88	Full cost of vehicle per year	\$200	\$9,000
89	Public cost to maintain infrastructure (per km)	\$0	\$100,000
90	Energy consumption (MPGe)	3564	24
91	Energy consumption (liters/100km)	0.07	9.8
92	Energy consumption (Watt-hours/km)	9	1375
93	mass of CO2 per vehicle per km (kg)	0	0.09875
94	Vehicle mass (kg)	45	1950
95	Average speed of urban travel (km/h)	72	16
96	Typical travel time (in minutes) for 8 km trip	7	31
97	Fare/cost per km	\$0.37	\$0.62
98	Number of deaths per 100M passenger-km	0.00001	1
99	Number of injuries per 100M passenger-km	0.0006	62
100	Volume to park (cubic meters)	5.7	70.9

### 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 (5,509 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)	\$2,790
19	Water crossing: additional cost per km	\$8,370
20	Triple-speed: additional cost per km	\$5,580
21	Rate factor for water crossings or high-speed links.	
22	Average distance traveled per person per year (for trips under 1600 km)	1(
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	2
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	<b>.</b>
35	Ex-Factory cost per pod	\$
36	Worldwide Median Income per Household (US\$)	1(
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 Interest rate for debt	
43	kg CO2 emissions per liter of gasoline	
44	Monetary value of 1 hour personal time (USD)	\$
45	Eat. roadway maintenance per year per km	ۍ \$5
46	Area of one parking lot space	φIJ
47	Commercial income of land (annual)	
48 49	Distance from roadway that is convenient	•
49 50	Stops per km	
50	Boarding capacity per stop	
52	Solar panel area per meter of track	
53	Cost of sustainable energy and storage	9
54	Global Horizontal Irradiance (GHI)	
55	Cost to generate sustainable energy	\$
56	Storage per column	Ŷ
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	km	
52,790,000	4,101,300	AUD
8,370,000	.,,	
5,580,000		
2.2		
10,000	km	
27	km	
85%	at 5 min walk.	
20%		
25,380	pph	
10	seconds	
18%		
72	km/h	45 mph
3	per day	
2.4	passengers	
1.5	passengers	
19%		
5	passengers	
25%		
\$5,000	7,350	
10,000	14,700	
2.3		AUD
\$0.37		AUD
\$0.59	0.9	AUD
5%		
70%		
10	years	
7%		
2.37	10	
\$12.50		AUD
\$51,000	74,970	AUD
	m <sup>2</sup>	AUD
\$1.00	per m <sup>2</sup>	AUD
	km	
4.0	nnh	
360 2.0	ppn	
	per kWh	
3.8	kWh/m²/day	
\$1,000	,	
40	kWh	
23		44
	per kWh	
1	days	
2.20	m <sup>2</sup>	
40%		
500	km	
50%		
20%		
40%		
67%		



