

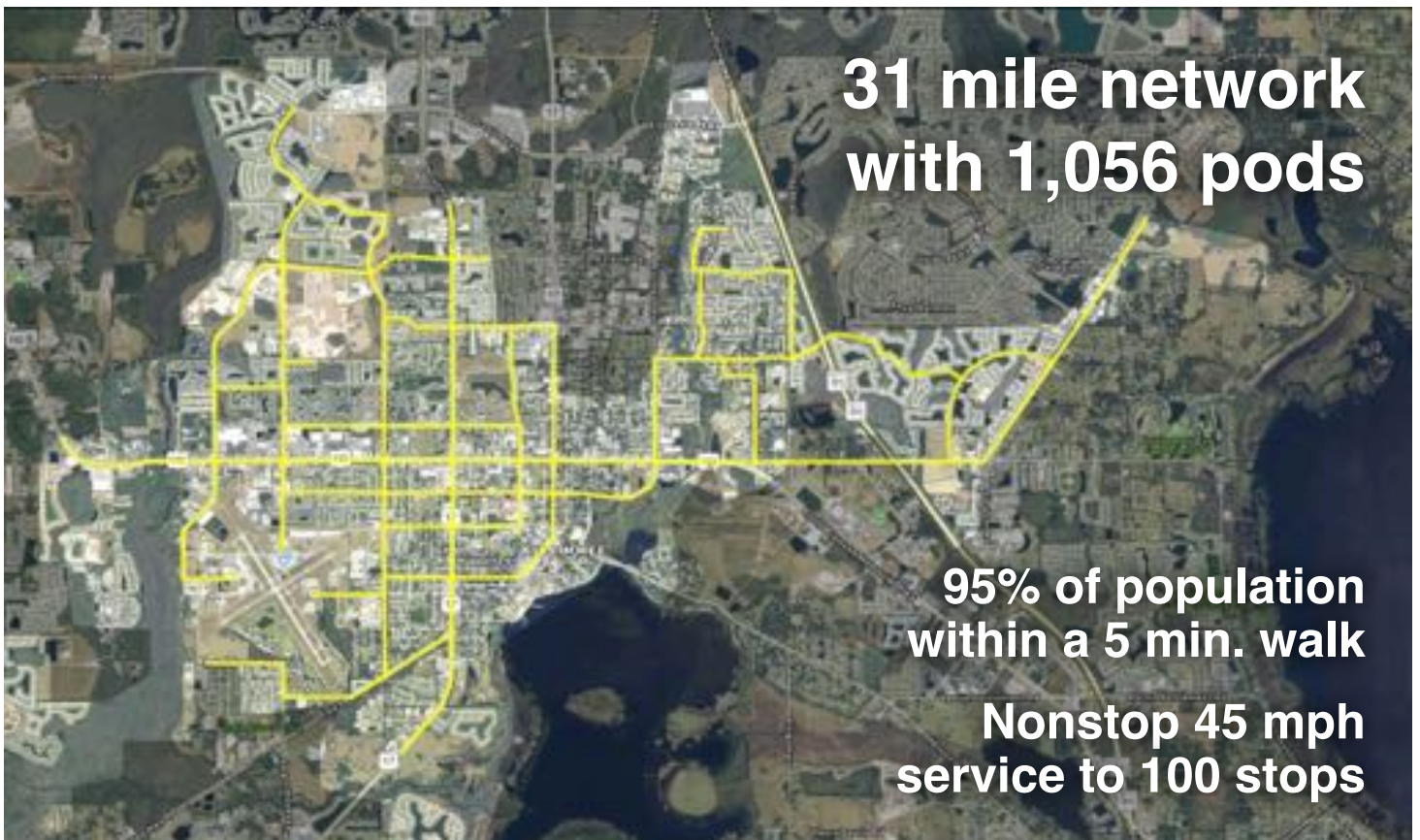


Transit X, LLC presents a preliminary proposal for a privately-funded fleet of fully-autonomous shared electric vehicle network for

# Kissimmee, Florida

**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](http://transitx.com/transitxhandbook.pdf)



**Transit X proposes to build and operate a privately-financed pod network to carry passengers and freight for Kissimmee, Florida 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](http://transitx.com) for more details. This 3-minute video ([transitx.com/video](http://transitx.com/video)) describes our innovative solution.

