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In collaboration with

**Ministry of Public Works and Transport, Lao People's Democratic Republic
Ministry of the Environment (MOE), Japan
Partnership on Sustainable, Low Carbon Transport
United Nations Economic and Social Commission for Asia and the Pacific, and
United Nations Office for Sustainable Development**

**TENTH REGIONAL ENVIRONMENTALLY SUSTAINABLE TRANSPORT (EST) FORUM IN ASIA,
14-16 MARCH 2017, VIENTIANE, LAO PDR**

**Insight to Implementation of the Bangkok 2020 Declaration ~ Policy Trends and Developments,
Challenges and Opportunities**

(Presentation for EST Plenary Session 9 of the Provisional Programme)

Final Draft

This presentation has been prepared by Mr. Todd Litman, Victoria Transport Policy Institute (VTPI), for the Tenth Regional EST Forum in Asia. The views expressed herein are those of the author only and do not necessarily reflect the views of the United Nations.

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Insight to Implementation of the Bangkok 2020 Declaration

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Policy Trends and Developments, Challenges and Opportunities

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Presented at the

Tenth EST Forum in Asia

Vientiane, Lao PDR

15 March 2017

Asia Needs Leadership!

Solving great problems require great leadership.



Who Provides Leadership in Asia?

Who can **create** a common vision for more sustainable transport in Asia, and **assemble** the resources needed to realize that vision?

Before and after Guangzhou BRT



We Can!



Declarations and Statements

- Kyoto Declaration (2015)
- Aichi Statement (2005)
- Bali Declaration (2013)
- Bangkok Declaration (2010)
- Colombo Declaration (2014)
- Manila Statement (2004)
- Seoul Statement (2009)

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... Social Dimension
... Disaster Management Planning
... Environment - Environmentally Sustainable Transport (EST)
... Environment - 3R/Waste Management
... Environment - IBLA

Special Event of Asian Mayors for the Signing of the Kyoto Declaration for the Promotion of EST in Cities in the United Nations Forum on Climate Change Mitigation, Fuel Efficiency and Sustainable Urban Transport

16 Mar 2010 - 16 Mar 2010
Seoul, Korea

The United Nations Forum on Climate Change Mitigation, Fuel Efficiency and Sustainable Urban Transport was held at the Korea Press Center in Seoul, Republic of Korea, on 16-17 March 2010. The Forum was hosted by the Government of the Republic of Korea through the Ministry of Knowledge Economy (MKE), the Ministry of Land, Transport and Maritime Affairs (MLTM), and Korea Energy Management Corporation (KEMCO), and co-organized by the Korea Energy Economics Institute (KEEI), the Korea Transport Institute (KOTI), and United Nations Department of Economic and Social Affairs (UN DESA), in collaboration with the United Nations Centre for Regional Development (UNCRD) and the Sustainable Low Carbon Transport Partnership (SLOCAT).

As an integral part of the UN Forum, the Special Event of Asian Mayors for the Signing of the Kyoto Declaration for the Promotion of Environmentally Sustainable Transport (EST) in Cities was jointly organized by UNCRD and the Ministry of the Environment, Government of Japan (MOEJ). These 10 new signatories have brought the total signatories to 44 Asian cities.

Kyoto Declaration (Extended in 2010, 44 cities)
Programme and Presentations are available in UN Forum website (United Nations Sustainable Knowledge Platform - DSD/UNDESA)



Final Version

Bali Declaration
on
Vision Three Zeros - Zero Congestion, Zero Pollution, and Zero Accidents
towards Next Generation Transport Systems in Asia