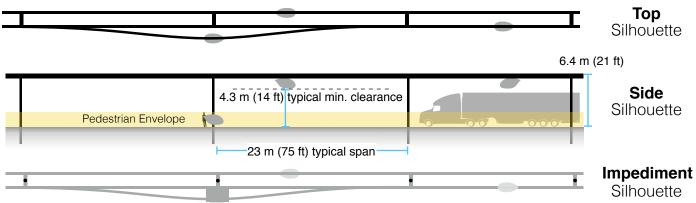
# **Taxes and Fees**

## 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		(for calculating min	iimums)	
2	Total commercial land (estimated)	130,320,000	m <sup>2</sup>		acres
3	Total commercial gov't revenue (US\$)	\$130,320,000		191,570,400	AUD
4	TXCR (Transit X Commercial Rate)	\$1.00	per m <sup>2</sup> (estimated)	1.5	AUD
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 examp	ble		
8	4% of gross revenue	\$36.20	per route-meter		
	Minimum per year	\$1 49	per route-meter		
9		φ1110	per route meter		
9 10	Transit X payment to Gover				
		rnment	estimated		
10	Transit X payment to Gover	rnment	estimated	396,887,121	AUD
10 11	Transit X payment to Gover % of route on government easements	rnment 98%	estimated		AUD
10 11 12	Transit X payment to Government easements           % of route on government easements           Total air-rights and local taxes	rnment 98% \$269,991,239	estimated per year		AUD
10 11 12 13	Transit X payment to Gover         % of route on government easements         Total air-rights and local taxes         per resident	rnment 98% <b>\$269,991,239</b> \$202	estimated per year	298 3,311,973	AUD
10 11 12 13 14	Transit X payment to Gover         % of route on government easements         Total air-rights and local taxes         per resident	rnment 98% <b>\$269,991,239</b> \$202 \$2,253,043	estimated per year per year	298 3,311,973 0	AUD AUD
<ol> <li>10</li> <li>11</li> <li>12</li> <li>13</li> <li>14</li> <li>15</li> </ol>	Transit X payment to Gover         % of route on government easements         Total air-rights and local taxes         per resident         with a minimum of	rnment 98% <b>\$269,991,239</b> \$202 \$2,253,043	estimated per year per year	298 3,311,973 0	AUD AUD AUD
<ol> <li>10</li> <li>11</li> <li>12</li> <li>13</li> <li>14</li> <li>15</li> <li>16</li> </ol>	Transit X payment to Gover         % of route on government easements         Total air-rights and local taxes         per resident         with a minimum of         Other financial benefits to ease	rnment 98% <b>\$269,991,239</b> \$202 \$2,253,043 Government	estimated per year per year	298 3,311,973 0	AUD AUD AUD AUD
10 11 12 13 14 15 16 17	Transit X payment to Gover         % of route on government easements         Total air-rights and local taxes         per resident         with a minimum of         Other financial benefits to         Less road maintenance from lower VMT	rnment 98% \$269,991,239 \$202 \$2,253,043 Government	estimated per year per year	298 3,311,973 0	AUD AUD AUD AUD AUD

# Footprint calculations for minimum fee



Pod landing area: 1.5m x 2.5m with 3m minimum spacing

1	Footprint Calculations	Metric	: Imperial
2	Track width	0.30	<u>)</u> m
3	Track height	<u>0.60</u>	) m
4	Post diameter	<u>0.3</u>	<u>k</u> m
5	Post cross section	<u>0.07</u>	2 m <sup>2</sup>
6	Stop landing area	<u>3.75</u>	2 m <sup>2</sup>
7	width	<u>1.5</u>	
8	length	<u>2.5</u>	i m
9	Ramp length		_ m
10	Typical Span	<u>23</u>	
11	Number of posts per unit length	<u>43.5</u>	poles per km
12	Post height	<u>6</u>	<u>i</u> m
13			
14	Single track	1022.1	m <sup>2</sup>
15	Area of Side Silhouette	678.3	8 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	8 m <sup>2</sup>
21	Area of Top Silhouette	613.1	
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	2 m <sup>2</sup>
26	Area of Top Silhouette	19.4	
07	•	07.5	
27	Impediment Area (adjusted)	37.5	o m²
28			
29	Stops with dedicated landing areas	2	stops per km
30	% of dual track	100%	
31			
32	Average area per unit length	1,486	m² per route-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	



Summary

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

At 0.32 AUD 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 AUD					2 km			10 km				40 km	
Transit X				<b>0.64</b> to 1.07 2 min., 3.6x faster				<b>3.19</b> to 5.34 8 min., 3.6x faster				<b>12.23</b> to 20.84 33 min., 3.4x faster	
	ic tra erago				3.6	61			5.74				8.42
nodes	Тахі			<b>5.00</b> 2 to 6 minutes				<b>21.80</b> 8 to 30 minutes			es	<b>84.76</b> 30 to 120 minutes	
Common public modes	Uber/Lyft			<b>3.81</b> 2 to 6 minutes				<b>15.69</b> 8 to 30 minutes			es	<b>60.25</b> 30 to 120 minutes	
d uou	Public Bus			<b>2.91</b> 3 to 12 minutes				<b>2.91</b> 15 to 60 minutes		tes	<b>4.46</b> 60 to 240 minutes		
Com	Trai	n		21	<b>4.3</b> to 12 r	-	es		8 to	<b>5.1</b> 60 m		es	<b>8.04</b> 30 to 240 minutes
Personal car			2 t	<b>4.(</b>		es		<b>1</b> 8 to 3	<b>2.</b> 30 m	_		<b>44.85</b> 30 to 120 minutes	
	·	Low Speed	High speed		Includ	Over	Dist	Max Dist.	Time cost	6%	shar 70%	24%	* All numbers on mode shares, speeds, and cos are rough estimates
Travel mode	km/h	km/h	km/h	Base	es km	per-km	km	km	per min	2	10	40	are rough estimates
Taxi	30	20	80	2.91	1	1.45		100	1.29	5%	4%	1%	
Uber/Lyft Public Bus	30 15	20 10	80 40	2.32 2.91	1 20	0.08	0.5 0.5	100 50	0.65 0		10% 50%		
Train	30	10	80	4.36	20	0.10		100	0		36%		

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.