### Major benefits

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



The Transit X Handbook ([transitx.com/transitxhandbook.pdf](http://transitx.com/transitxhandbook.pdf)) 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

Transit X does not require public funding because our business model appeals to investment banks and private equity firms that provide our project financing. Most of our infrastructure is factory-built, so that installation is fast and not disruptive. We have reduced or eliminated many costs of transportation infrastructure including materials, land, construction, fuel, debt service, and driver costs. By significantly reducing our costs, it makes private financing possible.

### 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 be 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. These 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 transition away from roads. 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 potentially displaced by the transition to automated vehicles.

## Revenue Generator

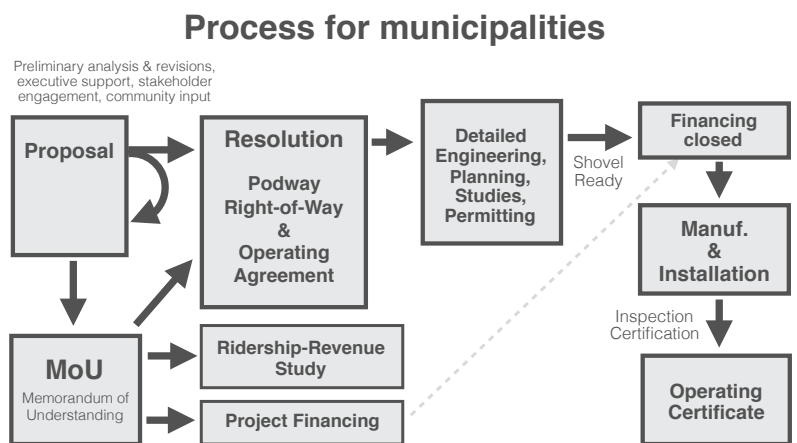
Not only does Transit X not require public financing, but the local municipality and right-of-ways owners receive 5% of gross revenue, which would be US\$12 million per year average over the first 10 years. For specifics, please see the "Taxes and Fees" section of this proposal.

## 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

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



## Evaluation

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

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

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

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

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

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

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

### **Other Resources**

The links below provide general information about Transit X:

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

### **Addendum**

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

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

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

Sincerely,



Mike Stanley  
CEO, Transit X

Telephone: +1 508-596-7024 (also via WhatsApp)

Email: [mike@transitx.com](mailto:mike@transitx.com)

Zoom eRoom: <https://zoom.us/j/8229009123>

Website: [transitx.com](http://transitx.com)

LinkedIn: <http://linkedin.com/in/mikestanleymit/>

Skype: [mikestanley49](https://www.skype.com/people/mikestanley49)

WeChat: MikeTransitX

Facebook Messenger: [m.me/MikeStanleyMIT](https://www.facebook.com/mikestanleymit/)

Twitter: <https://twitter.com/MikeTransitX>

Mail: 1127 Commonwealth Ave #30, Boston, MA 02134 USA

# Project Summary

<b>Project Description</b>	Solar-powered automated transportation network infrastructure
<b>Project type</b>	Project financing of Green Infrastructure
<b>Project cost</b>	\$211 million
<b>Structure</b>	Equity and Debt
<b>Debt term</b>	10 years @ 5%
<b>Equity terms</b>	41% average IRR through 12 yrs Using a waterfall profit distribution of: 1. 90/10 split until Return of Capital, 2. then 50/50 until Target IRR met 3. then 10/90 onwards
<b>Benefits to society and environment</b>	Extremely high


## Financials

(US\$ in millions)

