

# Training Sessions

- Introduction to Road Asset Management
- Overview of the Components of RAM
- Levels of Service and Performance Measures
- Inventory and Condition Data
- Lifecycle Decisions Making and Funding
- Asset Valuation
- Asset Management Plans, Teams and Tools
- Contracting Models and Impact on RAM

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3. Levels of Service and Performance Measures
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5. Lifecycle Decisions Making and Funding
6. Asset Valuation
7. Asset Management Plans, Teams and Tools
8. Contracting Models and Impact on RAM

# Road Asset Management (RAM) Training

10-13 August 2020

Session 1: Introduction to RAM  
Session 2: Overview of the Components

Primer for full session

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# Definitions of Asset Management

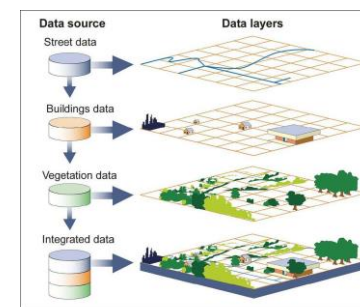
- “The combination of management, financial, engineering, economic and other practices applied to physical assets with the objective of providing the required level of service in the most cost effective manner.” (IIMM 2011)
- “A systematic process of operating, maintaining and upgrading transportation assets cost-effectively, by combining engineering practices and analysis with sound business practice and economic theory. Also, the management of the physical infrastructure such as pavements, bridges, and airports, as well as human resources (personnel and knowledge), equipment and materials, and other items of value such as financial capabilities, right-of-way, data, computer systems, methods, technologies, and partners.” (AASHTO)

# My Simple Definition

All activities required to define and provide the agreed level of service in the most cost-effective manner for the present and future owners of the asset in a transparent and informed manner.



# What It Isn't (but these are part of RAM)

- Routine or periodic maintenance
- Disaster recovery or climate resilience
- Software solution Asset Management Information System (AMIS)
- Although these are all parts of asset management, by themselves they are no asset management



# Many Guidance Documents Available

- My personal favourites (cover all asset types)
  - ISO55000
    - Provides the theoretical structure for asset management
  - International Infrastructure Management Manual (IIMM)
    - Provides practical guidance on how to meet the requirements for asset management
- Road specific guidance from:
  - Austroads
    - Guide to Asset Management (GAM)
  - AASHTO
    - AASHTO Transportation Asset Management Guide: A Focus on Implementation



# Are You An Asset Manager or Facility Management?

- Many agencies still operate as Facility Managers not Asset Managers

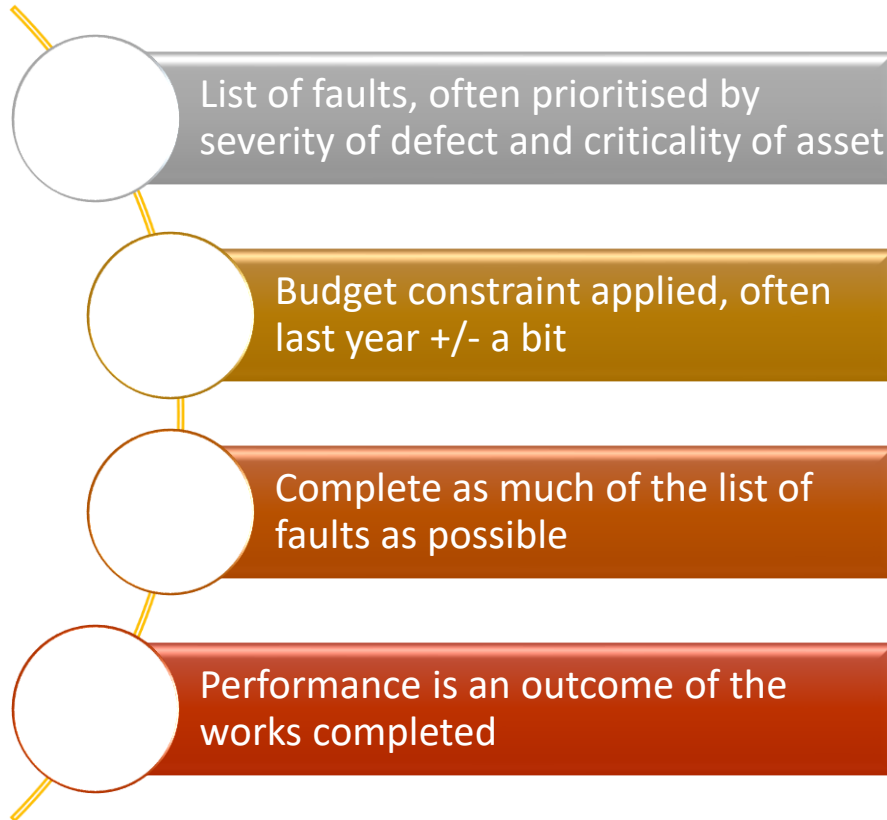
***FM - Find faults and fix as many as we can with the budget available***

