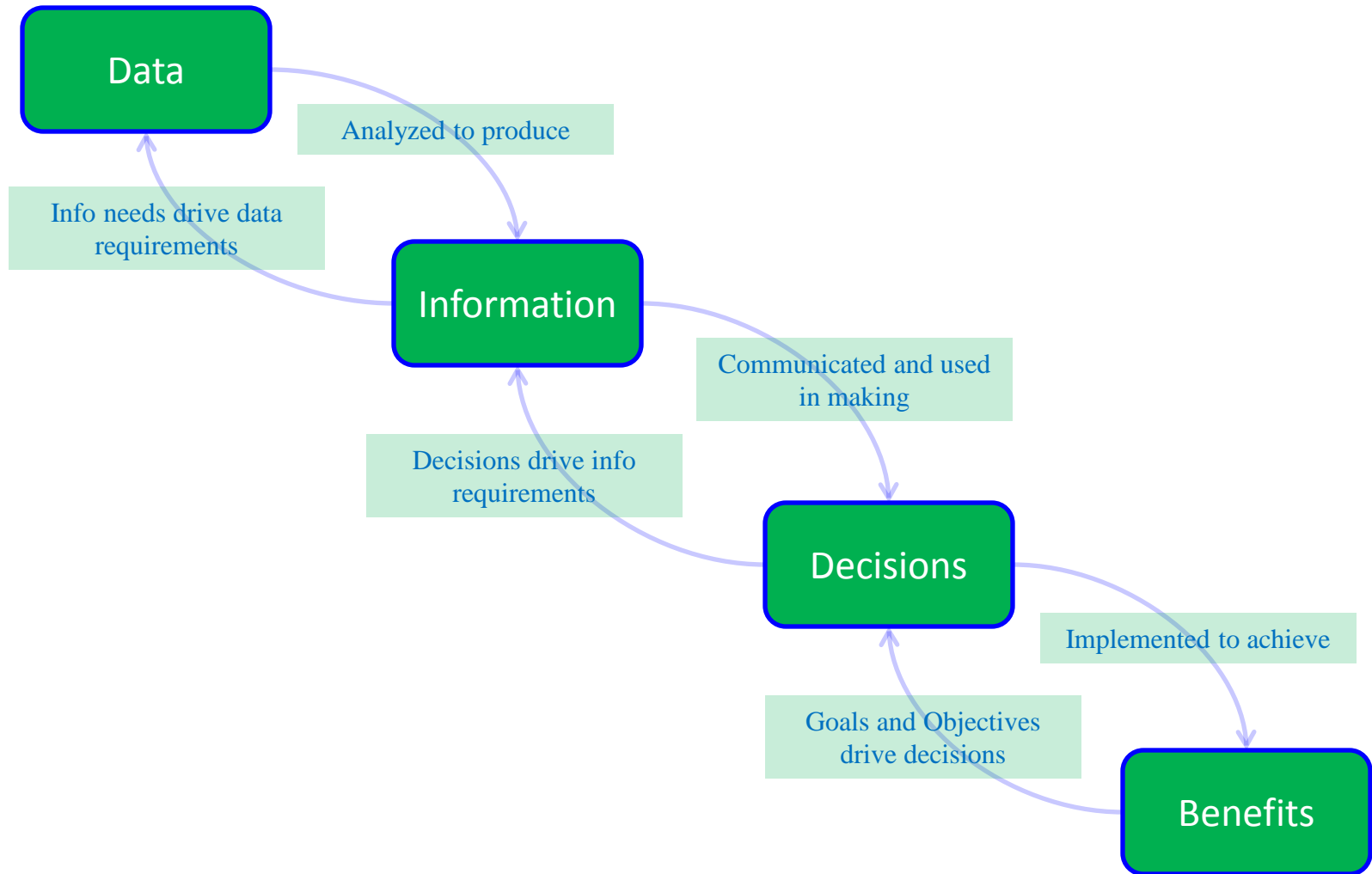


Transportation Asset Data at CDOT



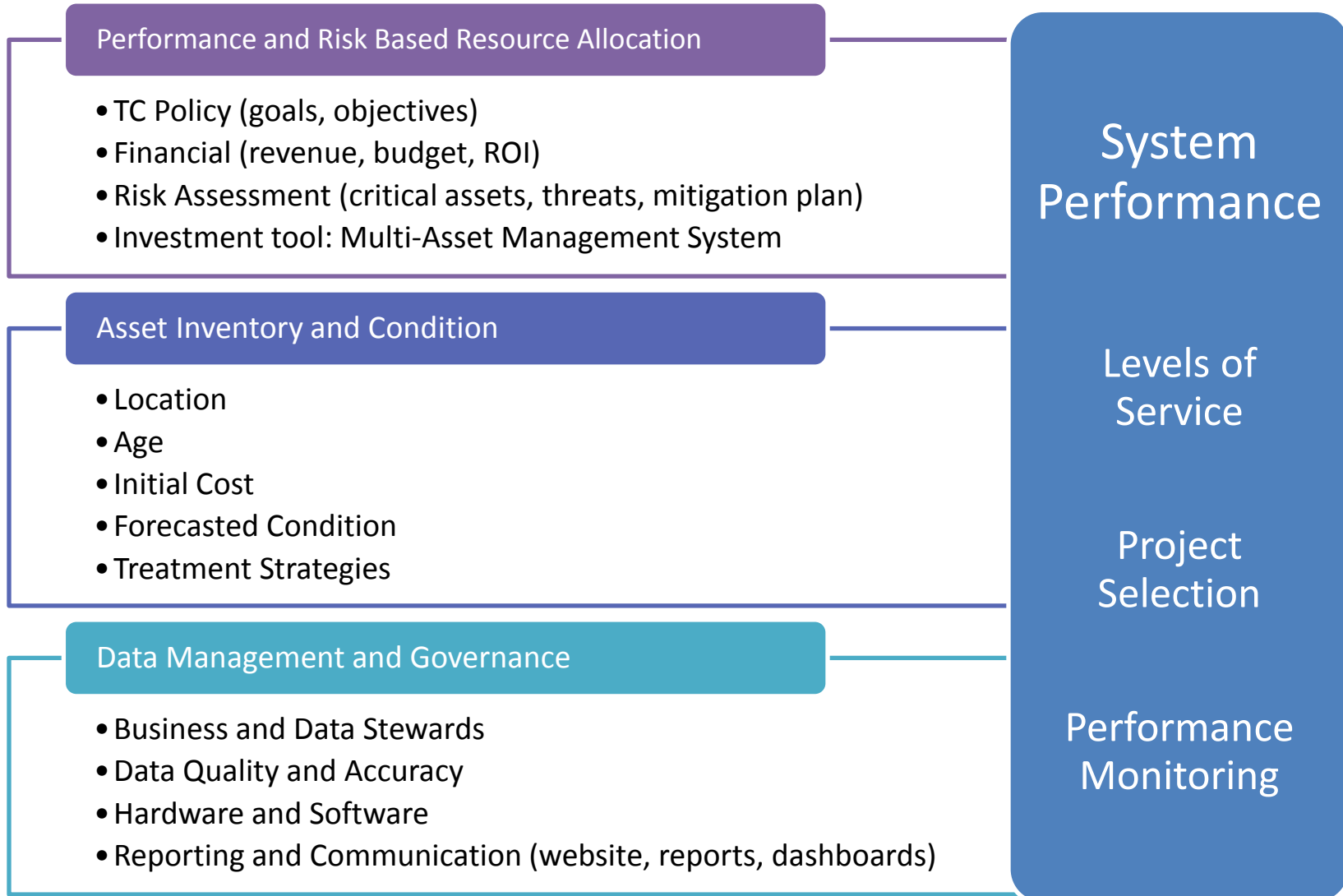
William Johnson
GIS/Data Management Section Manager
Colorado Department of Transportation

