

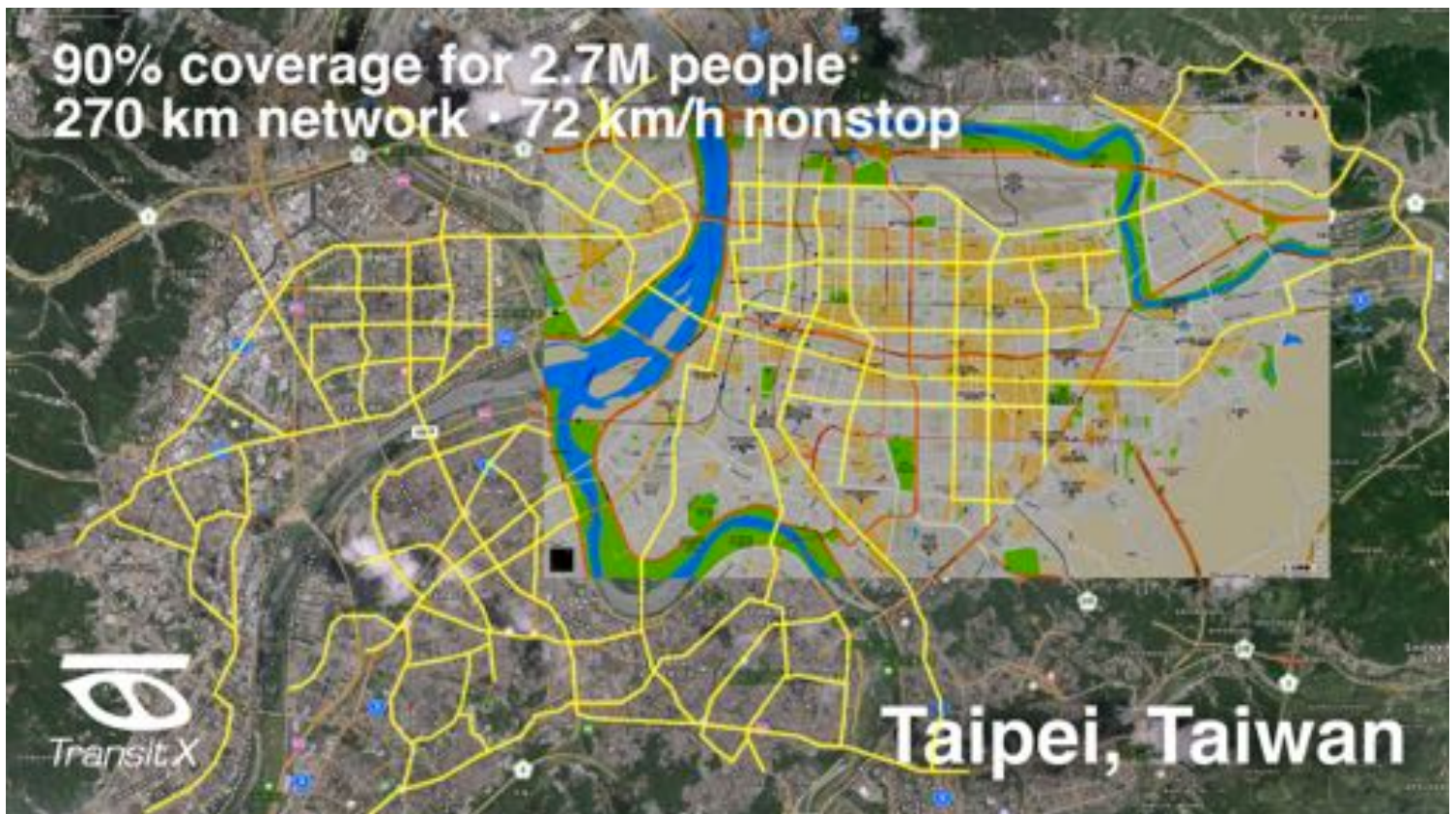


Transit X, LLC offers a preliminary proposal for

Taiwan

For a privately-funded mobility service that is

High capacity • Automated • Wait-free
Solar powered • Final destination • Resilient



