



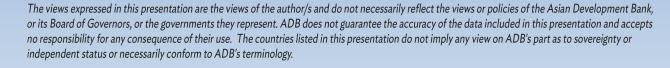


Asian Development Bank Headquarters, Manila, Philippines

# 8<sup>th</sup> ADB Business Opportunities Fair

Transport Sector – SDCC presentation by: Ki-Joon Kim

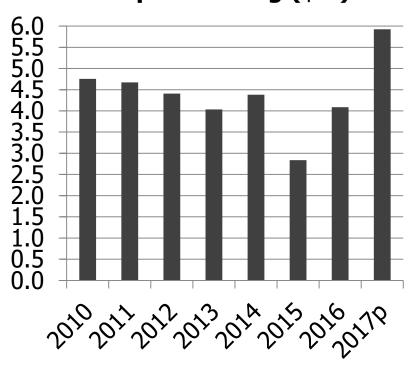
23 March 2017



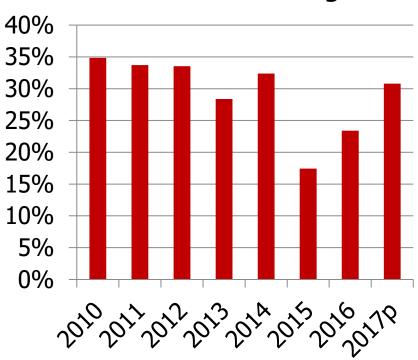


### Transport is largest sector for ADB lending

#### **Transport lending (\$ B)**



#### **Share of ADB lending**







- ✓ accessible
- ✓ affordable
- ✓ environment friendly
- safe



# The good and the bad...

- Transport enables economic & social activity, provides access to opportunities, services
- But has negative effects too congestion, emissions, environment impacts, accidents



### Massive investment needs

- \$2.5 trillion for transport in developing Asia, 2010-20
- Poor countries need basic access
- Others face capacity bottlenecks
- Asia's rapidly growing cities need urban transport



# **Extending access, connectivity**



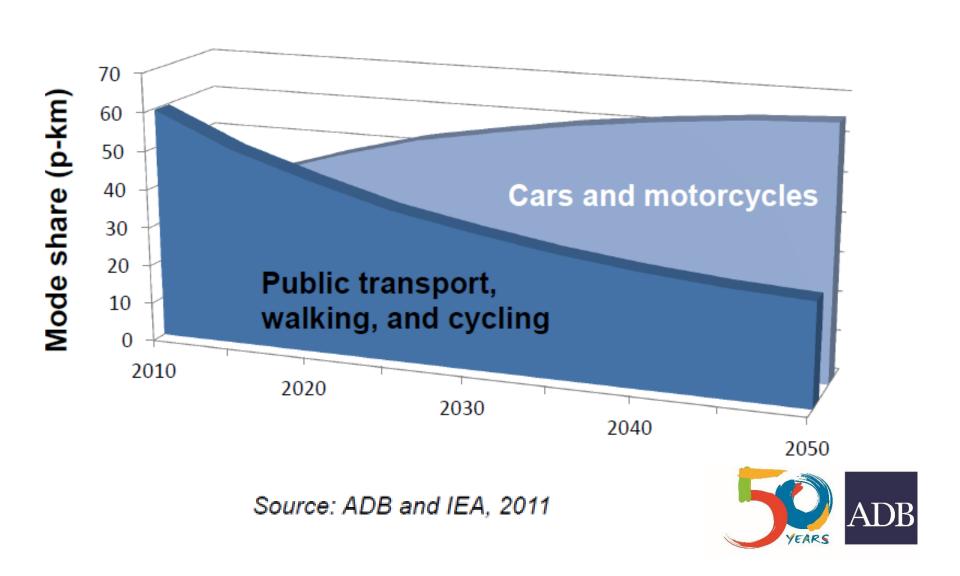








# Problem of rapid motorization



# Congestion



# **Air pollution**



# **Rising GHG emissions**

- Transport is 23% of global energyrelated GHG emissions
- Land transport is <sup>3</sup>/<sub>4</sub> of transport GHG emissions
- Land transport GHG emissions to double by 2050 based on current trend