Data Value Chain

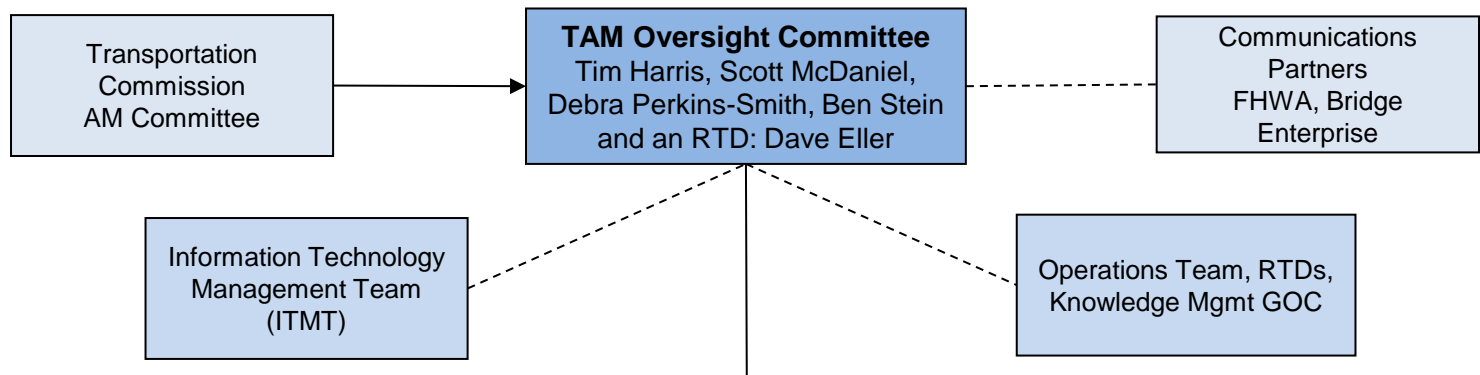


CDOT

TRANSPORTATION ASSET MGMT IMPLEMENTATION STRATEGY



CDOT Transportation Asset Management (TAM) Structure



TAM Working Committee

- | | | |
|---|---|---|
| <ul style="list-style-type: none"> • Scott Richrath, Committee Chair • JoAnn Mattson, Committee Vice Chair • Sandi Kohrs, DTD Planning • Bob Haley, Chief Engineer's Office • William Johnson, GIS • Lou Henefeld, GIS • Josh Laipply, Staff Bridge • Mark Nord, Staff Bridge • Cole Richards, Staff Bridge • Stephen Henry, Pavement | <ul style="list-style-type: none"> • Bill Schiebel, Materials and Geotech • Dave Wieder, Maintenance & Operations • Roy Smith/Karen Neuschwanger, Fleet • David Fox, Real Property Building Assets • Rich Sembrat, ITS • Charles Meyer, Traffic • Laurie Freedle, OFMB • Ty Ortiz, Rockfall Mitigation • Jay Hendrickson, R1 Resident Engineer • Doug Lollar, R2 Program Engineer | <ul style="list-style-type: none"> • Jason Ahrens, R2 Business Manager • Zane Znamenacek, R3 Traffic Engineer • Mike Goolsby, R3 Deputy Superintendent • Myron Hora, R4 Plng and Env. Manager • Mike McVaugh, R5 Traffic and Safety Engr • Cambridge Systematics/Redd Engineering |
|---|---|---|

Multi Asset Management Task Force	Asset Management Pilot Selection Task Force	Cross - Asset Integration Task Force	Risk Task Force	Colorado Const. Cost Forecast Task Force
DTD Maintenance Staff Bridge Fleet Pavement ITS	DTD IMB Region 3 DTD TPB Region 4 Region 2 Region 5	Pavement Maintenance DTD TPB	Staff Branches Region 2 DTD TPB Region 4 OFMB Region 5 Risk Mgmt.	Staff Branches Consultant DTD TPB OFMB

Bridge Task Force	Real Estate Task Force	Communicating Value of Preservation Task Force	Tunnels Task Force	Maintenance Operations and Traffic Operations Task Force
Staff Bridge DTD TPB	HQ DTD TPB Property Mgmt	DTD MPB	Staff Branches Region 5 DTD TPB Region 3	MLOS Region 3 HQ Traffic Ops Region 5 DTD TPB DTD IMB

Current Activities

- Pilot Project – Division of Transportation Development and CDOT Region 4
- Pavement Data Collection Contract
- TAM Task Force for Pilot Selection

Next Steps

Priorities

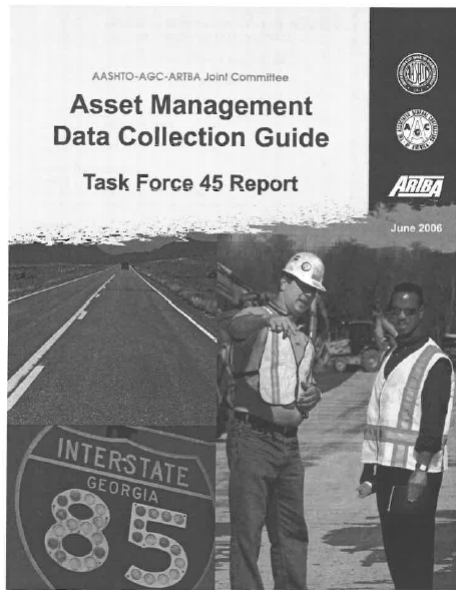
- Asset Prioritization
- Data Integration

Prioritization

Top Priority Asset Data			
Rank Order	Asset Types	Rating Value by Asset Type	Current and Proposed Task Force Activities
1	Bridge	852	MAMS. Current.
2	Rights of Way	788	
3	Pavements - Conditions	764	MAMS. Current. Ground Penetrating Radar for Pavement and Roadbed conditions. Proposed.
4	Highways - Design Data	730	
5	Fleet	716	MAMS. Current.

