Where we started: little evaluation evidence

Transport represents 16% of MDB lending, but only 0.4% of impact evaluations cover Transport.

* Impact Evaluation may cover more than one subject area.
What is DIME?

DIME
Development
Impact
Evaluation

Agriculture
Fragility
Governance
Transport
Energy...

conduct
rigorous research
generate
actionable data
and evidence
inform
real-time decisions
increase
policy effectiveness
DIME's yearly surveys show that our approach secures an enormous amount of policy influence, with clients identifying at least four major decisions per project having been guided by data and evidence from the impact evaluation.

Government officials say they used the IE to:

- Improve their monitoring and evaluation function (better indicators, more capacity, and better data systems) (100%).
- Make improvements to program design (better delivery mechanism, more efficient modalities, better quality and outreach) (82%).
- Adopt the arm of the experiment or new delivery mechanism that was proven most effective (58%).
- Scale up or scale down (68%).
A simple idea

Identify problems

Test alternatives

Adopt solutions
## DIME IEs, by GP

### Percentage and Number of IEs

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport</td>
<td>16%</td>
<td>33</td>
</tr>
<tr>
<td>Governance</td>
<td>15%</td>
<td>30</td>
</tr>
<tr>
<td>Agriculture</td>
<td>14%</td>
<td>28</td>
</tr>
<tr>
<td>Social Protection</td>
<td>9%</td>
<td>19</td>
</tr>
<tr>
<td>Health, Nutrition &amp; Population</td>
<td>9%</td>
<td>18</td>
</tr>
<tr>
<td>Finance, Competitiveness &amp; Innovation</td>
<td>8%</td>
<td>16</td>
</tr>
<tr>
<td>Social, Urban, Rural &amp; Resilience</td>
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<td>14</td>
</tr>
<tr>
<td>Water</td>
<td>4%</td>
<td>9</td>
</tr>
<tr>
<td>Jobs &amp; Development</td>
<td>3%</td>
<td>7</td>
</tr>
<tr>
<td>Environment &amp; Natural Resources</td>
<td>3%</td>
<td>7</td>
</tr>
<tr>
<td>Education</td>
<td>3%</td>
<td>6</td>
</tr>
<tr>
<td>Macroeconomics, Trade &amp; Investment</td>
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<td>5</td>
</tr>
<tr>
<td>Energy</td>
<td>2%</td>
<td>5</td>
</tr>
<tr>
<td>Poverty</td>
<td>1%</td>
<td>3</td>
</tr>
<tr>
<td>Digital Development</td>
<td>1%</td>
<td>3</td>
</tr>
</tbody>
</table>

### Development Financing Amount (USD million)

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
<th>Of which WB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport</td>
<td>$6,700</td>
<td>$4,502</td>
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<tr>
<td>Governance</td>
<td>$892</td>
<td>$846</td>
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<tr>
<td>Agriculture</td>
<td>$1,539</td>
<td>$1,433</td>
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<td>Social Protection</td>
<td>$1,373</td>
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<td>Health, Nutrition &amp; Population</td>
<td>$462</td>
<td>$441</td>
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<td>Finance, Competitiveness &amp; Innovation</td>
<td>$808</td>
<td>$806</td>
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<tr>
<td>Social, Urban, Rural &amp; Resilience</td>
<td>$997</td>
<td>$963</td>
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<tr>
<td>Water</td>
<td>$1,190</td>
<td>$1,067</td>
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<tr>
<td>Jobs &amp; Development</td>
<td>$103</td>
<td>$60</td>
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<tr>
<td>Environment &amp; Natural Resources</td>
<td>$687</td>
<td>All WB</td>
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<tr>
<td>Education</td>
<td>$540</td>
<td>All WB</td>
</tr>
<tr>
<td>Macroeconomics, Trade &amp; Investment</td>
<td>$91</td>
<td>$66</td>
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<tr>
<td>Energy</td>
<td>$650</td>
<td>$60</td>
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<tr>
<td>Poverty</td>
<td>$125</td>
<td>$60</td>
</tr>
<tr>
<td>Digital Development</td>
<td>$80</td>
<td>All WB</td>
</tr>
</tbody>
</table>
The ieConnect for Impact Portfolio

- Peru Rural
- Bogota BRT Subsidies
- Nicaragua Gender Rural Access
- Nicaragua Road Safety
- Guinea Bissau Gender Rural Access
- Dakar BRT Mobility
- Dakar BRT Workers
- Liberia Road Safety
- Nigeria Rural
- Rwanda Feeder Roads
- Rwanda Corridors
- Malawi Post-Crash Response
- Rio Women’s Safety Metro
- Rio Access to Jobs
- South Africa Youth Mobility
- Tunisia Corridors
- Iraq Corridors
- Nepal Bridge Connectivity
- Pakistan CAREC Corridors
- India GBV in Public Spaces
- Ethiopia Hawassa Industrial Park
- Ethiopia Road Safety Data
- Ethiopia Expressway
- Nairobi Crash Big Data
- Tanzania Post-Crash Response
- Dar es Salaam BRT Gender
- Dar es Salaam BRT
- Mozambique Rural Roads
- South Africa Youth Mobility
- Urban Mobility
- Rural Roads
- Road Safety
- Development Corridors
Brazil: (1) Rio de Janeiro gender segregated public transport; (2) Pavuna Transport Subsidy

Colombia: (3) The impact of a targeted fare subsidy program on public transportation usage and labor market outcomes: a regression discontinuity analysis from Bogota