	Year 1	Total Years 1-12
<b>Gross Revenues</b>	<b>116</b>	<b>2,834</b>
<b>Taxes and fees</b>	<b>6</b>	<b>142</b>
<b>Debt service</b>	<b>\$19</b>	<b>\$192</b>

## ESG (Environmental, Social, Governance) Benefits

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



Transit X, LLC presents a preliminary proposal for a privately-funded fleet of fully-autonomous shared electric vehicle network for

### Kissimmee, Florida

**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](http://transitx.com/transitxhandbook.pdf)



**31 mile network with 1,056 pods**  
**95% of population within a 5 min. walk**  
**Nonstop 45 mph service to 100 stops**

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

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



## Model Inputs and Assumptions

<b>Route length (km)</b>	50	<b>Travel per year per pod (km)</b>	168,193
<b>Starting number of pods</b>	352	<b>Revenue per vehicle-km (US\$)</b>	1.97
<b>Projected revenue growth</b>	15%	<b>OPEX as % of project cost</b>	5%
<b>Project Cost</b>	\$211,359,820	<b>Debt Interest rate</b>	5%
<b>% Debt financed</b>	70%	<b>Debt term (yrs)</b>	10
<b>Debt</b>	\$147,951,874	<b>Years to return equity capital</b>	5
<b>Equity</b>	\$63,407,946	<b>Profit share when below capital return</b>	90%
<b>Capital return per year</b>	\$12,681,589	<b>Profit share when below Target IRR</b>	50%
<b>Target IRR</b>	15%	<b>Profit share when above Target IRR</b>	10%
<b>Target return per year</b>	\$9,511,192		
<b>Debt payment (per year)</b>	\$19,160,445		

The revenue estimates are conservative because they only show revenue from passenger fares, freight, and advertising, which may be less than 60% of total revenue. A substantial revenue stream can be expected from developer fees, private leasing, private branch & stops, subsidies, municipal contracts, carbon credits, water delivery, conduit leasing, 3rd-party services, mail & package delivery, para-transit, private shuttles, sale of surplus power to grid, and naming rights.

## Pro Forma

Years	0	1	2	3	4	5	6	7	8	9	10	11	12
<b>Revenue</b>	0	<b>116,378,551</b>	133,835,333	153,910,633	176,997,228	203,546,813	234,078,834	269,190,660	309,569,259	356,004,647	409,405,344	470,816,146	541,438,568
<b>5% RoW+tax+fee</b>	0%	5,818,928	6,691,767	7,695,532	8,849,861	10,177,341	11,703,942	13,459,533	15,478,463	17,800,232	20,470,267	23,540,807	27,071,928
<b>Debt service</b>	0	\$19,160,445	\$19,160,445	\$19,160,445	\$19,160,445	\$19,160,445	\$19,160,445	\$19,160,445	\$19,160,445	\$19,160,445	\$19,160,445	0	0
<b>Investor IRR</b>	0%	16%	18%	21%	24%	28%	33%	42%	47%	54%	62%	74%	84%
<b>Investor balance</b>		-\$40,793,186	-\$16,591,268	\$9,435,882	\$37,562,049	\$68,102,086	\$101,418,072	\$127,781,130	\$157,815,382	\$192,071,506	\$231,182,784	\$277,793,534	\$330,825,224
<b>Avg. return to date</b>		-64%	-18%	7%	21%	29%	33%	36%	38%	39%	40%	40%	41%

### 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 speak only as of the date made. Except as required by law, Transit X undertakes no obligation to update any forward looking statement to reflect events or circumstances after the date on which it is made or to reflect the occurrence of anticipated or unanticipated events or circumstances. These materials and documents and information from which they are derived or which are referred to by or accessible from them represent Transit X's best estimate as to the allocation of the funding proceeds based upon its present business plan and financial condition. The costs and expenses to be incurred in pursuing the Company's business plan 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.