Second Priority Asset Data			
Rank Order	Asset Types	Rating Value by Asset Type	Current and Proposed Task Force Activities
6	MLOS Surveys	655	MAMS. Current.
7	ITS Devices	635	MAMS. Current.
8	Guardrails & End Treatment	619	Region 4 Asset Data Pilot. Current.
9	Pavement Stencils	612	TOAMS Version 3. Proposed.
10	Drainage Structures - Includes Drains	609	Region 4 Asset Data Pilot. Current.
11	Permanent Water Quality Structures	605	
12	Sign Structures	602	

Prioritization



CHAPTER 4

EVALUATION AND SELECTION OF ASSETS

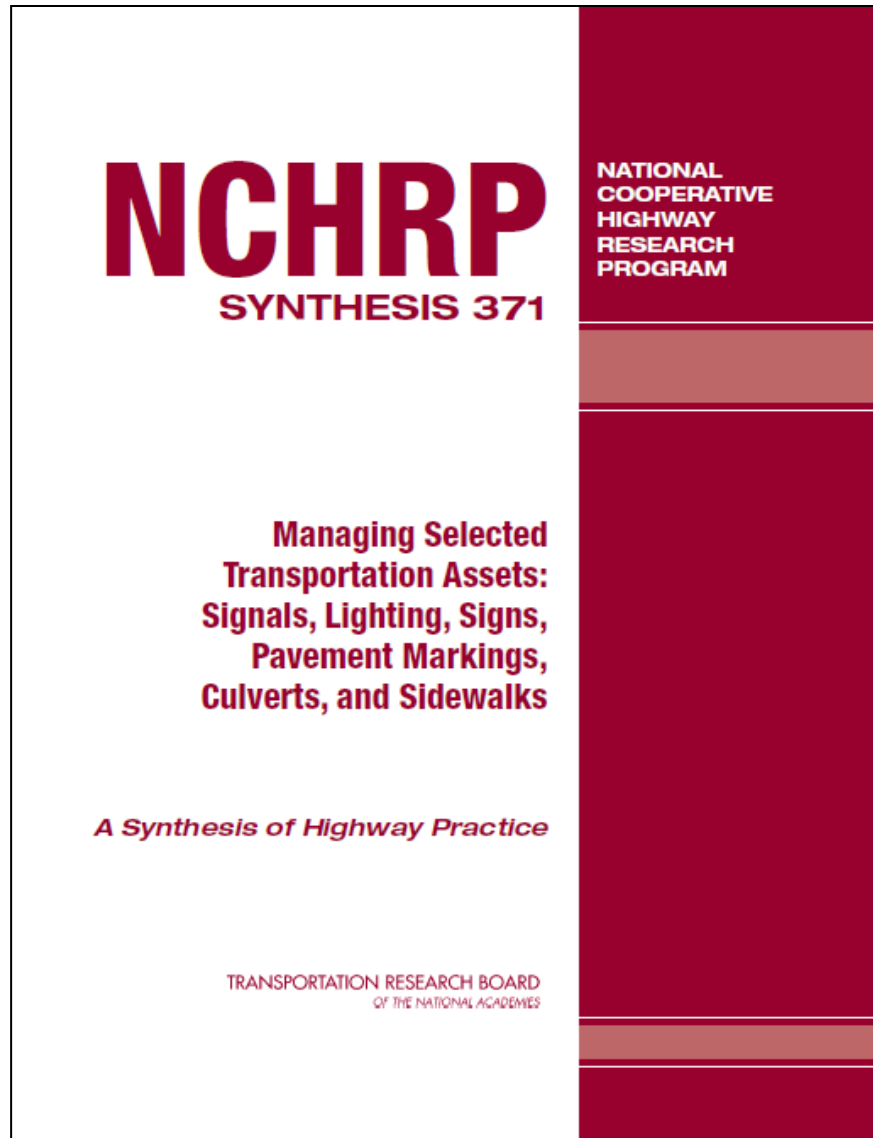
4.1 Asset Selection Criteria

Transportation agencies are faced with growing pressures to quantify how their infrastructure assets are performing, both technically and fiscally. Meeting these pressures necessitates the collection of relevant data for transportation assets. In all cases, resources are limited to aid in the data collection efforts. The purpose of this section is to present a methodology intended to provide guidance to an agency seeking to start collecting transportation asset management data.