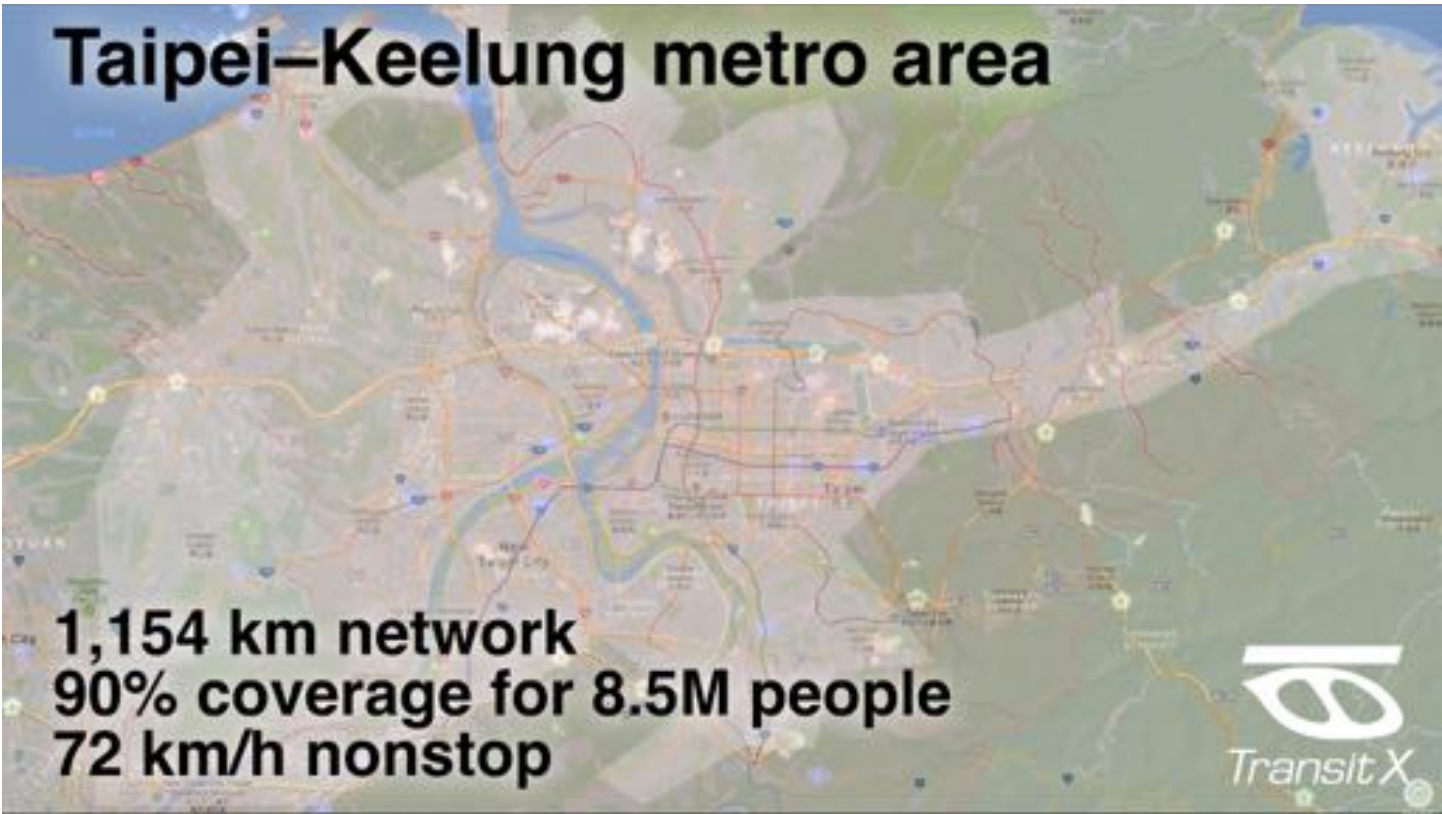


Economics for Taipei City, Taiwan

Inputs are underlined.

