

# Strategic Blueprint to Create Communities of Best Asset Management Practice in the U.S.

---

AASHTO/AM Joint Subcommittee  
TRB 88<sup>th</sup> Conference  
Washington, D.C.  
January 14, 2008

# Presentation

- Background
- Project Approach
- Findings
- Recommendations
- Benefits
- Discussion/Next Steps

# Background

“Join with other efforts, agencies and resources to embed the topic into existing efforts on an on-going basis. Create National Asset Management Steering Committee (NAMS) in U.S.

“Such an effort provides a platform to distribute information, provide training and document best practices on transportation asset management nationally and abroad. ”

2005 Scan Team Recommendation

# Background

2007 FHWA/EPA meet with 21 US and international AM leaders

- **Purpose** - Examine best source of national AM coordination & training in US
- **Finding** - Cross-asset training and networking needed
- **Recommendation** - forwarded to APWA Board

# 2008 Project

- Objective  
Evaluate alternatives and recommend approach that embeds best AM practice in the US using a peer community network.
- Schedule June – December 2008

# Project Committee

- Steve Gaj, FHWA Office of AM (Project Sponsor)
- Lacy Love, North Carolina DOT
- Sue McNeil, U. of Delaware, TRB ABC40
- Steve Allbee, EPA
- Chris Champion, CEO, NAMS.AU

# Tasks

1. Research national and international AM peer networks (literature/interviews/surveys)
2. Document factors which influenced or challenged success—content, membership, funding, structure
3. Identify alternatives for implementation in the US
4. Recommend best approach for US implementation

# AM Peer Networks

- US
  - State-level
    - Michigan TAM Council
  - Regional
    - New England Water Environment Association AM Committee
    - New Mexico Environmental Finance Center
    - Pacific Northwest AM User Group (AMUG)

# AM Peer Networks

- Australia
  - IPWEA NAMS.AU & NAMS.PLUS
- Canada
  - InfraGuide
  - Canadian Network of AM
  - National AM Working Group
  - National Round Table for Sustainable Infrastructure
- New Zealand
  - Road Controlling Authorities Forum
  - INGENIUM's NAMS Group

# AM Peer Networks

- UK
  - England –
    - Institute of AM
    - Road Liaison Group AM Subcommittee
  - Scotland
    - SCOTS

# Summary

Criteria	Mandate			Organizational Support			Asset Focus		Information Sources	
	Legislation	Exec. Order	Accounting Requirement	Volunteer	Prof. Staff	Prof. Assoc.	Cross-Asset	Industry-Specific Orientation	Industry-Specific Best Practice	International Best Practice
<b>Organization</b>										
<b>U.S.</b>										
▪ Michigan TAM Council	✓		✓	✓	✓			✓	✓	
▪ AMUG			✓	✓			✓			✓
▪ NEWEA			✓	✓		✓		✓	✓	✓
▪ NMEFC	✓	✓	✓		✓			✓		✓
<b>INTERNATIONAL</b>										
NAMS.AU			✓	✓	✓	✓	✓			✓
Canada			✓	✓			✓			✓
▪ CNAM			✓	✓			✓			✓
▪ NAMWG			✓	✓	✓	✓	✓			✓
▪ NRTSI			✓		✓		✓			✓
NAMS.NZ	✓		✓	✓	✓	✓	✓			✓
UK										
▪ IAM	✓		✓		✓			✓		✓
▪ Road Liaison Group AM Committee.	✓		✓			✓		✓	✓	
▪ SCOTS	✓		✓			✓		✓		✓

# Findings

# Findings

- US AM guidance aimed at state agencies & large organizations
- There is an “urgent” desire at local level for simplified implementation guidance (not accounting rule compliance) to accelerate adoption

# All Countries

- The majority of authorities successful in asset management work in regional groups by
  - supporting each other and
  - sharing examples of best practice
- Collaborative development of the AM framework by neighboring authorities maximizes AM skills
- Smaller agencies making slower progress

# Trend Toward Regional Groups

- In UK –
  - In April 2006, 76% of authorities participate in regional groups
  - In January 2007, 92% of authorities participate in regional groups
- In Australia
  - In 2007, two states sign up for NAMS.PLUS
  - By 2009, 6 states signed up
- In US
  - In 2006, 2 regional AM groups
  - By 2007, 3 regional AM groups

[www.nams.au.com](http://www.nams.au.com)

AM<sub>UG</sub>

# National Initiatives

- Canada (2008/2009)
  - Developing national framework for performance metrics
- UK \$45M (July 2008)
  - 2/3 to local authorities to develop AM for highway assets
  - 1/3 reward locals for innovative use of data as decision support, and to act as regional champion
- Road Liaison Group creates AM Committee (2008)
  - Simplify guidance for local authorities
- *Australian Infrastructure Financial Management Guidelines* (publish March 2009)