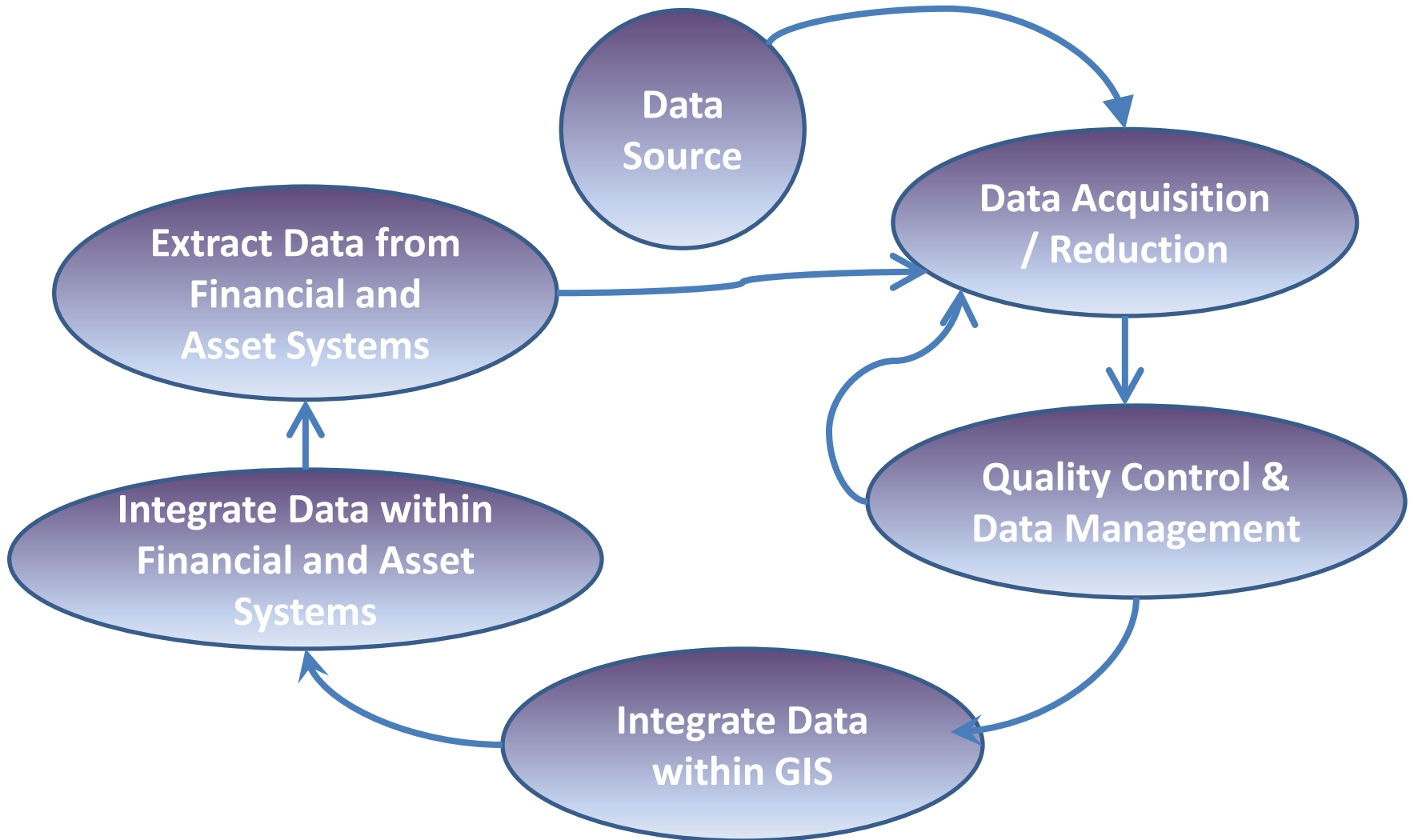
Several questions or criteria can be applied to transportation assets to obtain an indication of the relative benefit of data collection efforts. Seven selection criteria to be applied to the transportation assets listed in this guide are as follows:

- Q1. Are there established protocols (e.g., standard procedures, guidelines) for data collection for this asset? If yes, are these protocols being used? If no, why?
- Q2. What is the relative quantity and dollar value of the asset compared to those of the entire asset population?
- Q3. What is the importance of the asset to the agency and road users (e.g., safety, congestion, environmental)?
- Q4. How easy is it to collect data for this asset?
- Q5. Are there automated procedures/tools for data collection?
- Q6. How frequently do the data need to be collected?
- Q7. How important is the accuracy of the data for the asset? Are high-quality data required?

Prioritization



Asset Data Life Cycle



Questions?



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Taking care to get you there