1	<b>Transit X network length</b>	<b>50 km</b>	<b>31.2 miles</b>
2	Route density ratio (route length to service area)	1.16	
3	Number of stops	100	
4	Triple-speed route length	0 km	<b>0 miles</b>
5	Water crossing route length	0 km	<b>0 miles</b>
6	<b>Cost of fixed infrastructure</b>	<b>\$182,267,853</b>	
7	...per person	\$2,604	
8	Mode share of travel on Transit X	85%	
9	Distance traveled on Transit X, per year	297,500,000 km	<b>184,782,609 miles</b>
10	...per day	815,068 km	<b>506,254 miles</b>
11	Daily potential energy generation with standard panels on tracks	386 MWh	
12	Sustainable energy use per day	14 MWh	4% of max capacity
13	Energy storage capital cost for 1 day(s) of supply at \$800 per kWh	\$10,813,512	
14	Size (rated power) of solar installation	3,142 KW	
15	Cost to generate sustainable energy (at \$2,000 per kWh)	\$6,284,924	
16	Cost of buying sustainable energy at \$0.15 per kWh	\$2,028 per day	7% of OPEX
17	Daily passengers riding Transit X	59,500 customers	85% of the pop.
18	Distance per passenger per day	14 km	<b>8.5 miles</b>
19	Average distance per trip (assuming 3 trips per day)	5 km	<b>2.8 miles</b>
20	<b>Single passenger fare for shared 5 km trip</b>	<b>\$1.00</b> for average trip	
21	Passenger distance traveled during peak hour	163,014 km	<b>101,251 miles</b>
22	<b>Breakeven</b>	<b>24,656 customers per day</b>	
23			(37% of people convenient to Transit X)
24	<b>Number of pods for peak demand</b>	<b>1,056 pods</b>	
25	Number of people per pod	66.3	and 56 customers per pod
26	Distance per pod per year	168,193 km	
27	Pod garage volume (in units of cubic shipping containers)	4 sc <sup>3</sup>	
28	Cost of pods	\$6,864,000	is \$75 per person
29	Capital cost of energy generation and storage	\$22,227,967	is \$318 per person
30	<b>Project Finances</b>		
31	<b>Total Project Cost</b>	<b>\$211,359,820</b>	
32	Equity	\$63,407,946	
33	Financed	\$147,951,874	
34			
35		\$10,567,991	
36			
37	Debt service	\$22,192,781	
38	Fees and taxes (US\$145 per capita)	\$10,119,320	
39	OPEX + Debt service + Tax + Fees	\$42,880,092	
40			
41	Operating Margin	95%	
42	Project costs — per person	\$3,019	
43	Number of motor vehicles displaced	<b>29,750</b> motor vehicles	
44	Yearly cost of cars displaced — per person	\$3,825	
45	<b>Operating costs per passenger-mile</b>	<b>\$0.23</b>	
46	Breakeven revenue distance per day	337,754 km	<b>209,785 miles</b>
47	Number of tracks in one direction needed to satisfy peak demand	<b>0.01</b>	





### Impact of proposed network

1	<b>Reduction in GHG emissions (in metric tons of CO2-eq)</b>	29,378 MTCO2-eq
2	<b>Est. cost to maintain 175 km roadway</b>	\$8,902,727
3	<b>Reduced waste products per year</b>	4,767 metric tons
4	<b>Travel time saved per year</b>	243 hrs/person
5	<b>Cost savings per capita per year from reduced car ownership</b>	\$1,361
6	<b>Increase in household income from time saving and car costs</b>	9%
7	<b>Reported injuries avoided per year</b>	184
8	<b>Lives saved per year</b>	2
9	<b>Land freed from parking (169 acres)</b>	684,250 m <sup>2</sup>
10	<b>...and its commercial value</b>	\$547,400 per year
11	<b>Health care savings</b>	High
12	<b>Heat island mitigation from replacing asphalt with green space</b>	1 to 3 °C
13	<b>Change in global temperature</b>	TBD °C
14	<b>Decrease in sea level</b>	TBD mm