We, the participants, who are representatives of member countries of the Seventh Regional Environmentally Sustainable Transport (EST) Forum in Asia (Afghanistan, Bangladesh, Bhutan, Brunei Darussalam, Cambodia, People's Republic of China, Indonesia, India, Japan, Republic of Korea, Lao PDR, Maldives, Mongolia, Myanmar, Nepal, the Philippines, Pakistan, Russian Federation, Sri Lanka, Thailand, Timor-Leste, and Viet Nam), international organizations, bilateral and multilateral agencies, nongovernmental organizations, research organizations, and expert sustainable transport professionals, having met at the Seventh Regional EST Forum in Asia and Global Consultation on Sustainable Transport in the Post-2015 Development Agenda, held in Bali, Indonesia, from 23 to 25 April 2013, adopt the **"Bali Declaration on Vision Three Zeros - Zero Congestion, Zero Pollution, and Zero Accidents towards Next Generation Transport Systems in Asia"**, to give further inspiration and encouragement to all who are working on promoting environmentally sustainable transport in Asia. Realizing this will be helped by zero tolerance to fatalities, congestion, and pollution.

Recalling the commitments to achieve the sustainable transport goals under the **Bangkok 2020 Declaration (2010-2020)** agreed upon by the participants at the Fifth Regional EST Forum, held in Bangkok, Thailand, on 23-25 August 2010,

SEOUL STATEMENT
~ Towards the Promotion of Environmentally Sustainable Transport (EST) for
a Low-Carbon Society and Green Growth in Asia ~

The participants, having met in Seoul, the Republic of Korea from 24 to 26 February 2009, for the Fourth Regional EST Forum, to draw up and adopt a statement for the promotion of environmentally sustainable transport in Asia,

Noting that Asia is experiencing the fastest economic growth and by mid of this century, and at the current growth rate there might be more motorized vehicles in Asia than there would be in Europe and North America combined, and that the profound impact of this trend on quality of human life and environment can not be underestimated,

Reaffirming and building upon the integrated EST measures defined under the *Aichi Statement* adopted at the First Regional EST Forum in Asia, held in Nagoya, Japan, on 1-2 August 2005, and considering that efforts to promote environmentally sustainable transport will not only result in the improvement of human health through the reduction of urban air pollution, but will also have important complementary (co-)benefits, including the reduction of greenhouse gas (GHG) emissions,

Asian Mayors' Policy Dialogue for Promotion of Environmentally Sustainable Transport in Cities
-Kyoto Declaration-

We, the Mayors and governmental representatives of Asian cities, having met in Kyoto, Japan on 23-24 April 2007 at the Asian Mayors' Policy Dialogue for Promotion of Environmentally Sustainable Transport (EST) in Cities, to discuss and address key policy issues on environment and transport from city perspectives under the overall framework of the Regional EST Forum,

Recognizing that cities in the region are faced with a number of critical environment and transport related issues, their implications for human health, economic well-being, and social equity, and the emerging need to define and implement clear goals at the city level in line with the Millennium Development Goals (MDGs) and the Johannesburg Plan of Implementation (JPOI) adopted at the 2002 World Summit on Sustainable Development (WSSD),