0

0.21

0.32 0.1 50

0.97 0.1 400

72

30

72

20

72

80

0

1.94

0

0

Transit X

Personal car



# **Fair Fare Formula**

# Fare rates are updated annually using this formula

	Name	Value	Units	Description of the value or model input	In USD
1	GlobalIncome	14,700	AUD	Global median household income. Updated annually based on most recent standard published data.	10,000
2	AllTravel	23,000	km	Travel distance per household per year on any mode for trips under 1600 km. A global constant	
3	PercentIncomeForTr ansport	20%		% of median household income for all transportation under 1600 km trips. A global constant.	
4	GlobalRate	0.13	AUD/km	Global rate: Globalincome * PercentincomeForTransport / AliTravel	0.09
5	IncomeFirst	\$73,500	AUD	Median household income at first stop (per person per day). External input. Based on reliable public data source updated annually.	\$50,000
6	IncomeDest	\$110,250	AUD	Median household income at destination per trip. External input. Based on reliable public data updated annually.	\$75,000
7	RegionalRate	0.64	AUD/km	Regional rate based on median income: MedianIncomeFirst * PercentIncomeForTransport / AllTravel	0.43
8	UnderIncomeRate	0.00	AUD/km	Under global income adjustment: if (RegionalRate < GlobalRate, GlobalRate - RegionalRate, 0)	0.00
9	NominalRate	0.64	AUD/km	Nominal rate: RegionalRate + UnderIncomeRate	0.43
0	RegionalFactor	1.00		Regional Fare Factor. Negotiated upfront to make network financially viable.	
1	AdjustedRate	0.64	AUD/km	Regional adjusted rate: NominalRate * RegionalFactor	0.43
3	Population	1,333,927		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.	
4	PassengerTravel 9	0,694,314,47	3 km	Total passenger distance traveled previous calendar year. Based on expected mode share for first 3 years. Based on actual passenger trips. Audited.	
5	ModeShare	32%		Percent of Total Travel Per Capita on Transit X: PassengerTravel / (Population x AllTravel)	
6	BaseRate	0.54	AUD/km	Base rate for single-passenger pod (without discounts) (1 - UsageMaxDiscount x min(1,ModeShare)) x AdjustedRate	0.37
7	SpecialRateFactor	2.20		Rate factor for water crossings or high-speed links. Global constant.	
8	SpecialBaseRate	1.18	AUD/km	Base rate for high-speed travel or water crossings: BaseRate * SpecialRateFactor	0.81
9	DistanceDiscount	40%		Distance discount at max distance. Global constant.	
0	MaxDistanceDiscou nt	500	km	Max distance discount. Global constant.	
1	DistanceDiscountPe rKm	0.000431	AUD/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	0.43	AUD/km	Discounted base rate: BaseRate x (1 - SeniorDiscount)	0.29
5	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.	0120
26	SharedPodRate	0.43	AUD/km		0.29
27	SharedCompartment Discount	40%		Discount for shared compartment. Set by Transit X per year. 25% minimum and 40% maximum. Maximum yearly change is one percentage point.	
28	SharedCompartment	0.32	AUD/km	Rate for shared compartment	0.22
_0	Rate	0.52	AUD/KIII	BaseRate x (1 - SharedCompartmentDiscount)	0.22
29	SingleOccupancyMa xDistance	0.37	AUD/km	Rate for 500 km in single-passenger pod.	
30	Senior + SharedCompartment Rate	0.15	AUD/km	Rate for a Senior taking a 500 km trip in a shared compartment. BaseRate x (1 - SeniorDiscountAmount) x (1 - SharedCompartmentDiscount) x (1 - MaxDistanceDiscount)	0.11
31	50PctIncomeAtDest	25%		% Higher fare rate if Destination has 50% higher median income than First (IncomeDest / IncomeFirst - 1) / 2	
32	DistanceBase 7	7,173,792,710	0 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 3	8,130,715,93	8 AUD	Annual revenue from all travel under base rate. Audited value from operational data.	
35	AverageDiscount	19%		Average fare discount from Base Rate:	
36	MarketFactor	1.0		1 - (BaseRevenue / (DIstanceDase x BaseRate)) Market rate factor. Negotiated value for setting ratio of AverageDiscount	
37	MarketRateCap	19%		Cap on passenger travel distance at market rate: AverageDiscount x MarketFactor	
0	MarkatTravalCan 1	356 201 60	6 km	Cap on passenger travel distance at market rate:	
38	MarketTravelCap 1	,550,291,690		DistanceBase x MarketRateCap	

## **Project Summary**

**Project** A fully-automated, solar-powered, micro-rail **Description** network. A transportation utility.

Project type Sustainable Transportation Infrastructure Design, Build, Finance, Own, Operate, Maintain (DBFOOM)