### **Unsafe roads**

- 645,000 annual road deaths and 30 million injuries in developing Asia
- Leading cause of death for 15-44 year olds, 2<sup>nd</sup> leading cause for 6-14 year olds
- Vulnerable users are 50–75% of deaths
- Costs 2-5% of GDP



# **Avoid-Shift-Improve Paradigm**

Avoid the need to travel

**Shift** to sustainable modes

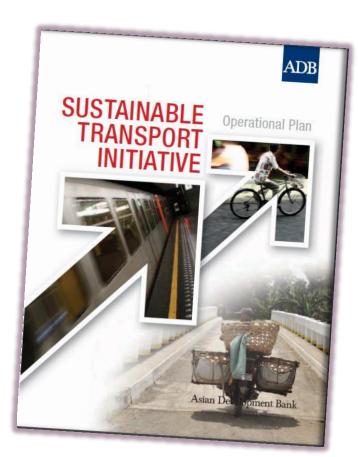
**Improve** efficiency of all modes

Lower congestion, emissions, air pollution, road accidents, respiratory & health problems



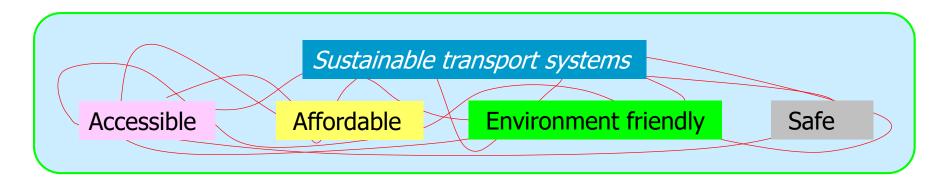
### **ADB's Sustainable Transport Initiative**

- STI approved in 2010
- Aims to transform ADB transport operations
- Covers a 10 year period, 2010-20





# STI priorities and targets



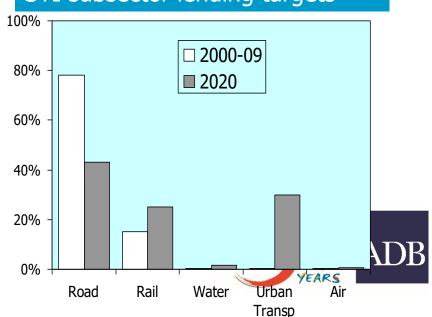
#### STI lending directions

- Mainstream sustainability in roads
  - Scale up 4 areas

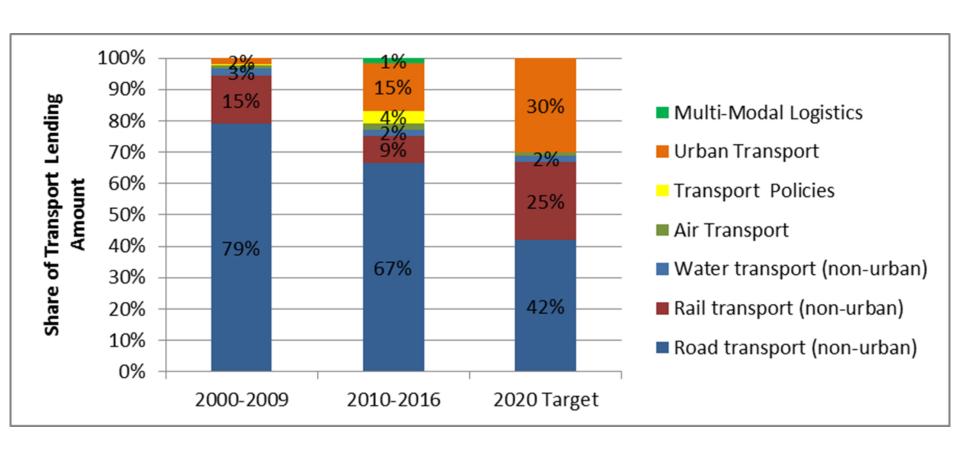


- Addressing climate change
- Cross-border transport & logistics
- Road safety & social sustainability