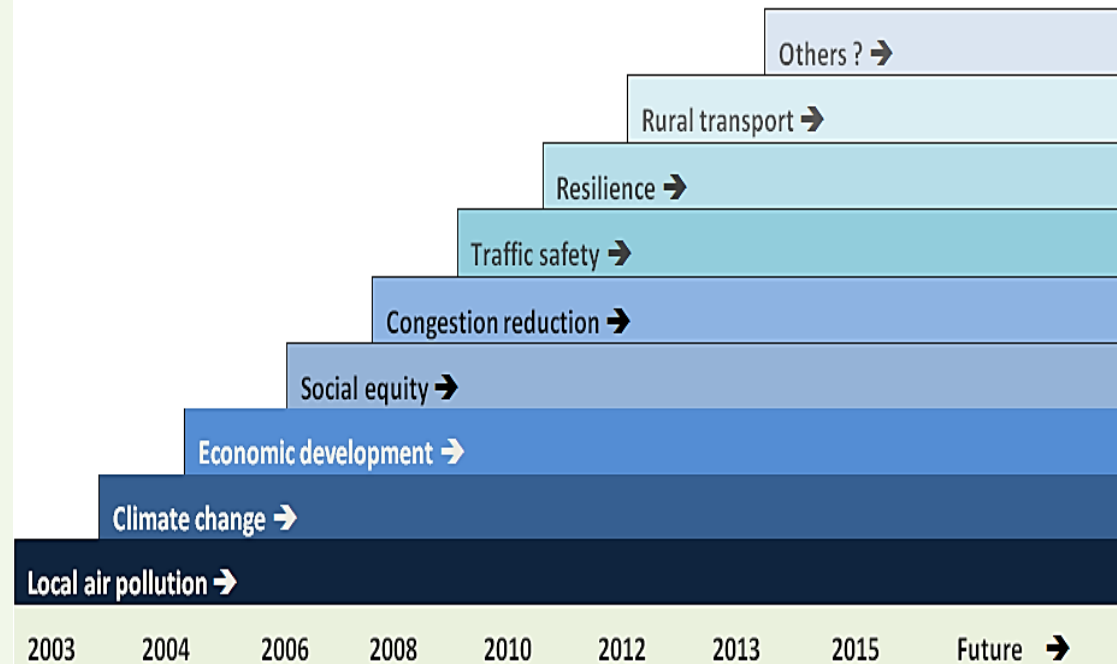
Reaffirming and building upon the Aichi Statement agreed upon at the First Meeting of the Regional Environmentally Sustainable Transport Forum in Asia, held in Nagoya, Japan, from 1-2 August 2005,

Noting the objectives of the Regional EST Forum, an initiative of the United Nations Centre for Regional Development (UNCRD) in cooperation with Asian countries, which is comprised of high-level government representatives and experts in various thematic areas related to EST, and which provides a strategic and knowledge platform for sharing

Expanding Scope

The EST Forums originally focused on local air pollution problems, but we soon realized that *everything is connected*. Over time the Forums incorporated other important issues.

This expanded scope reflects true sustainability, which balances economic, social and environmental goals. It helps identify **Win-Win** solutions that provide multiple benefits.



Our Review

We evaluated 74 progress reports submitted at the four most recent EST in Asia Forums. Many countries demonstrated progress toward Bangkok Declaration goals.

During the last decade many EST Forum countries have established integrated transport and land use planning programs, alternative fuel and emission reduction policies, and new non-motorized transport and public transit development programs.

Some cited the Bangkok Declaration as a reason for implementing a particular policy or project, or they cited the EST Forums as a source of support for implementation.

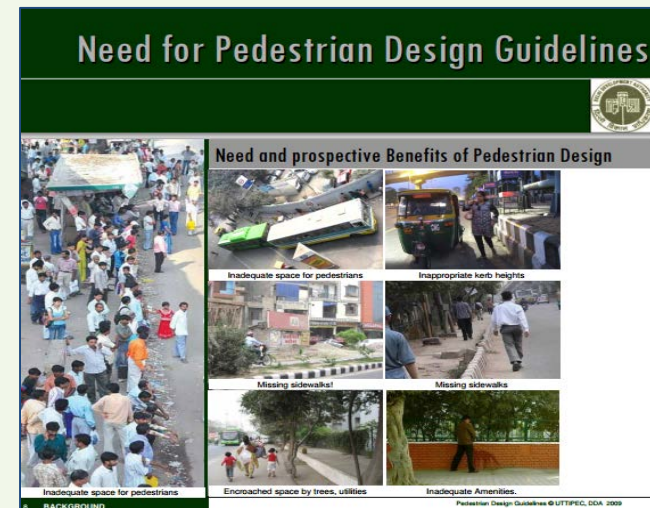
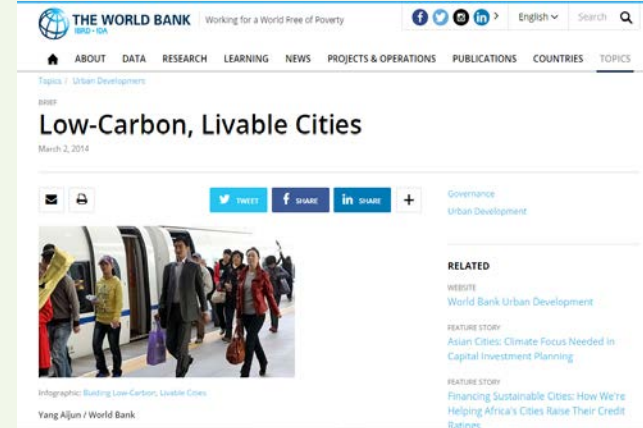
COUNTRY/CITY REPORT