# Benchmarking Statewide

- Identifies good practice for others to use
- Compare individual authorities with their regional peers (AU)
- Encourages improvement in asset management within each council and across the State/Province



# Locals Seeking Implementation Advice

- 4 workshops for AM Plans (2009-2011)
- National conferences (2007, 2008, 2009)
- 4 workshops AM Plans (2007, 2008)



SCOTS



Canadian Network of AM

“by municipalities, for municipalities”

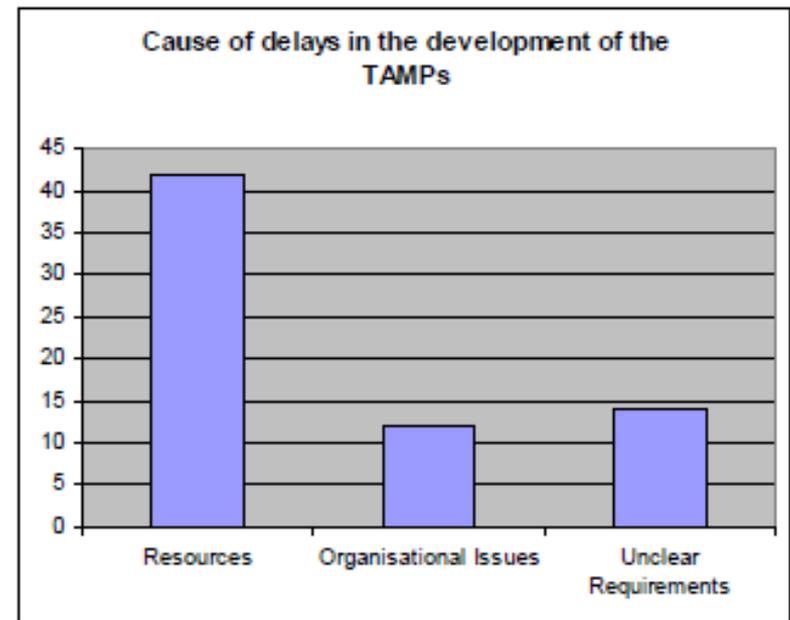


[www.nams.au](http://www.nams.au)

# Obstacles for Local Governments

- Lack of resources
- Organizational issues
- Unclear requirements

Figure 9 – Reasons for delays in developing the TAMP?



*Review of TAMPs, Atkins, 2008*

# Local Obstacles – Skills Shortage

- Lack of staff & resources to meet mandates & requirements

“limited access ... to strong financial and asset management skills which are critical to identifying sustainability problems, optimizing renewals expenditure and improving revenue streams”



National Financial Sustainability Study of Local Government, Australian  
Local Government Association 2006

# US Obstacles

- Understanding and involvement of leaders & top managers missing
- Lack of national, multi-sector network & approach
- AM not integrated with corporate decision making & reporting (usually AM located in maintenance)
- Relies on champions so far (lack of organizational support)

# US Success Factors - Resources

- State support (\$1.6M annually) & local funding flexibility (Michigan)
- FHWA/EPA training and AM guidance for regional groups (NMEFC, AMUG)
- Professional association support (NEWEA)

# US Success Factors – Mandates & Incentives

- Mandates (GASB, ESA)
- Incentives (Michigan)
- Gubernatorial Executive Orders (New Mexico, Oregon)

“...infrastructure-based activities will be focused to ensure a sustainable relationship between the natural and built environments, with an asset management model serving as its structural framework.”

Oregon Governor Kulongoski,  
Executive Order 08-11

May 2008

# US Success Factors – Approach

- Presence of practitioner as champion  
“those who have gone before”
- Cross-asset approach (AMUG)
- Training tailored to audience (Michigan, AMUG, NEWEA, NMEFC)

# Key Conclusions

- Simplified implementation strategies and network needed at the local and regional level
- Solutions must include a communication plan for the role of elected leaders, top management and asset managers throughout a state
- Resources needed to ensure on-going training

# US Implementation Options

# Six Options

1. National Center of AM Excellence
2. Regional Center of AM Excellence (CoE)
3. Regional Individual as AM Beacon
4. Assess State-wide Financial Sustainability
5. Implement AM Statewide
6. Statewide AM Assistance for Small Communities

# Ranking & Recommendation

# Key Principles

1. Build on findings & recommendations of 2005 scan
2. Provide cross-asset, local government on-going support for training and networking