### Model Inputs

15	Ratio of road length to track length	4
16	Walking speed	4.9 km/h 3 mph
17	Width of convenient swath along track	0.82 km 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	Average distance traveled per person per year (for trips under 1600 km)	10,000 km 6,211 miles
22	Average distance per day per person	27 km
23	Mode share % of people convenient to Transit X	85% at 5 min walk.
24	Percentage of daily demand during peak hour	20%
25	Maximum capacity per track	28,944 pph
26	Average dwell time during peak hour	10 seconds
27	% of pods traveling on route with highest demand	18%
28	Average speed of pod	72 km/h 45 mph
29	Average # of trips for people riding Transit X	3 per day
30	Average occupancy per pod during peak hours	2.7 people
31	Average occupancy per pod	1.7 people
32	Maximum occupancy per pod	5 people
33	Empty pods: Percentage non-revenue	25%
34	Ex-Factory cost per pod	\$5,000
35	Worldwide Median Income per Household (US\$)	10,000
36	People per Household	2.3
37	Base fare per km	\$0.35
38	(per mile)	\$0.56
39	O&M as % of project cost	5%
40	Percentage debt financed	70%
41	Length of loan/debt	10 years
42	Interest rate for debt	5%
43	kg CO2 emissions per liter of gasoline	2.37
44	Monetary value of 1 hour personal time (USD)	10
45	Eat. roadway maintenance per year per km	\$51,000
46	Area of one parking lot space	23 m <sup>2</sup> 247 sf
47	Commercial income of land	\$1 per m <sup>2</sup>
48	Distance from roadway that is convenient	0.25 km
49	Stops per km	2.0
50	Solar panel area per meter of track	2.0
51	Cost of sustainable energy and storage	\$0.15 per kWh
52	Global Horizontal Irradiance (GHI)	3.8 kWh/m <sup>2</sup> /day
53	Cost to generate sustainable energy	\$2,000 per kW
54	Energy storage cost	\$800 per kWh
55	Energy storage capacity	1 days

### Model Inputs (continued)

56	Name of region or project	Kissimmee, Florida
57	Currency name	
58	Equal to US\$1	1
59	Sustainable energy/electricity generation & storage as	CAPEX
60	Land area of region (sq. km)	54
61	Number of people in region	70,000
62	% travel within region	50%
63	% of land area served by roads	80%
64	Coverage: % of pop. convenient (5 min walk) to Transit X	95%
65	Median household income (US\$)	40,000
66	Convenient walk time to stop (min)	5
67	Triple-speed route length (km)	0
68	Water crossing route length (km)	0
69	Solar production ratio	1.57
70	EPC costs & contingency	30%
71	Triple-speed (km/h)	242

### 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 Efficiency in MPGe	1188	24
Energy Efficiency in liters/100km	0.20	9.8
Energy used (Watt-hours/km)	28	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 5 km trip	4	17
Fare/cost per km	\$0.35	\$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



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

## 1 Municipal rates

2	Total commercial land (estimated)	4,320,000 m <sup>2</sup>	<b>46,496,160 sq ft. (1,067.5 acres)</b>
3	Total commercial muni revenue (US\$)	\$3,456,000	
4	<b>TXCR (Transit X Commercial Rate)</b>	\$0.80 per m <sup>2</sup>	
5	<i>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.</i>		

## 6 Project Revenue

7	Length of Transit X route	50 km	<b>31 miles</b>
8	Estimated gross revenue per unit length	\$4,027,345 per km	
9			

## 10 Municipal Tax

		% of gross revenue with minimum.	
11	<b>1% gross revenue</b>	\$40,273 per route-km	
12	<b>Minimum per year</b>	\$1,322 per route-km	<b>\$2,132 per route-mile</b>