***AM - debate and agree the service level and then deliver it for the least possible cost [whole of life costs]***

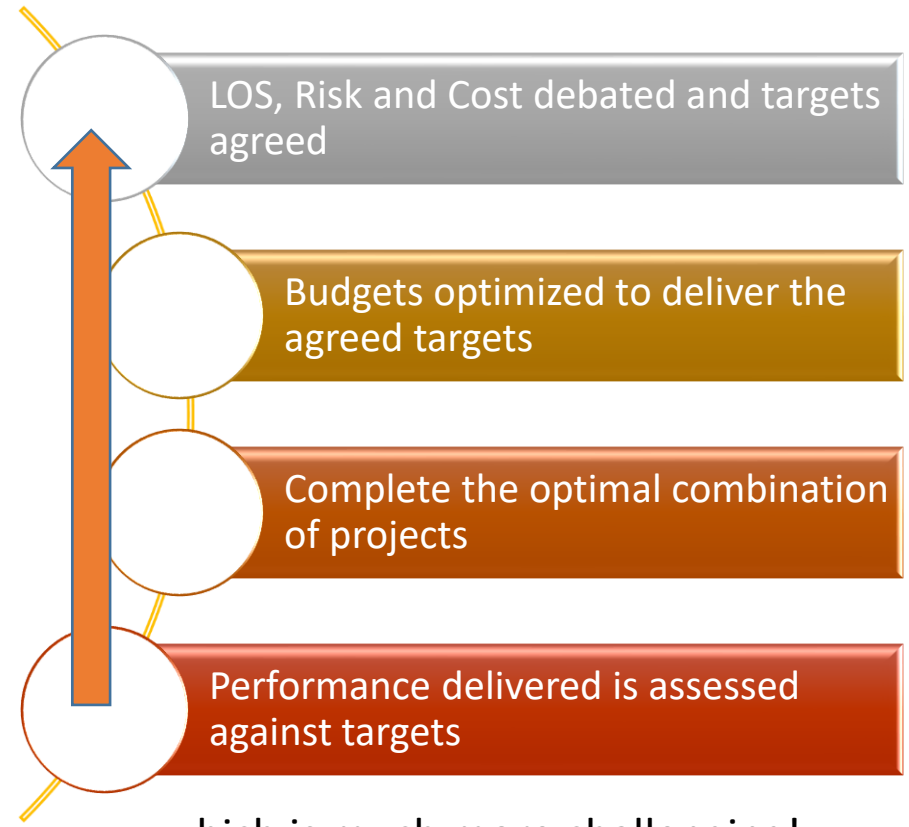


# Comparison of Approaches

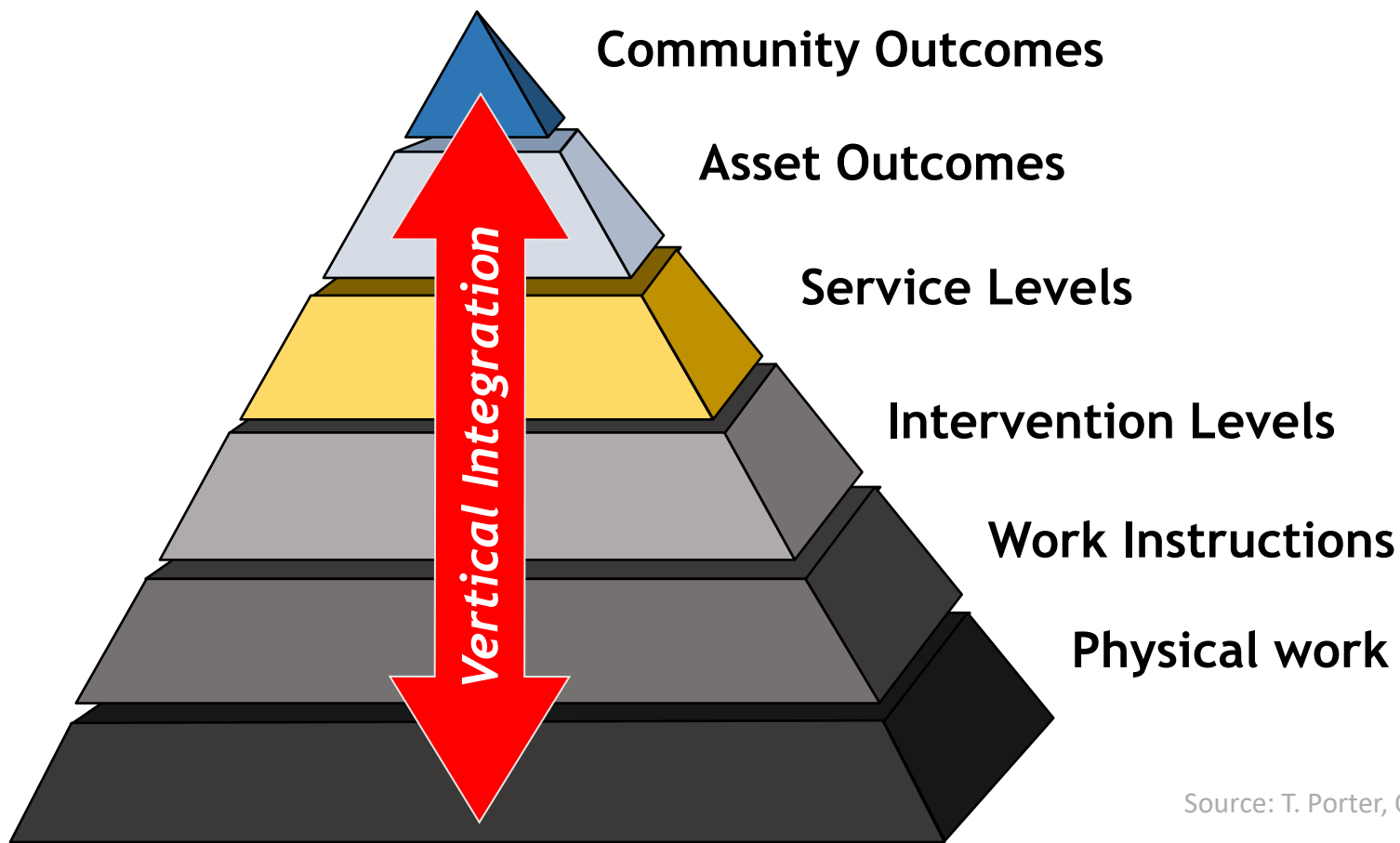
## • Facility/Mtce Management



## • Asset Management



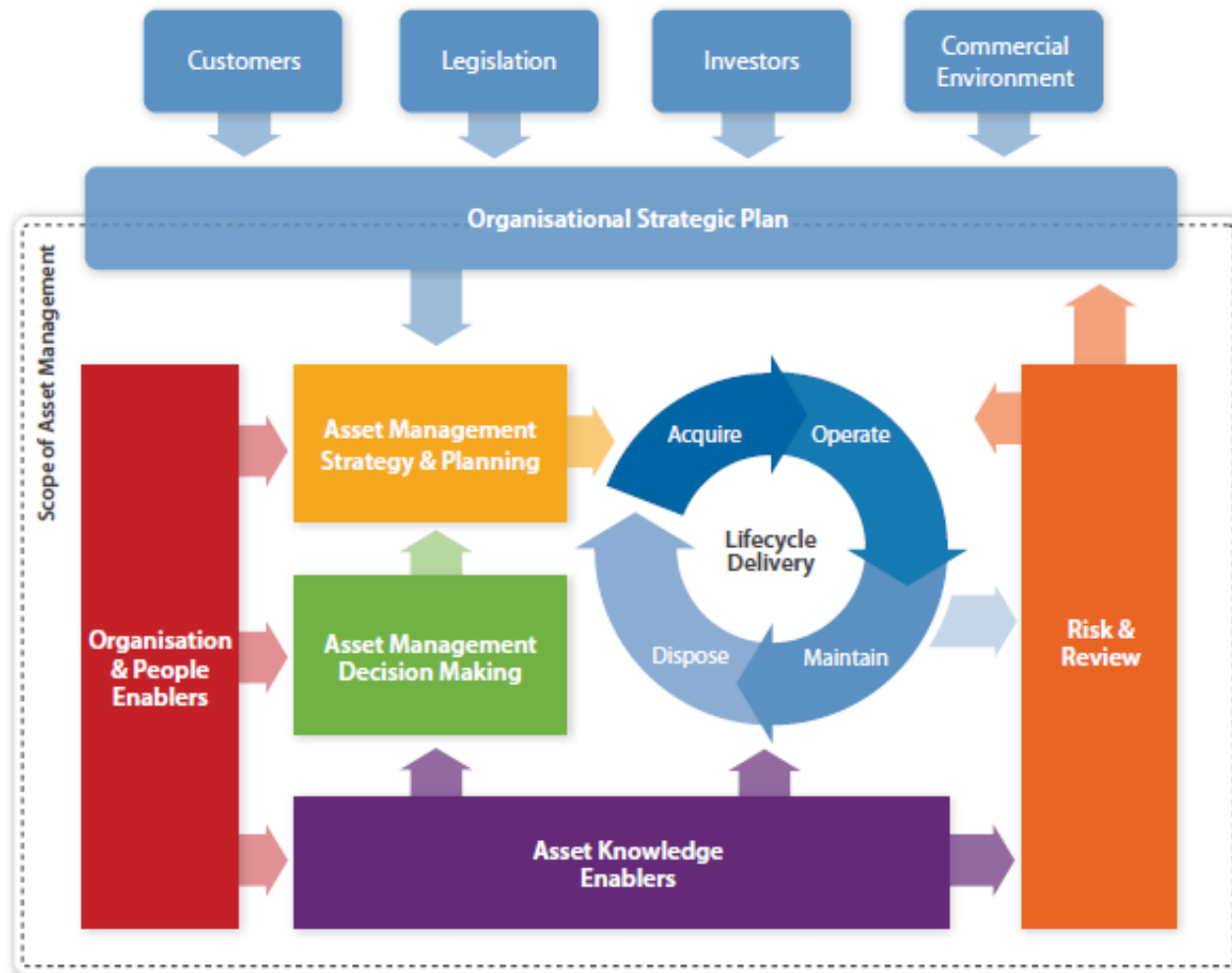
# Alignment of Activities



Source: T. Porter, Opus International Consultants Ltd

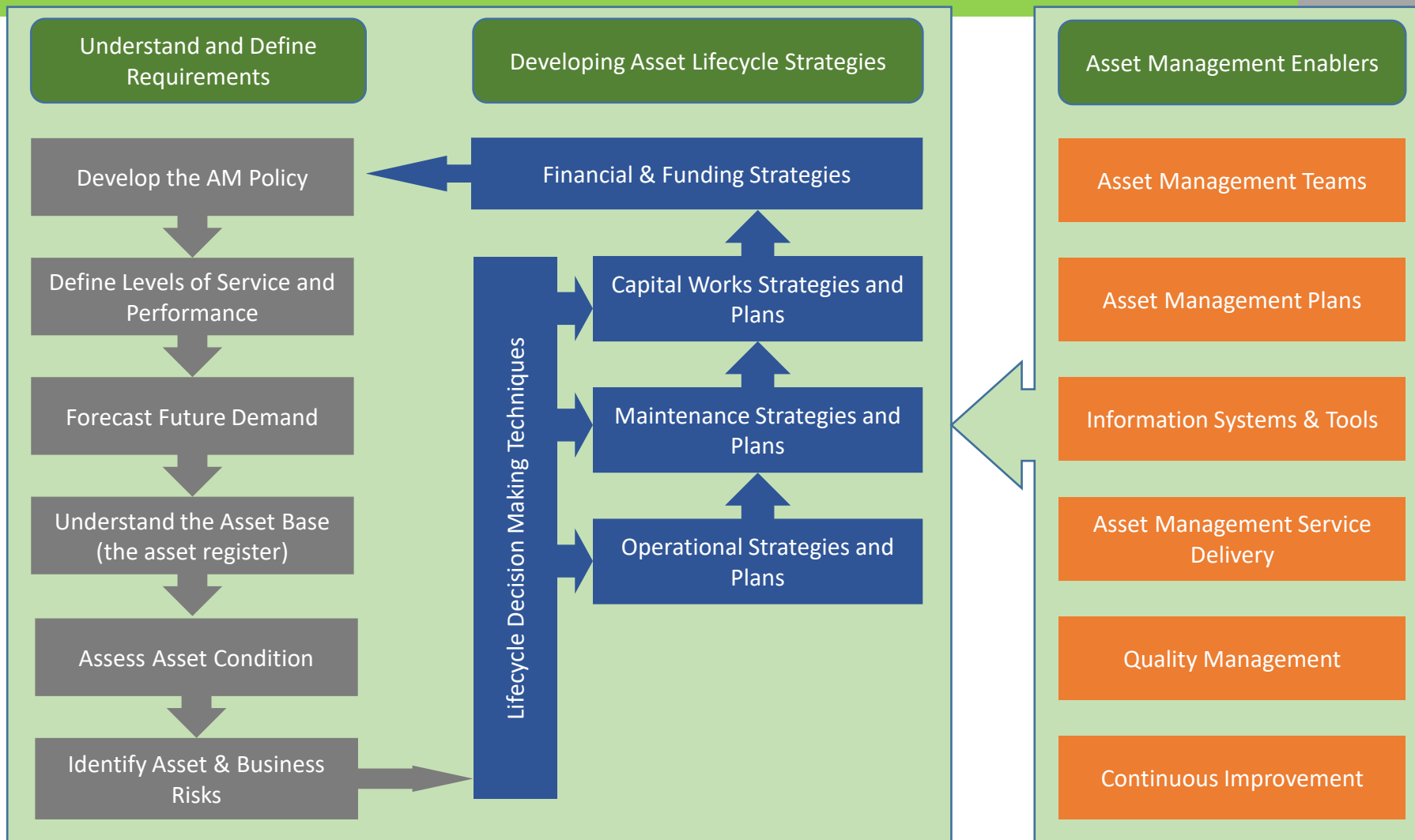
## Asset Management Pyramid

# Institute of Asset Management (UK) Process



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# International Infrastructure Management Manual (IIMM) AM Process