# Ranking Criteria

	<b>Criteria</b>	<b>Required?</b>	<b>Weight</b>
1	Focus on local government		3
2	Bottom up, focus on practitioners		3
3	Cross-asset approach	R	1
4	Simplified approach focused on implementation		3
5	Provide incentives (not mandates)		3
6	Minimize costs, leverages resources		1
7	Regional strategy and State as hub		3
8	Supports communication at all levels, across sectors	R	2
9	National approach		3
10	Addresses professional association concerns	R	1
11	Benefits state	R	1
12	Addresses transportation	R	1

# Option Rankings

NAMS-US BLUEPRINT PROJECT									
EVALUATION OF IMPLEMENTATION OPTIONS									
Criteria				Implementation Options					
				Op. 1 National Center of Excellence	Op. 2 Regional Center of Excellence	Op. 3 Regional AM Beacon	Op. 4 State-wide Local Govt. Sustainability Study	Op. 5 Statewide AM Roll Out	Op. 6 State-wide Small Community Roll Out
	Criteria	Required?	Weight						
1	Focus on local government		3	0	1	2	3	3	2
2	Bottom up, focus on practitioners		3	0	2	3	0	3	2
3	Cross-asset approach	R	1	1		1	1	1	1
4	Simplified approach focused on implementation		3	0	1	2	0	3	2
5	Provide incentives (not mandates)		3	0	1	2	3	3	2
6	Minimize costs, leverages resources		1	0	1	1	1	1	1
7	Regional strategy & State as hub		3	0	2	3	3	3	2
8	Supports communication at all levels, across sectors	R	2	1	1	2	2	2	1
9	National coordination		3	3	0	2	1	1	1
10	Addresses professional association concerns	R	1	0	1	0	1	1	0
11	Benefits state	R	1	0	1	1	1	1	1
12	Addresses transportation	R	1	1	1	1	1	1	1
<b>Total Weighted Score</b>				13	28	50	39	57	39
<b>Rank</b>				5	4		3	1	3

## Recommendation

“Greater support for a cross-asset, local government focus for AM training and networking within a state or region is recommended with some urgency.”

# Recommendation (short term)

## 1. Pilot Statewide AM Training Creating Network of Regional Beacons

Outcome:

A state by state network of asset management champions and practitioners that can assist each other, leverage resources and provide on-the-ground implementation assistance. Builds national network of regional AM beacons.

# Recommendation (short term)

## **2. Simplify Guidance, Training and Tools that Address Small and Rural Community Needs**

Outcome:

Simplified AM tools and techniques for local government AM planning & implementation.

# Recommendation (medium term)

## **3. Evaluate Support for Statewide Financial Sustainability Study**

### **Outcome:**

Sustainable development, management and funding of infrastructure services in local and small communities within a state.

# Recommendation (long term)

## 4. National AM Resource Center

### **Outcome:**

National AM Conference, web-based library, case study examples linked to international best practice

# Benefits

- ✓ Implements 2005 Scan Recommendations
  - *“Join with other efforts, agencies and resources to embed the topic into existing efforts on an on-going basis. Create National Asset Management Steering Committee (NAMS) in U.S.”*
  - Implements education, training, and outreach based on NAMS model
  - Targets a state or region to take a holistic view of the entire public asset inventory providing increased funding flexibility

# Benefits

- ✓ Builds agencies' skills in performance management & targeting “value for dollar” invested (2005 scan observation)
- ✓ Supports networking in communities & cross-asset tradeoffs (2005 scan observation)
- ✓ Provides AM training for state elected, top managers & stakeholders (2005 scan observation)

# Benefits – Meets Criteria

- ✓ Focus on local government
- ✓ Bottom up, focus on practitioners
- ✓ Cross-asset approach
- ✓ Simplified approach focused on implementation
- ✓ Provide incentives (not mandates)
- ✓ Minimize costs, leverages resources (LTAP)
- ✓ Regional strategy and State as hub
- ✓ Supports communication at all levels, across sectors
- ✓ National approach
- ✓ Works with professional associations/LTAP resources
- ✓ Benefits state
- ✓ Addresses transportation

# Next Step

- Clarify AASHTO/TRB AM Subcommittee support
- If Go:
  - Target pilot region & state
  - Develop detailed implementation plan (funding, staffing, communication, involvement by LTAP & professional associations) for short term recommendations
  - Request implementation funding

## Strategic Blueprint for Communities of Best AM Practice

---

“Great nations build and invest for succeeding generations...like our parents and grandparents did. Reliable electricity, clean water and communications along with highway systems, railroads and airports make our modern economy possible.”

Peter Rahn, President, AASHTO

November 2008