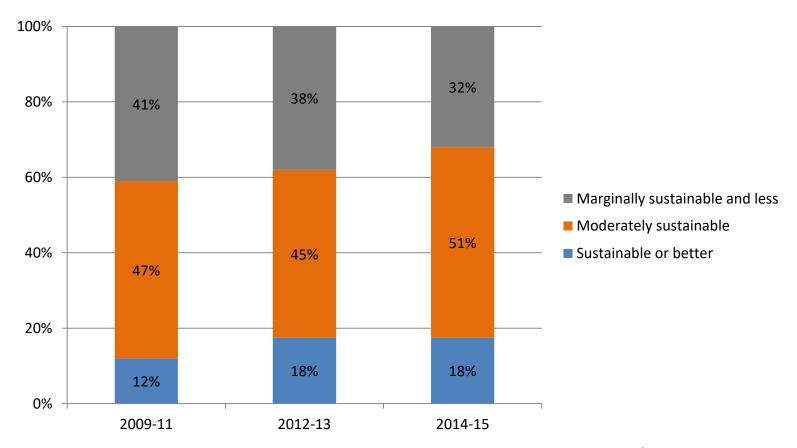


### **Progress against STI lending targets**





# Rated sustainability of transport lending (using STAR)





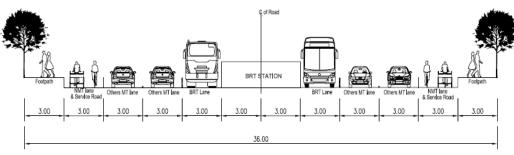
### **ADB transport operations: 2016 in numbers**

Total of **41** loans and grants and **27** technical assistance projects approved

Projects represented a total of **\$4.09 billion** in ADB investment, 23% of total ADB

Serving **30** countries

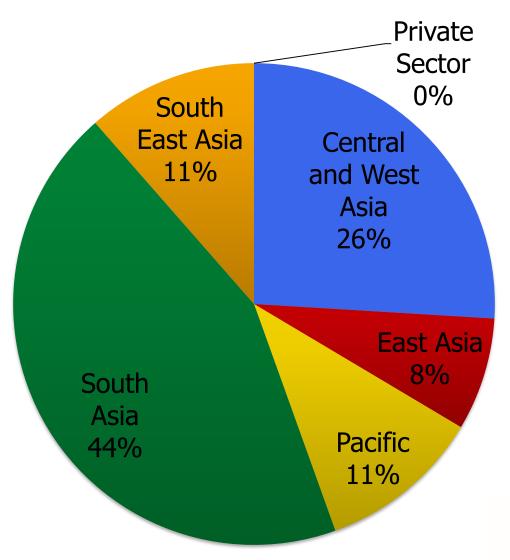




CROSS SECTION OF ROAD AT BRT STATION (TYPE - B & C) AT CH. 15+550



### **Transport approvals by subregion, 2016**





### **Road transport**

Remains largest ADB transport sub-sector

- □ Performance-based contracting
- □ Climate resilient infrastructure
- □ Cross-border regional networks
- □ Road safety initiatives



#### **India**

Madhya Pradesh District Roads II Sector Project \$300 million

Uttar Pradesh Major District Roads Improvement Project \$300 million

Bihar New Ganga Bridge Project \$500 million



#### **Nepal**

South Asia Subregional Economic Cooperation Roads Improvement Project \$186.8 million

#### **Uzbekistan**

Kashkadarya Regional Roads Project \$198 million

#### **Kazakhstan**

CAREC Corridors 1 and 6
Connector Road (AktobeMakat) Reconstruction
Project \$240.3 million



#### **PRC**

Ningxia Liupanshan
Poverty Reduction Rural
Roads Development
Project \$100 million

#### **Timor Leste**

Dili Baucau Highway Project \$49.65 million

#### **Papua New Guinea**

Highlands Region Roads
Improvement
Investment Program —
Tranche 3
\$106.99million



#### **Tajikistan**

CAREC Corridors 2, 5, and 6 Road Project (Dushanbe-Kurgonteppa) Road Project \$65.2 million

#### **Solomon Islands**

Sustainable Transport
Infrastructure
Improvement Program
\$15.75 million

#### **Viet Nam**

Support to Border Areas Development project \$104.12 million





## Water transport approvals, 2016

#### **PRC**

Chongqing Integrated Logistics Demonstration Project \$9.9 million

#### **Maldives**

**Kulhudhuffushi Harbor Project \$9.69 million** 

#### Tuvalu

Outer Island Maritime Infrastructure Project \$11.3 million





### Railways approvals, 2016

### **Bangladesh**

South Asia
Subregional
Economic
Cooperation
Chittagong-Cox's
Bazar Railway
Project, Phase 1
(Tranche 1)
\$300 million