## 13 Air Rights Leasing Fee

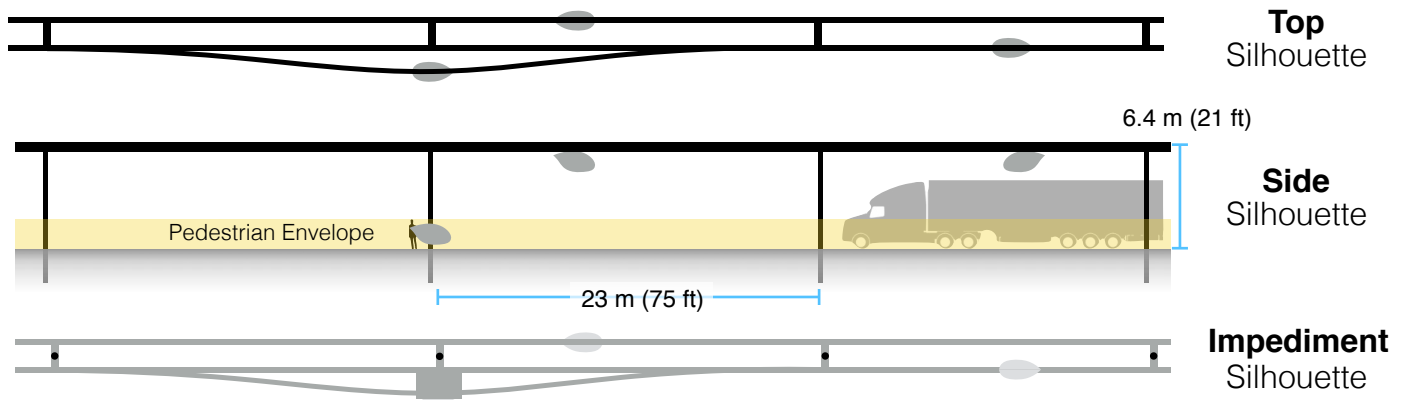
		% of gross revenue with minimum. Proportioned based on length.	
14	% of route on municipal land	90%	
15	<b>4% gross revenue</b>	\$161,094 per route-km	
16	<b>Minimum per year</b>	\$1,322 per route-km	<b>\$2,132 per route-mile</b>

## 17 Taxes, Fees, Programs

18	<b>Paid to Municipality</b>	<b>\$9,309,775</b> per year	
19	...with minimum	\$126,220	
20	<b>Paid to Private land owners</b>	<b>\$809,546</b> if 10% of RoW is over private property	
21	...with minimum	\$6,643	
22	<b>For livelihood programs</b>	<b>\$0</b>	

# Footprint calculations for minimum fee

# Yearly fees and taxes



1	Footprint Calculations	Metric	Imperial
2	Track width	0.41 m	16.1 inches
3	Track height	0.61 m	24.0 inches
4	Pole diameter	0.3 m	11.8 inches
5	Pole cross section	0.07 m <sup>2</sup>	0.8 sf
6	Stop landing area	2 m <sup>2</sup>	21.5 sf
7	...width	2 m	78.7 inches
8	...length	1 m	39.4 inches
9	Ramp length	21 m	68.9 feet
10	Pole span	23 m	75.5 feet
11	Number of poles per unit length	43.5 poles per km	70.0 poles per mile
12	Pole height	6 m	19.7 feet
13			
14	<b>Single track</b>	1126.7 m <sup>2</sup>	12124 sf
15	...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
17	...Impediment Area (adjusted)	15.4 m <sup>2</sup>	165 sf
18			
19	<b>Dual track</b>	1536.7 m <sup>2</sup>	16535 sf
20	...Area of Side Silhouette	688.3 m <sup>2</sup>	7406 sf
21	...Area of Top Silhouette	833.1 m <sup>2</sup>	8964 sf
22	...Impediment Area (adjusted)	15.4 m <sup>2</sup>	165 sf
23			
24	<b>Stop</b>	57.8 m <sup>2</sup>	622 sf
25	...Area of Side Silhouette	25.6 m <sup>2</sup>	276 sf
26	...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 km	3.2 stops per mile
30	% of dual track	100%	
31			
32	<b>Average area per unit length</b>	1,652 m <sup>2</sup> per route-km	<b>28,678 sf per route-mile</b>
33			
34	<b>Contract values</b>		
35	% gross revenue for muni tax/fee	1%	
36	% gross revenue for air rights (RoW)	4%	
37	% gross revenue for RoW+tax+fee	5%	
38	Impediment Factor	5	



