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Transportation has achieved a high level of development in:
- Design;
- Operation;
- Technology.

Not everyone has benefited from this development.

Transportation Development

Death rate remains unacceptably high at **1.24 million per year**

World Safety Situation

Source: World Health Organization
WORLD ROAD TRAFFIC DEATH RATES PER 100 000 POPULATION

WHO regions

Access Management Rationale
AM Safety Benefits

Level of Service Benefits

AM Operational Benefits
AM Economic Benefits

Access Management is the careful planning of the location, type and design of access.

(Adapted from Access Management for Corridors, AM Training 2012)

What is Access Management?
What is Access Management?

Systematic control of:
- Locations
- Spacing
- Design
- Operation

Source: NY5 Access Management Plan

U.S. has been a champion worldwide in developing and implementing the concept of Access Management in many States for more than 30 years.

However this is an exception worldwide

Concept Implementation
Pedestrian crossing on a divided high-speed highway in Africa;
- Africa has the highest fatality rates per 100,000 population in the world (24.1)

Source: German Research Association for Road and Traffic Engineering-FGSV

Access Management Worldwide?

Arterial access problems in Papua, New Guinea

Source: Transport Research Laboratory, U.K.
Access Management Worldwide?

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Access Management Worldwide?

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Access Design along a high speed divided road in Athens, Greece
- Continuous and improperly designed driveways (km-long wide driveway!)
- Destruction of Sidewalk, Curb and Gutter function

Access Management Worldwide?

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2nd CAM Shanghai, China – Sept. 25~27, 2014

Dangerous Driveway Location in Nurnberg, Germany

Access Management Worldwide?

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2nd CAM Shanghai, China – Sept. 25~27, 2014
Findings from PIARC TC C.1

Source: H. J. Vollpracht, Infrastructure and engineering. How to make our towns safer? PIARC TC C.1

False settlement policies and endless linear settlements may be...

...the most crucial disaster for road safety in emerging countries.

Source: H. J. Vollpracht, Infrastructure and engineering. How to make our towns safer? PIARC TC C.1
Shortage of financial and human resources; and
Failure of policy makers to prioritize and take the necessary actions to strengthen
- the legal,
- economic and
- technical decision-making framework of a country

What are the Reasons for non-utilization of the Access Management Benefits globally?

Time to Change That!

TRB Access Management Committee AHB70 has initiated an action plan to advance the integration of access management in the transportation planning and design decision processes of nations across the globe

Step 1 is Preparation of an International AM Primer
Historical Background

Legal Framework

Access Control Schemes

Policies and Standards

Enforcement Schemes

Land Use and Development Regulation

Traffic Modes

Perspectives

Other

Int'l AM Primer

TRB-AHB70

Participating Countries

Americas

• U.S.

Africa

• S. Africa

Asia

• China
• S. Korea

Australia

• Australia (just came in!)

Europe

• Germany
• Greece
• Poland
• U.K.
Legal Framework & Tools

<table>
<thead>
<tr>
<th>Countries</th>
<th>Legal Framework and Tools</th>
<th>Access Permit Engineering Standards</th>
<th>Access Permit Procedures</th>
<th>Criteria and Procedures for Deviation from Standards</th>
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<tbody>
<tr>
<td>U.S.A.</td>
<td>Full for freeways, varies by state for other road categories</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>S. Africa</td>
<td>Partially for freeways and arterials</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
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<td>Yes</td>
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<tr>
<td>S. Korea</td>
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<td>Ad hoc, based on U.K. documentation</td>
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<tr>
<td>Germany</td>
<td>Partially for all road categories</td>
<td>Partially in urban settings only</td>
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<td>Greece</td>
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<td>Partially for specific land uses</td>
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<tr>
<td>U.K.</td>
<td>Partially for all road categories</td>
<td>Yes</td>
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<td>No</td>
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</tbody>
</table>

OVERVIEW:

- In all countries, intersection spacing, signalization rules, and divided highway criteria apply for freeways (motorways);
- For other roads access schemes applied vary widely;
- Often no access control at all on subordinate roadway categories

Roadway Function & AM

Source: T. Rieker-Grossmann, Colloquium for Rural Road Design, Cologne, June 18, 2013
Enforcement Schemes

- U.S., China and S. Africa have strong enforcement schemes
- Rest of countries provide indirect or ad hoc enforcement through urban planning or land use regulation

Land Use Regulation

- All countries provide for land use regulation
- Town plans and land use regulations may be the best tools to improve AM practices all over the world
Policies and Standards

- U.S., China and S. Africa have AM Manuals
- In U.K. a Chapter of the Design Manual for Roads explicitly refers to AM
- In other countries land development manuals or procedures involve some AM Features

Transportation Modes

- Multimodal Approach associated with AM is found in Germany and U.K.
- In U.S. the multimodal AM approach has been initiated
- In all other countries there are guides and policies for pedestrian, bicyclist and transit design. But NOT directly associated with AM
Transportation Modes

Perspectives

- Development perspectives vary between countries;
- U.S. is striving to expand systemwide and corridor programs to support multimodal AM;
- S. Africa is advancing systemwide AM requirements;
- In most other countries value of AM is recognized by transportation community;
- Nevertheless AM is receiving sporadic or limited implementation in access regulation and land development plans.
1. General lack of familiarity with contemporary practice of AM;
2. Lack of nationally accepted guidelines with local variations;
3. Limited tools to predict the impacts of AM techniques;
4. Inadequate number of case studies and examples of successful practices;
5. Lack of government policy and programmatic support;

AM impeding Factors #1

6. Numerous agency functions, jurisdictions, and levels of government;
7. Local stakeholder opposition;
8. Lack of resources;
9. Need for outreach and education of agency management, staff, consultants, public officials, and the general public.

AM impeding Factors #2
Nations are in varying stages of developing the concept;
U.S is currently working toward systemwide advancement of AM practices;
South Africa and China are also seeking to expand their AM programs and requirements;
In South Korea, Poland and Greece, the concept of AM is being introduced partially or occasionally, as opportunities arise;
In Germany and the U.K., AM practices are limited and more strongly focused on serving vulnerable road users;
The building blocks exist in every nation to begin integrating AM into urban planning and regulation, as well as major roadway planning, policy, and design.

Overview of Findings for the Countries examined

Next Steps

• Prioritize and advance country-specific research on access management
• Include urban planning and transportation engineering considerations

• Tailor the programmatic and technical approach to implementing access management to the societal and institutional context of the country

• Test and evaluate the impacts of access management projects and actions relative to all modes of transportation
• Refine practices accordingly
NEXT STEPS

- Document case studies and examples of effective practices within the country for further national and international dissemination
- Share successful experiences with other nations having similar institutional and political contexts

- Regularly convey the results of research and practice to the professional community, government agency staff, and public policy makers through conferences, training, and other means

- Prepare a national access management manual to document the national state of the practice and
- Provide a foundation for further advancements

TRB Access Management Committee AHB70 is committed to provide support for global advancement of the concept!

PROMISE
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