### **Urban transport approvals, 2016**

#### **Armenia**

Infrastructure
Sustainability Support
Program (Phase 2)
\$10.5 million

#### **PRC**

Air Quality Improvement in the Greater Beijing-Tianjin-Hebei Region-China National Investment and Guaranty Corporation's Green Financing Platform \$59.8 million



### **Urban transport approvals, 2016**

#### **Viet Nam**

Greater Mekong Subregion
Ben Luc-Long Thanh
Expressway Project —
Tranche 2
\$639.82 million

#### **Solomon Islands**

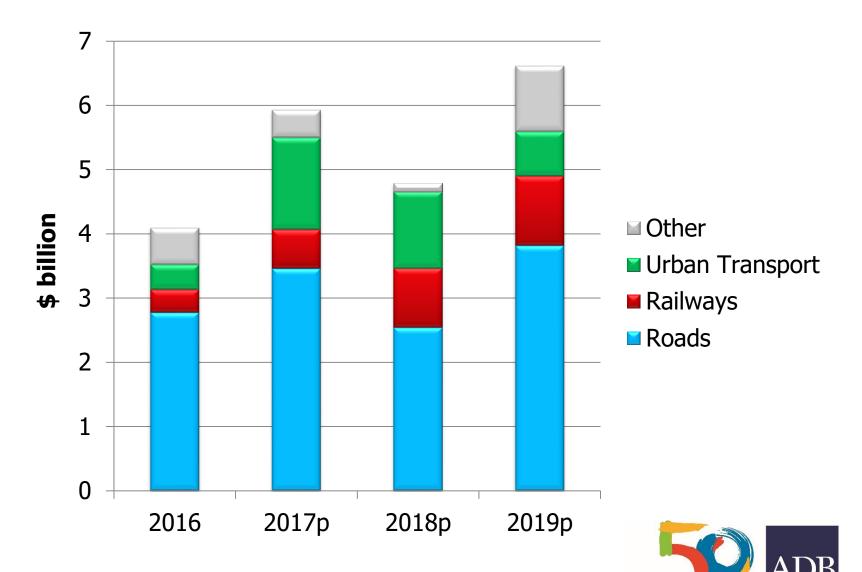
Sustainable Transport
Infrastructure
Improvement Program
\$2.1 million

#### **Pakistan**

**Karachi Bus Rapid Transit \$7 million** 



# **Transport lending pipeline, 2017-19**



# **Transport lending pipeline, 2017-19**

Subsector	Projects in 2017-19 pipeline
Roads (non- urban)	Av. annual lending of \$0.6–1.2B in each of Central & West, South, SE Asia regions; lower in East Asia, Pacific. In many DMCs, large programs in IND, SRI, KAZ, VIE
Rail (non-urban)	Expanded lending especially in South Asia in 2018, 2019. Major projects include BAN, and IND, with new rail lending in PAK, TKM, UZB, AZE, SRI, PRC, MON
Water transport	Small but important support for ports and shipping, mainly in Pacific: TUV, TIM, PNG, NAU, SAM, also IND and BAN
Air transport	Airports and related support mostly in small DMCs: NEP and PNG
Urban public transport	In 2017 and 2018 more support for metro in VIE, BAN, IND, THA, BRTs in several PAK cities, PRC, MON, PHI, GEO mass transit
Urban roads and traffic mgt	Often as part of urban development projects. ARM, GEO, MLD, KIR, BAN, LAO, PRC, IND, MON
Multimodal logistics	infrastructure for inclusive growth in VIE

### **Emerging types of ADB transport operations**

- Mass transit metro, bus rapid transit
- Intelligent transport systems e.g. electronic fare collection, bus info systems, travel info systems
- **Electric vehicles** charging infrastructure
- Energy efficient technologies e.g. for railways, vehicles
- Multimodal transport hubs e.g. rail/metro/bus
- Scaled-up structured financing for railways and mass transit e.g. combining domestic bonds, syndicated loans, guarantees, ADB sovereign financing

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# Thank you!