- 8th EST Forum - City Report (Bangladesh, Sylhet)
- 8th EST Forum - City Report (Indonesia, Makassar)
- 8th EST Forum - City Report (Indonesia, Surakarta)
- 8th EST Forum - City Report (Indonesia, Yogyakarta)
- 8th EST Forum - City Report (Karachi, Pakistan)/Presentation
- 8th EST Forum - City Report (Nepal, Kathmandu)
- 8th EST Forum - City Report (Philippines, Baguio)
- 8th EST Forum - City Report (Tangerang, Indonesia)
- 8th EST Forum - City Report (Tangerang, Indonesia)/Presentation
- 8th EST Forum - City Report (Ulaanbaatar, Mongolia)
- 8th EST Forum - City Report Guideline
- 8th EST Forum - Country Report (Afghanistan)
- 8th EST Forum - Country Report (Afghanistan)/Presentation
- 8th EST Forum - Country Report (Bangladesh)
- 8th EST Forum - Country Report (Bangladesh)/Presentation
- 8th EST Forum - Country Report (Bhutan)/Presentation
- 8th EST Forum - Country Report (Cambodia)/Presentation
- 8th EST Forum - Country Report (India)/Presentation
- 8th EST Forum - Country Report (Indonesia)/Presentation
- 8th EST Forum - Country Report (Japan)
- 8th EST Forum - Country Report (Malaysia)/Presentation
- 8th EST Forum - Country Report (Mongolia)
- 8th EST Forum - Country Report (Myanmar)
- 8th EST Forum - Country Report (Nepal)/Presentation
- 8th EST Forum - Country Report (Pakistan)
- 8th EST Forum - Country Report (Pakistan)/Presentation
- 8th EST Forum - Country Report (Philippines)/Presentation
- 8th EST Forum - Country Report (Singapore)
- 8th EST Forum - Country Report (Singapore)/Presentation
- 8th EST Forum - Country Report (Thailand)/Presentation
- 8th EST Forum - Country Report (Viet Nam)
- 8th EST Forum - Country Report (Viet Nam)/Presentation
- 8th EST Forum - Country Report Guideline

Our Review

Our review indicates that the EST Forums have:

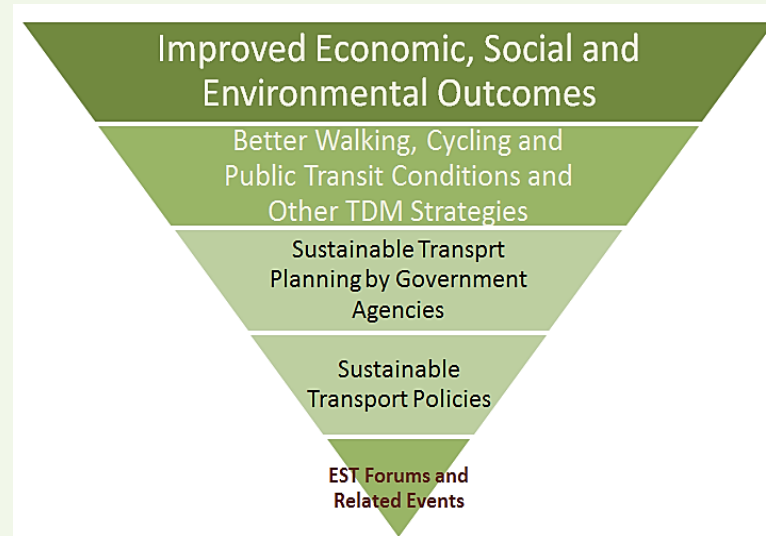
- Introduced many decision-makers to sustainable transport concepts and strategies.
- Helped make federal transport and environmental policies more sustainable, which in turn, leveraged changes by other levels of government.
- Supported policy changes by development banks and other international organizations to support more sustainable transport investments and planning.
- Helped countries and cities establish sustainable transport planning goals, performance targets, standards and evaluation programs.
- Responded to emerging needs.
- Helped create an information network that produces and shares publications and tools for more sustainable transport.