| | | |
|--|-----------------------|------------------------------------|
| Size of region | <u>271.8</u> | km ² |
| Number of people in region (residents + visitors) | <u>2,700,000</u> | |
| Travel distance per year by all people (residents and visitors) | 39,150,000,000 | km 24,316,770,186 mi |
| Percentage of all travel that occurs within the region | <u>70%</u> | |
| Region's area that is conveniently served by paved roads | <u>90%</u> | |
| Area to serve | 244.62 | km² |
| Desired coverage (percent of people convenient to Transit X) | <u>90%</u> | |
| Estimate #1 for network length based on desired coverage | <u>270</u> | km |
| Length of paved roads (non-highway) in region | <u>612</u> | km |
| Estimate #2 for network length based on paved roadways | <u>275</u> | km |
| Transit X network length | 275 | km |
| Total fixed costs for Transit X | \$639,834,188 | |
| ...per person | \$237 | |
| Mode share of travel on Transit X | 77% | |
| Distance traveled on Transit X, per year | 20,964,825,000 | km 13,021,630,435 mi |
| ...per day | 57,437,877 | km 35,675,700 mi |
| Daily number of people riding Transit X | 2,065,500 | |
| Distance per Transit X customer per day | 28 | km 17.3 mi |
| Average trip distance | 9 | km |
| Cost for an average trip | \$2.61 | 78.21 TWD |
| Distance traveled during peak hour | 5,743,788 | km 3,567,570 mi |
| Number of pods needed to meet peak demand | 49,859 | pods |
| Pod shed parking volume | 1,781 | standard 53' trailers |
| Cost of pods | \$249,295,000 | |
| Cost of pods per person | \$92 | |
| Milage per year per pod | 420,482 | km too high |
| Revenue per pod per year | \$118,261 | TWD |
| Yearly payment to municipality for RoW | \$296,656,956 | 8,899,708,684 TWD |
| System Economics | | |
| Total system cost | \$889,129,188 | 26,673,875,625 TWD |
| OPEX (O&M Costs) | \$62,239,043 | 1,867,171,294 TWD |
| Equity | \$444,564,594 | 13,336,937,813 TWD |
| Financed | \$444,564,594 | 13,336,937,813 TWD |
| Revenue from fares | \$5,896,357,031 | 176,890,710,938 TWD |
| EBITA (Profit) | \$5,834,117,988 | 175,023,539,644 TWD |
| Debt service | \$57,793,397 | 1,733,801,916 TWD |
| OPEX + Debt service | \$120,032,440 | 3,600,973,209 TWD |
| Net income | \$5,776,324,591 | 173,289,737,728 TWD |
| Operating Margin | 99% | |
| One-time fixed costs (per person) | \$329 | 9,879 TWD |
| Operating costs (per passenger-km) | \$0.01 | 0.17 TWD |
| Equivalent number of cars taken off the road | 1,445,850 | cars |
| Yearly cost of cars removed (per person) | \$4,820 | 144,585 TWD |
| Breakeven revenue distance per day | 1,169,266 | km 726,252 mi |
| Breakeven (people riding daily) | 42,047 | people |
| IRR (Internal rate of return) | 650% | |
| Payback period (profits pays back equity) | 1 | months |
| Network capacity (number of pods) | 8,205 | pods |
| Peak demand as % of maximum track capacity | 608% | |
| Externalities (estimated) | | |
| Reduction in CO2 emissions | 2,484,331,763 | kg CO₂ |
| Public cost for maintaining roadways per year | \$31,189,050 | 935,671,500 TWD |
| Reduced waste products per year | 135,548,438 | kg |
| Travel time saved (hours per person per year) | 493 | |
| Cost savings per household per year over personal car ownership | \$3,438 | |
| Increase in household income from time saving and car costs | 24% | |
| Reported injuries avoided per year | 12,998 | |
| Lives saved per year | 130 | |
| Land freed from less street parking and parking lots | TBD | |
| Health care cost savings from lower pollution | TBD | |
| Municipal revenue from leasing rights-of-way | \$1,839,105 | |

Taipei–Keelung metro area

A satellite-style map of the Taipei–Keelung metro area in Taiwan. The map shows a dense network of rail lines in various colors (red, blue, orange, green) connecting major cities like Taipei, Keelung, and Keelung. The Keelung River is visible in the upper left. The map is overlaid with a semi-transparent grey layer.