# Fair Fares

Fares will be similar to existing mass transit, and several times less than taxis or ride-sharing services. Transit X Fair Fare is a universal passenger fare model that applies to all regions and all times. Fares are proportional to the median income of the area and inversely proportional to per capita use, so the more people that use Transit X, the lower the base fare. Market-rate fares are proportional to number of half-price fares. No additional peak or congestion pricing. Longer trip are discounts: 0% at 0 km, and up to a 40% discount at 500 km or greater trip length, below 500 km, discount is proportional to trip length.

		0% of use	80% of use	+25% Income	43% of use	50% market fares
1	<b>Median household income</b>	US\$ 40,000	\$40,000	\$50,000	\$40,000	\$40,000
2	<b>Nominal fare</b>	US\$ 0.35	\$0.35	\$0.43	\$0.35	\$0.35
3	<b>Minimum nominal fare</b>	US\$ 0.09	0.09	0.09	0.09	0.09
4	<b>Fare incr. for livelihood programs</b>	US\$ 0.00	0.00	0.00	0.00	0.00
5	<b>Adjusted nominal fare</b>	US\$ 0.35	0.35	0.43	0.35	0.35
6	<b>% of total travel on Transit X</b>	0%	80%	80%	43%	90%
7	<b>Discount for usage</b>	US\$ 0.00	0.14	0.17	0.07	0.16
8	<b>Base Fare (US\$)</b>	per km <b>0.35</b>	<b>0.21</b>	<b>0.26</b>	<b>0.27</b>	<b>0.19</b>
9	per passenger-mile US\$	<b>0.56</b>	<b>0.34</b>	<b>0.42</b>	<b>0.44</b>	<b>0.31</b>
10	for shared pod (20% discount)	<b>0.45</b>	<b>0.27</b>	<b>0.34</b>	<b>0.35</b>	<b>0.25</b>
11	for shared seating (40% discount)	<b>0.34</b>	<b>0.20</b>	<b>0.25</b>	<b>0.27</b>	<b>0.19</b>
12	<b>% Fares at Market rate</b>	50%	30%	30%	30%	50%
13	<b>% Fares at Base rate</b>	25%	65%	65%	65%	25%
14	<b>% Fares at 100% discount</b>	25%	5%	5%	5%	25%
15	<b>Average revenue US\$</b>	per km 1.17	0.52	0.65	0.68	0.65
16	<b>Livelihood program</b>	per km 0.00	0.00	0.00	0.00	0.00

## Price comparison with common travel modes (in Boston, USA)

Mode »	Bus	Commuter Rail	Subway	Personal Car	Taxi / TNC's
Average distance (km)	5	18	8	8	5
Price per trip	US\$ \$1.85	\$8.00	\$2.50	\$6.00	\$12.00
Typical price per km	US\$ \$0.37	\$0.44	\$0.31	\$0.75	\$2.40

## Base Inputs

17	Travel distance per household per year (trips under 1600 km)	23,000 km
18	% of median household income for 23,000 km transportation	20%
19	Fare Discount when Transit X travel per household is 23,000 km per year	50%
20	Minimum median household income. Fares are based on this minimum.	10,000 USD
21	Discount for shared pod	20%
22	Discount for shared bench seat	40%
23	Discount for fare	100%
24	Projected multiple of Market rate vs. Base rate	4
25	% increase in median income for scenario	25%
26	Percent of Total Travel Per Capita on Transit X	43%
27	Percent of fare for under-income programs	75%
28	Average expected fare discount	18%
29	Percentage of revenue from freight and advertising	40%
30	Metric ton per km (US\$ )	\$0.35