What Went Right?

The EST Forums:

- Helped improve our understanding of sustainable transport concepts.
- Helped governments establish clear goals and measurable targets, and track progress toward achieving those goals.
- Contributed to more multi-modal planning. Many jurisdictions, transport agencies and professional organizations are changing their policies, investments and planning practices to give more consideration to walking, cycling and high quality public transit services.
- Helped cities implement new technologies that improve traffic and public transit operations.
- Encouraged reductions in fuel subsidies and more parking pricing.



What Went Wrong?

- Conflicting policies between different levels of government and agencies.
- Equity objectives are treated as special issues rather than incorporated in all planning decisions.
- Little progress toward pricing reforms, such as increased fuel taxes and road tolls.
- Inadequate professional development programs, so many practitioners use outdated methods.
- Contradictory land use development policies result in sprawl.
- Uncoordinated bus systems planning.
- New technologies are sometime difficult to implement, resulting in waste and poor services.
- Inadequate law enforcement and driver training.
- Inadequate data for planning and evaluation.

WHERE WE WENT WRONG

Crises went down the BRT drain, but the result could have been different had authorities taken cue from success stories elsewhere. Here's how it could have been done

DEDICATED RIGHT OF WAY	INTERSECTION TREATMENT	LESSONS LEARNT
<p>IDEAL Dedicated BRT lanes ensure buses bypass traffic jam; can be enforced through use of delineators, coloured pavement or camera enforcement</p> <p>REALITY BRT had a dedicated bus lane, but is now open to all vehicles</p>	<p>IDEAL Forbidding turns across bus lanes and simplifying signal cycles reduce delays. Give traffic signal priority to BRT vehicle to increase speed</p> <p>REALITY Traffic signals were longer for certain directions, but had no impact. Jams went on till 2km beyond the intersection</p>	<p>Before embarking upon the ambitious plan, government could have considered the following points:</p> <p>Choosing the right corridor: Dependent on demand for a bus service at the location</p> <p>Start early: Put BRT in place when you plan a new road</p> <p>If road is narrow: Ban use of cars</p> <ul style="list-style-type: none"> > Have a single lane, but with double lane at bus stops, for passing over > Last-mile connectivity makes BRT more robust > Provide continuous, unhindered walking spaces > Include expanded footpaths, safe pedestrian crossings, protected cycle tracks, properly scaled carriageways, conveniently placed bus stops, designated on-street parking
<p>BUS BAY ALIGNMENT</p> <p>IDEAL Median-aligned bus bays as they minimise risk of delays caused by turning movements and parked vehicles</p> <p>REALITY Only thing that Delhi BRT got right, as bus bay is in the centre</p>	<p>PLATFORM-LEVEL BOARDING</p> <p>IDEAL Bus floor and station platform should be at same height</p> <p>REALITY Levels are same, but passengers had no connection to sidewalks, running across traffic to get to the bus stop</p>	<p>A large network of bus-stops brings flexibility to system</p>
<p>OFF-BOARD FARE COLLECTION</p> <p>IDEAL Off-board fare collection reduces boarding time and prevents revenue leakage</p> <p>REALITY Delhi is yet to automate its fare collection in the bus system</p>		

Key Recommendations

Urban Livability and Social Equity

Many Asian cities lacking quality-of-life features. Solutions:

- ***Complete streets policies.*** Design streets to ensure safe and comfortable walking and cycling, with speed control, sidewalks, crosswalks, and bike lanes where appropriate.
- ***Streetscaping.*** Design streets with amenities such as shade trees, benches, and garbage cans.
- ***Parks and recreation.*** Develop parks and recreation facilities within a five-minute walk of most houses, and devote at least 20% of the urban area to public openspace.
- ***Housing diversity.*** Build diverse and affordable housing so all households can find options that meet their needs.
- ***Culture and heritage.*** Support community resources that preserve cultural identity and history.