1,154 km network
90% coverage for 8.5M people
72 km/h nonstop





Economics for Taipei–Keelung metro area

| | | Inputs are <u>underlined</u> . | |
|----------------------------------|---|--------------------------------|---------------------------|
| | Size of region | <u>1,140</u> | km ² |
| | Number of people in region (residents + visitors) | <u>8,500,000</u> | |
| | Travel distance per year by all people (residents and visitors) | <u>123,250,000,000</u> | km 76,552,795,031 mi |
| | Percentage of all travel that occurs within the region | <u>70%</u> | |
| | Region's area that is conveniently served by paved roads | <u>90%</u> | |
| | Area to serve | <u>1026</u> | km ² |
| | Desired coverage (percent of people convenient to Transit X) | <u>90%</u> | |
| | Estimate #1 for network length based on desired coverage | <u>1,131</u> | km |
| | Length of paved roads (non-highway) in region | <u>2,565</u> | km |
| | Estimate #2 for network length based on paved roadways | <u>1,154</u> | km |
| | Transit X network length | 1,154 | km |
| | Total fixed costs for Transit X | \$2,683,631,250 | |
| | ...per person | \$316 | |
| | Mode share of travel on Transit X | 77% | |
| | Distance traveled on Transit X, per year | 66,000,375,000 km | 40,994,021,739 mi |
| | ...per day | 180,822,945 km | 112,312,388 mi |
| | Daily number of people riding Transit X | 6,502,500 | |
| | Distance per Transit X customer per day | 28 km | 17.3 mi |
| | Average trip distance | 9 km | |
| | Cost for an average trip | \$2.61 | 78.21 TWD |
| | Distance traveled during peak hour | 18,082,295 km | 11,231,239 mi |
| | Number of pods needed to meet peak demand | 156,964 | pods |
| | Pod shed parking volume | 5,606 | standard 53' trailers |
| | Cost of pods | \$784,820,000 | |
| | Cost of pods per person | \$92 | |
| | Milage per year per pod | 420,481 km | too high |
| | Revenue per pod per year | \$118,260 | TWD |
| | Yearly payment to municipality for RoW | \$935,843,957 | 28,075,318,713 TWD |
| System Economics | | | |
| | Total system cost | \$3,468,451,250 | 104,053,537,500 TWD |
| | OPEX (O&M Costs) | \$242,791,588 | 7,283,747,625 TWD |
| | Equity | \$1,734,225,625 | 52,026,768,750 TWD |
| | Financed | \$1,734,225,625 | 52,026,768,750 TWD |
| | Revenue from fares | \$18,562,605,469 | 556,878,164,063 TWD |
| | EBITA (Profit) | \$18,319,813,881 | 549,594,416,438 TWD |
| | Debt service | \$225,449,331 | 6,763,479,938 TWD |
| | OPEX + Debt service | \$468,240,919 | 14,047,227,563 TWD |
| | Net income | \$18,094,364,550 | 542,830,936,500 TWD |
| | Operating Margin | 99% | |
| | One-time fixed costs (per person) | \$408 | 12,242 TWD |
| | Operating costs (per passenger-km) | \$0.01 | 0.21 TWD |
| | Equivalent number of cars taken off the road | 4,551,750 | cars |
| | Yearly cost of cars removed (per person) | \$4,820 | 144,585 TWD |
| | Breakeven revenue distance per day | 4,561,251 km | 2,833,075 mi |
| | Breakeven (people riding daily) | 164,025 | people |
| | IRR (Internal rate of return) | 522% | |
| | Payback period (profits pays back equity) | 1 | months |
| | Network capacity (number of pods) | 34,412 | pods |
| | Peak demand as % of maximum track capacity | 456% | |
| Externalities (estimated) | | | |
| | Reduction in CO2 emissions | 7,821,044,438 | kg CO ₂ |
| | Public cost for maintaining roadways per year | \$130,815,000 | 3,924,450,000 TWD |
| | Reduced waste products per year | 426,726,563 | kg |
| | Travel time saved (hours per person per year) | 493 | |
| | Cost savings per household per year over personal car ownership | \$3,438 | |
| | Increase in household income from time saving and car costs | 24% | |
| | Reported injuries avoided per year | 40,920 | |
| | Lives saved per year | 409 | |
| | Land freed from less street parking and parking lots | TBD | |
| | Health care cost savings from lower pollution | TBD | |
| | Municipal revenue from leasing rights-of-way | \$7,713,684 | |