Ethiopia: (4) Hawassa Industrial Park Community IE; (5) Creating a Transport Data System to Evaluate Improvements to Transport Efficiency & Road Safety; (6) Ethiopia Expressway; (7) Evaluating the Impact of Urban Corridor Improvement in Addis Ababa

Guinea-Bissau: (8) Rural Transport Project: Impact Evaluation on Women’s Access to Essential Services and Economic Opportunities

India: (9) Measuring Violence Against Women in Public Spaces: Drawing on Experimental Evidence

Iraq: (10) Iraq Transport Corridor Project

Kenya: (11) smarTTrans: Road Safety in Kenya;

Liberia: (12) Liberia Road Safety Impact Evaluation

Malawi: (13) Health Impacts of Emergency Response and Post-Crash Medical Care in Malawi

Mozambique: (14) The Route for Development: Complementary Effects of Improved Roads and Agricultural Extension Services

Nepal: (15) Connecting the Dots: The Impact of Enhanced Bridge Connectivity
Nicaragua: (16) Enhancing Female Participation in Household Decision-Making for Improved Impacts of Rural Roads; (17) Slow down! Pilots to Decrease Speeding and Incidence of Fatal Traffic Accidents at “Critical” Road Spots

Nigeria: (18) Impact Evaluation of the Rural Access and Mobility Project

Pakistan: (19) Understanding the Impacts of CAREC Corridor Investments in Pakistan on Connectivity and Local Economic Development

Peru: (20) Impact Evaluation of the Peru Support of the Subnational Transport Program Project

Rwanda: (21) Impact Evaluation of Rwanda Rural Feeder Roads; (22) Lake Victoria Transport Program Rwanda Corridor

Senegal: (23) Constructing Africa’s Cities: Measuring and Enhancing Construction Worker Welfare in Dakar; (24) Measuring and Enhancing Mobility in Dakar

South Africa: (25) Matching Youth to Jobs: A Randomized Controlled Experiment in South Africa

Tanzania: (26) Health Impacts of Emergency Response and Post-Crash Medical Care in Tanzania; (27) Experimental Evidence on Urban Transport and Mobility: Impact Evaluation of the Dar es Salaam BRT System; (28) Understanding and Addressing Gender-Based Violence in Public Transportation in Dar es Salaam

Tunisia: (29) Impact of Highway Upgrading on National Integration and Local Economic Development
ieConnect for Impact

- Partners: WB Transport GP, DIME, DFID, EU, AfDB, IsDB, ADB, IADB, JICA
- Inform & transform investments in transport
Lack of data is a major shortcoming for transport.

Data constraints can be overcome by scaling up the use of new technologies, big data, remote sensing, and crowdsourcing. Technology must not be a boutique business for the transport sector.
How are we different?

- **Project**: not just whether but how
- **Country**: data ecosystem to transform planning and returns on investment
- **Region**: understand trade and migration dynamics
- **Sector**: common framework for greater learning
1. Increase project effectiveness

Not just **WHETHER** a BRT **cause** higher employment

But also **HOW**: what pricing policy or labor market linkages maximize the impact of the BRT on jobs?
Urban Mobility

Dar es Salaam Bus Rapid Transit (BRT) System

- Evaluating BRT investments: Impact of mass transit on labor market linkages and quality of life
- Understanding cost of displacement and pricing strategies for gentrification and inclusive urban growth
- Using randomized experiments with multiple subsidies
  Triple difference strategy (before-after, with-without, close-far)
  Structural modeling to estimate general equilibrium impacts
2. Create better institutions for transport policy

• Not just evaluate an investment
• But also how to create country-wide
  • institutional coordination mechanisms and
  • data ecosystem
to transform transport policy
Build partnerships through multi-year research co-production to guide the country’s economic transformation.

**Overall Impact of LWH**
GAFSP, Ministry of Agriculture

**Commitment and Savings**
Savings and Cooperatives Organizations (SACCOS)

**Feedback Matters**
One Acre Fund

**Impact of Irrigation**
UC-Berkeley, 3ie, IGC, Ministry of Agriculture

**Rural Feeder Roads**
EU, USAID, Netherlands, Transport Development Authority

**Market Listing and Price Surveys**
Innovations for Poverty Action, Ministry of Infrastructure

**Lake Victoria Corridor**
eConnect, JICA
Ministry of Infrastructure

**DIME-EU Partnership for Evidence-Based Policy-Making**
EU, Ministry of Agriculture

**Feeder road rehabilitation increases HH income in remote villages by $74 or 27% of household income**

- 2012
- 2013
- 2014
- 2015
- 2016
- 2017
- 2018
3. Economics of transport at regional level

• Not just work at project or country level
• But also create the data infrastructure to understand the dynamics of trade and migration across geographical space
The economics of infrastructure investments for production and trade

• Value of connectivity across East Africa Trade Zone
• Industrial zones
• Urbanization
• Rural transformation
• Migration
• Trade
4. Global framework for learning

Offer a common framework for faster learning in the transport sector

1. Create standards for use and availability of data in multiple country settings

2. Develop a greater understanding on how to maximize returns to transport investments

3. Document how mobility and transport are engines of development and contribute to the SDGs
Thank You

http://dime.worldbank.org
http://transport.worldbank.org

Dimewiki.worldbank.org
DIME Wiki | ietoolkit | Stata GitHub

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@WB_transport

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blogs.worldbank.org/transport

microdata.worldbank.org/index.php/catalog/impact_evaluation