

International Con

WirginiaTech Transportation Institute



Federal Highway Administration





International Conference unsserts neurons A Strategic Look at the **Development Need for Pavement Management Systems** 

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### STRATEGIC LOOK AT THE DEVELOPMENT NEED FOR PAVEMENT MANAGEMENT SYSTEMS – WORLD BANK PERSPECTIVE

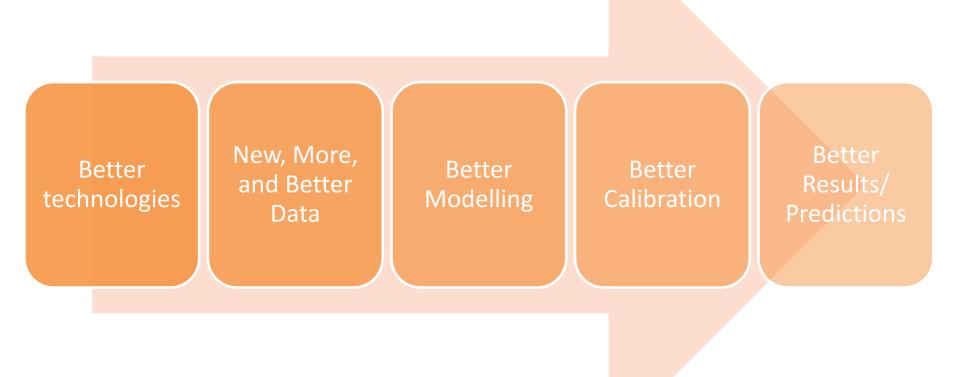
# **Development Need for PMS**

#### Improve current "Evolutionary tools and Path" approaches • Game changing "Revolutionary new tools or

Path"

### approaches

### "Evolutionary" Path (1) – Data and Analysis



### "Evolutionary" Path (2) – New Layers/Expanding

- Modelling new materials scarce resources
- Systems and Process Integration to better support Client's complex world
  - Vertical Integration e.g. asset types, prioritization between sectors
  - Horizontal Integration e.g. processes (design)
- ICT developments web-based technologies, cloud-systems, apps

# "Revolutionary" Path (1)

- Moving from Assets to Policies:
  - Road Safety (iRAP)
  - Greenhouse Gasses (GHG) and Air Pollution
  - Climate Change
  - Benefits of ITS investments



# Multi-dimensional Decision-Making Models (from one single answer to many answers)

# **Involvement of Society?**

# Transparency and Accountability



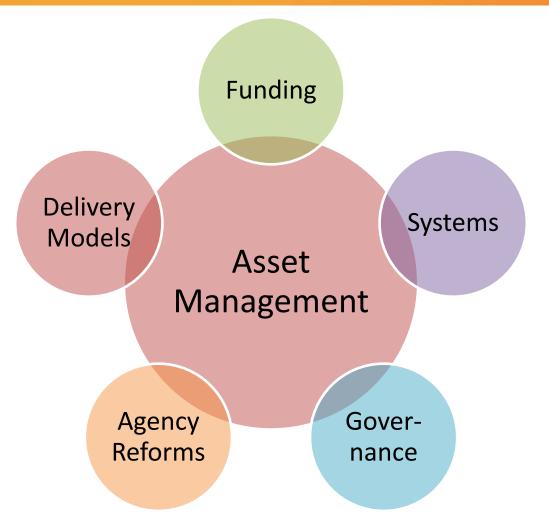


How well are roads and work zones maintained?

9th International Conference on Managing Pavement Assets | May 18-21, 2015

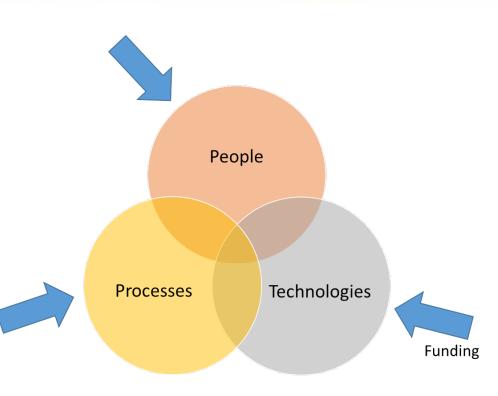
### HOW DOES THE WORLD BANK ENCOURAGE SUSTAINABLE ADOPTION OF ASSET MANAGEMENT PROCESSES?

### Asset Management is Much More Than Systems?



### **Success Factors and Pressure?**

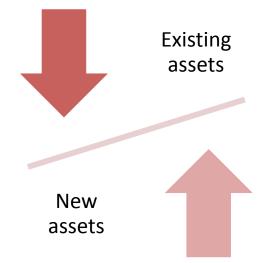
- Projects are guided by "Success Factors for Road Asset Management Systems"
- Include in Monitoring & Results Framework as a Project Development Objective Indicator
  - Ex. Percentage of maintenance decisions made based on asset management system



### HOW WOULD COUNTRIES BALANCE THE PRESSURE FROM CREATING MORE INFRASTRUCTURE VERSUS LOOKING AFTER WHAT THEY ALREADY HAVE?

# What Is Best To Focus On?

- Bank Clients varies greatly in terms of context
  - Poorly developed networks these countries naturally focuses on developing new assets
  - Networks developed at impressive rates and now starts focusing existing assets
  - Reasonable networks, but still high needs for new assets (poverty eradication, national integration)
- The decision is by nature political (if funds are scarce)



### Make Sure Maintenance Is In Focus

- Secure focus on existing assets:
  - Through the Bank's engagement strategies with countries
  - Asset Management Systems visualize needs, asset value/balance sheets
- Solid dedicated funding, untouchable by politicians:
  - Road Funds with own revenue streams assets (fuel levy, vehicle registration) - can only be used to maintenance
  - Performance Based Contracting (funds) secured over several years) – clear tendency to honor these contracts first

New

Existing assets

### **MANY THANKS**