Project equity US\$1.76 billion (30% of total)

Cost to Gov't \$0

Structure Privately financed equity and debt

Debt term 10 years @ 7%

- Equity terms A waterfall profit distribution per year with:
  - 1. 90% until capital payback,
  - 2. then 50% until Target% is reached
  - 3. then 10%

Taxes & Fees \$269,991,239 per year

Benefits to society and Extremely high environment

Estimated return 30% average IRR at 5 yrs 39% average IRR at 10 yrs

Financials (US\$ in millions)	Year 1	Total Years 1-12
Gross Revenues	1,811	52,519
Taxes and fees	91	2,626
Debt service	\$287	\$3,158

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

Clean Energy	yes	Improve Resiliency	yes
Energy security	yes	Sustainable	yes
Zero Emissions	yes	Equitable	yes
Zero GHG	yes	<b>Recyclable Materials</b>	yes
Lowers Pollution	yes	Affordable Housing	yes
Clean Water	yes	Improved Health	yes
Improved Safety	yes	Economic Development	yes
Add Green Space	yes	Access to Food	yes
Accessible	yes	Add Quality Jobs	yes

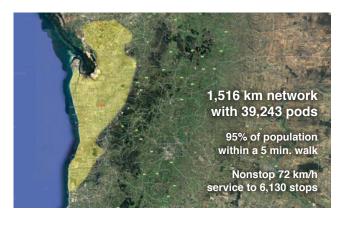




Transit X presents a preliminary proposal for a sustainable micro-rail network – a fleet of automated electric vehicles (pods) for passengers and freight on a local and regional podway providing equitable public transportation for

### Adelaide, Australia

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	Available	Yes
Outdoor Test Track	Nov 2019	Yes
Rider-Revenue study	Preliminary	Yes
Environmental study	Per region	Yes
Air rights	Per project	Yes
Permitting	Per project	Yes
Safety certification	Per country	Yes
Construction firm	Per project	Yes
Design and major subs	Per project	Yes
<b>Operations &amp; Maint</b>	Partners	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)	1,516
Starting number of pods	12,950
Projected revenue growth	15%
Project Cost (Privately funded)	\$5,858,514,742
% Debt financed	70%
Debt	\$4,100,960,320
Equity	\$1,757,554,423
Debt payment (per year)	\$287,067,222

- Travel per year per pod (km) 168,193
- Revenue per vehicle-km (US\$) 0.83
  - 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 O	0	1	2	3	4	5	6	7	8	9	10	11	12
Revenue		0	1,810,890,276	2,082,523,818	2,394,902,390	2,754,137,749	3,167,258,411	3,642,347,173	4,188,699,249	4,817,004,136	5,539,554,756	6,370,487,970	7,326,061,165	8,424,970,340
5% RoW÷tax÷fee	0	0%	90,544,514	104,126,191	119,745,120	137,706,887	158,362,921	182,117,359	209,434,962	240,850,207	276,977,738	318,524,398	366,303,058	421,248,517
Debt service		0	\$287,067,222	\$287,067,222	\$287,067,222	\$287,067,222	\$287,067,222	\$287,067,222	\$287,067,222	\$287,067,222	\$287,067,222	\$287,067,222	\$287,067,222	\$287,067,222

Investor share	0	923,685,770	1,097,117,303	354,969,149	380,453,949	409,761,470	443,465,118	482,224,314	526,797,389	578,056,425	637,004,317	704,794,392	782,752,979
Investor share (%)		90%	90%	25%	22%	21%	19%	18%	17%	16%	15%	14%	14%
Share / Orig Capital	0%	53%	62%	20%	22%	23%	25%	27%	30%	33%	36%	40%	45%
IRR to date	loss	(47%)	10%	19%	26%	30%	33%	35%	37%	38%	39%	39%	40%

#### **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 made. Except as required by law, Transit X undertakes no obligation to update any forward looking statements 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.

# **Jobs Report**

1	Annual median household income (US\$)	\$50,000
2	CAPEX	
3	Average gross CAPEX salary (% of median HH)	125%
4	Average gross CAPEX salary	\$62,500
5	% of CAPEX as salary	15%
6	Years of CAPEX	2
7	# of CAPEX jobs	7,030
8	% of jobs that are manufacturing vs. construction	75%
9	Manufacturing jobs	5,273
10	Construction jobs	1,758
11	OPEX	
12	Average gross OPEX salary (% of median HH)	115%
13	Average gross OPEX salary	\$57,500
14	% of OPEX as salary	30%
15	<b>Operations and Maintenance jobs</b>	1,528