Key Recommendations

Motorcycles and Scooters

Motorized two-wheelers (motorcycles and scooters) are common in Asian cities. Two-wheelers are less expensive, require less space for travel and parking, and consume less fuel than cars, but still cause significant congestion, accident risk, noise and air pollution.

To minimize these impacts some cities ban fossil fuel motorcycles, which created demand for electric scooters that are now widely used. This significantly reduces pollution, and because electric scooters tend to have lower maximum speeds, can reduce accident risk.



Key Recommendations

Regional Research and Knowledge Sharing

Some Asian countries have national transport research programs and support academic networks, but there is no major international organization in the Asian region.

To fill this gap the EST Forums could support research and information sharing programs, or help establish a new organization, comparable to the International Transport Forum.



Key Recommendations

Data Quality

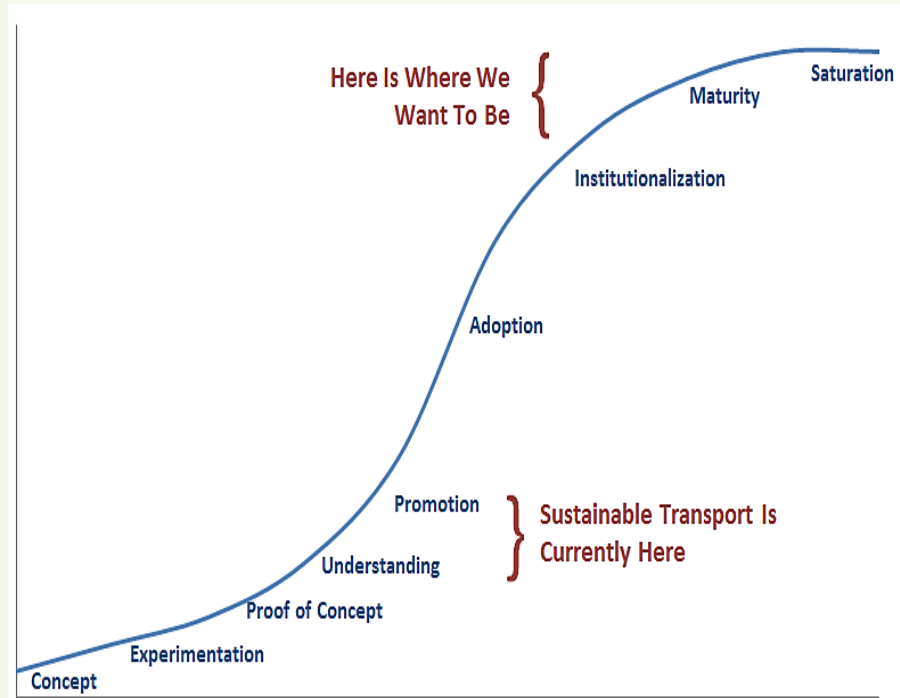
Planning, evaluation and research all require comprehensive, accurate, consistent, transparent and accessible data.

The EST Forum can help establish Asia-wide standards for transport data, similar to current efforts to standardize European transport statistics.



The Way Forward

- This analysis indicates that the EST Forums in Asia are overall effective and beneficial. As a result, the best way forward is to continue and expand them to meet future needs.
- Sustainable transport policies will become even more important in the future due to urban population and economic growth, and increasing environmental concerns.
- We now have good knowledge about how to implement sustainable transport policies. This is a good time for EST Forums to scale up to support deployment of these innovations.



Innovation Implementation

It may be time to develop national, regional and local sustainable transport conferences and workshops.

Examples include the *Urban Mobility India* conference held annually in New Delhi, and regional conferences and workshops sponsored by planning and engineering professional organizations.