# Same Process, Different Focus

- RAM process can be the same across all road hierarchies, and across all of CAREC nations
- It is the level of detail that changes within each step of the process
  - A road network in a mountainous region will naturally have a greater focus on the identification and management of risks than a road network in a stable plains region
  - An urban network with high growth will be more concerned about forecasting future demand, than will a low growth rural network
  - High volume national highways will naturally be managed at a greater level of effort than minor country lanes
- Don't change the process, change the level of depth you go into each step of the process

# Benefits

- Reduced life-cycle costs
- Defined levels of service
- Ability to track performance
- Improved transparency in decision making
- Ability to predict consequences of funding decisions
- Demonstrated asset custodianship
- Decreased financial, operational and legal risk
- Better financial management
- Better communication
- Fewer surprises going forward

# The challenges to getting started...

- Institutional inertia
- Organizational silos
- “It’s an accounting issue”
- Software vs. AM / previous bad IT experience
- “Trust me I know what I’m doing”
- Lack of corporate buy in / clear leadership
- Lack of time / training / competency
- Data deficiencies
- Ribbon cutting syndrome
- Desire to muddle / interfere in others business

- Start with core functions
- Start simple, with something that is sustainable for your road authority
  - Focus on those asset groups that are either high value or high risk
  - Collect only the information that is necessary, not everything you can
- It is easier to add complexity in 5 years time, than it is to simplify a complex system that isn't sustainable
- Single asset management process for all roads, but the level of complexity in each step of the process will normally vary by road class