



# 6. Activity

## Sustainable Urban Transport

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Transport: Session 6

Jakarta, 17 July 2018

 #energyefficientworld

# What can you get for the cost of an flyover (overpass in US English)?

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## US-based estimates:

1-5 million USD (simple overpass)

7.1 million USD (simple flyover)

15-21 million USD (major flyover)

32 million USD (3-level flyover)

Sources:

[www.cityofws.org/portals/0/pdf/transportation/forms-reports/studies/lewisville\\_roads\\_study\\_app\\_d.pdf](http://www.cityofws.org/portals/0/pdf/transportation/forms-reports/studies/lewisville_roads_study_app_d.pdf)

2.7 million USD / lane-mile

Sources:

[http://www.vtpi.org/WSDOT\\_HighwayCosts\\_2004.pdf](http://www.vtpi.org/WSDOT_HighwayCosts_2004.pdf)

News » City News » Delhi News » Flyover finished at less than project cost, before deadline

## Flyover finished at less than project cost, before deadline

Mayank Manohar | Nov 10, 2015, 23:45 IST

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New Delhi: The six-lane Azadpur-Prembari Pul elevated corridor was inaugurated by Union urban development minister M [Venkaiah Naidu](#) in the presence of CM [Arvind Kejriwal](#) on Tuesday morning. The [project](#) has many firsts-the 2.1-km corridor has been completed at a cost lower than the sanctioned amount and before deadline. Design-wise, it is perhaps the first [flyover](#) in the city to be built on a series of single pillars.

It is expected to decongest areas like [Azadpur](#) Mandi, Ashok Vihar, Shalimar Bagh and Wazirpur and allow unhindered traffic flow along the entire 44-km Ring Road.

PWD has built it at a cost of Rs 145 crore, which is almost Rs 100 crore less than the sanctioned budget of Rs 247 crore. "This has never happened in our country as far as I remember that a project has been completed successfully at a cost less than the allocated budget," said [Kejriwal](#).

- 145 crore Rs  $\approx$  21 million USD
- Originally budgeted at 247 crore Rs  $\approx$  36.6 million USD

**Overpass costs vary widely, depending on site conditions, materials, number of lanes, labor costs...**

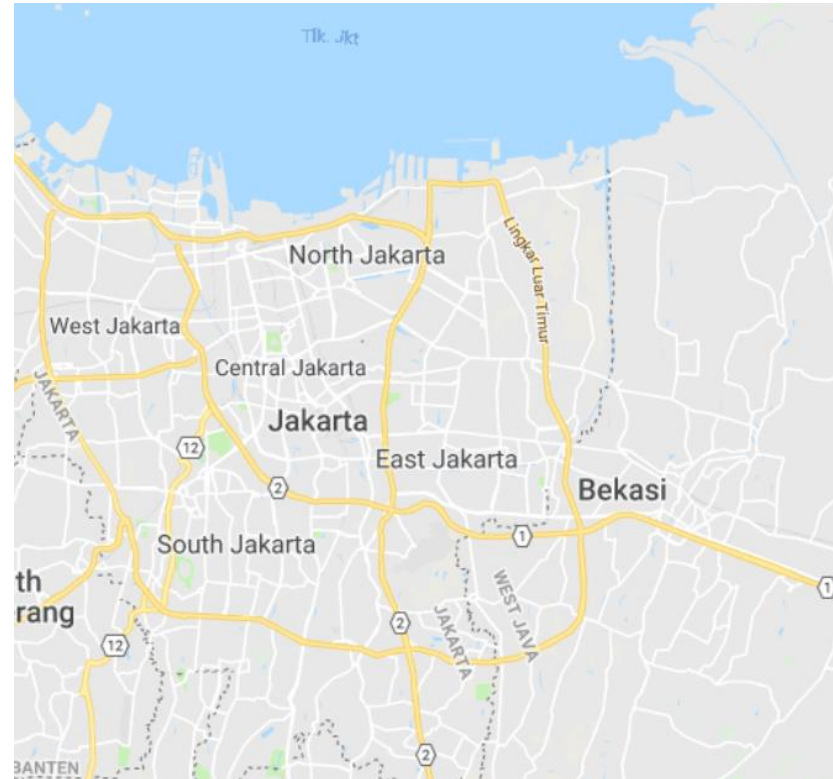
# What else could you afford?

Choose a city:

Bangkok, Batam, Hanoi, Jakarta, Kuala Lumpur, Medan, Menado, Singapore, Surabaya, Vientiane

Describe your city:

- Population; main districts; main industries and commercial areas, residential areas & workplaces
- Commuting & mobility patterns; modal split
- Main negative externalities of transport
- Propose a sustainable transport plan:
  - Where will you invest your budget?
  - How will it improve the quality of life and economic activity in the city?
  - What negative impacts of transport does it address, and how?
  - How will you get stakeholders behind your project?
    - international or national financial institutions
    - convincing city leaders to endorse, fund and champion your plan
    - convincing more skeptical or resistant people that your plan benefits them (or at least that it is in the public interest)?
  - How will you measure the effectiveness of your plan?  
What data will you collect and how?



# What else could you afford?

- There is a wide range of alternatives...
- Use this list as inspiration, but feel free to adopt country-specific costs, as long as you can find a citation, and defend the less expensive options as good choices to city officials and citizens alike
- In the next session, your colleagues provide critical feedback and we will vote to fund a project

	Intervention	Unit cost	Units	No. of units	Cost (US\$)
	Underground metro rail	\$200,000,000	Per km		\$0.00
	Elevated metro rail	\$150,000,000	Per km		\$0.00
	Elevated light rail	\$100,000,000	Per km		\$0.00
	At-grade light rail	\$50,000,000	Per km		\$0.00
	Bus rapid transit	\$5,000,000	Per km		\$0.00
	Greenway	\$300,000	Per km		\$0.00
	Footpath upgrade	\$75,000	Per km		\$0.00
	On-street parking system	\$200,000	Per km		\$0.00
	Congestion pricing	\$5,000,000	Per km <sup>2</sup>		\$0.00
	Traffic calming infrastructure	\$150,000	Per km		\$0.00
	Car-free day event	\$20,000	Per major neighborhood per year		\$0.00
	Bicycle sharing system	\$20,000	Per station (10 bikes per station)		\$0.00
	Bicycle distribution program	\$200	Per bicycle distributed		\$0.00
	Cycle way infrastructure	\$100,000	Per km		\$0.00
	Bicycle parking infrastructure	\$1,000	Per station (10 bicycle capacity)		\$0.00
	New clean diesel bus fleet (12-m vehicles)	\$100,000	Per bus		\$0.00
	New electric buses (12-m buses)	\$350,000	Per bus		\$0.00
	Modern pedicab program	\$800	Per pedicab		\$0.00
				Total	\$0.00
				Remaining budget	\$50,000,000



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