Issues in selecting a reporting approach: Depreciation
(Number of states)

• Uncertainty in the ability to achieve target conditions (15)
• Asset management systems inadequate to support the modified approach (9)
• Depreciation smooths out the peaks and valleys of preservation costs (6)
• The funding of preservation costs under the modified approach (recorded as an expense) with debt (recorded as a liability) could result in the reporting of a deficit (6)
• Changing to the depreciation approach from the modified approach when condition levels are not met could result in the reporting of higher depreciation costs as in the result of shorter estimated lives (4)
• The use of the modified approach has a higher risk of making the DOT look less favorable in comparison with other DOTs (4)
• Ease of implementation (3)
• Dictated by the State (3)
• None (3), Other (2)
There were broad range of reasons provided for selecting the depreciation approach, but most were reasons for not selecting modified. Uncertainty in the ability to achieve target conditions and the lack of an adequate asset management system appear to be the two most important.
Methods of Depreciation Used

- Almost all states using depreciation used a straight line calculation.
- 22 of 28 said the state accounting system could break out costs at the asset class level desired by the DOT.
- The vast majority of depreciation states did not assign salvage values to infrastructure assets.
Cost Allocation Policies

GASB publications provide specific guidance for allocating costs among capital, preservation and maintenance categories. Survey responses suggest that not all states are following these guidelines.

• (73%) If the expenditure increases the capacity or efficiency of an asset, it is treated as a capital asset.

• (70%) If the expenditure extends the useful life of an asset, it is treated as a capital asset.

• (63%) If the expenditure neither increases capacity/efficiency nor extends the useful life of the asset, it is a maintenance cost.

(% of states reporting that they follow this guideline)
Asset Classes

7 of the 28 depreciation states used one “single infrastructure asset.” The following were used as asset classes by at least 1/3 of the remaining 21 depreciation states.

- Roads (17 states)
- Bridges (21 states)
- Buildings (12 states)
- State Highway System (10 states)
- Equipment (9 states)
Useful Life Estimations for Depreciation Calculations

How were useful lives of infrastructure assets determined?

- Internal experience, 20
- Comparison with lives used by others, 4
- Other, including published guidelines, 3
- Use of outside appraisers, engineers, etc., 2

• The useful life for “Roads,” “State Highway System,” and “Single Infrastructure Asset” categories averaged approximately 34 years

• The useful life of the “Bridges” asset category averaged 51 years
“Historical Cost” was the most commonly used method for calculating the beginning value of assets for the depreciation calculation.
Who Is Involved in the Process?

Who made the final decision concerning the specifics of the depreciation method used such as the length of useful life, salvage value, etc?

- The DOT's Chief Financial Officer, 8
- The DOT's Chief Engineer, 1
- A committee within the DOT, 16
- Other, 5

Decision making for GASB 34 implementation typically involved several offices within the DOT
Asset Reporting

Do you plan to report the condition of infrastructure assets being depreciated as supplementary information in the financial report?

Yes, 5

No, 23
• Section 1: Overview Questions
• Section 2: Depreciation
• **Section 3: Modified Approach**
• Section 4: Organization and Decision Making
• Section 5: Costing Methodology
• Section 6: Condition Assessment
Section 3: Modified Approach

• Issues in Selecting the Modified Approach
• Cost Allocation Policies
• Historical vs. Replacement Cost Calculation
• Decision Making
Modified Approach

• Unlike with depreciation states, most of the reasons supplied for the approach selected were reasons for doing modified, not reasons for not doing depreciation. The most important reasons were more useful information and consistency with department philosophy.

• Interestingly, modified states reported little difficulty in convincing others that this approach would provide better information.
Issues in selecting a reporting approach: Modified
(Number of states)

- (19) The modified approach is consistent with the DOT’s asset management philosophy
- (17) The modified approach provides more useful information
- (13) Estimated lives and related salvage costs used to compute depreciation are inconsistent with the characteristics of infrastructure assets
- (9) The depreciation method does not reflect the economics of financing infrastructure as reported to the public by the DOT (e.g., the smoothing effect of depreciation masks the peaks and valleys of preservation costs)
Reported Policies

GASB publications provide specific guidance for allocating costs among capital, preservation and maintenance categories. Survey responses suggest that not all states are following these guidelines.

- (95%) If the expenditure increases the capacity or efficiency of an asset, it is treated as a capital asset
- (50%) If the expenditure extends the useful life of an asset, it is treated as a preservation cost
- (82%) If the expenditure neither increases capacity/efficiency nor extends the useful life of the asset, it is a maintenance cost

(% of states reporting that they follow this guideline)
Asset Classification

5 of the 22 modified states used one “single infrastructure asset.” The following were used as asset classes by at least 1/3 of the remaining 17 modified states.

- Roads (15 states)
- Interstates (9 states)
- National Highway System (8 states)
- State Highway System (10 states)
- Bridges (17 states)
- Rights of Way (11 states), (vs. 3 of 28 depreciation states)
What determinations for the financial reporting of infrastructure assets under the “modified approach” were the most challenging for the DOT’s required supplementary information (paragraphs 132-133 of GASB 34)?

- (18) The estimated annual costs to maintain and preserve at (or above) the condition level established and disclosed by the government compared with amounts actually expensed (a surprising finding)
- (10) The condition level at which the government intends to preserve eligible infrastructure assets
- (7) The basis for the condition measurement and the measurement scale used to assess and report condition
- (2) Factors that significantly affect trends in the information reported in the required schedules
Unlike depreciation states which in most cases used a historical cost calculation to arrive at a beginning value, an equal number modified states used a current replacement value method.

How did you arrive at a historical cost for your assets?

- Historical construction costs, 9
- Current replacement value deflated to the time of construction, 9
- Combination of both, 4
A wide diversity of approaches to establish condition policies was reported.
• Section 1: Overview Questions

• Section 2: Depreciation

• Section 3: Modified Approach

• Section 4: Organization and Decision Making

• Section 5: Costing Methodology

• Section 6: Condition Assessment
Section 4: Organization and Decision Making

- Decision Input
- Communication and Information Use
The Decision-Makers

- 66% of all DOTs used committees for major decision making and policy development
- Only 7 of the 50 DOTs relied solely on the DOT’s Chief Financial Officer for oversight
When asked if implementing GASB 34 improved lines of communication among the engineering, finance and maintenance departments,

Modified States tended to agree

Most depreciation States disagreed

Yes, 16  No, 6

Yes, 9  No, 19
Those who agreed that GASB 34 improved lines of communication (25 states) were asked if they thought the communication improvement would result in improved funding allocations between expansion and preservation.

**Depreciation States:** Most believed allocations would improve

- Yes, 6
- No, 3

**Modified States:** Most were skeptical that funding allocations would improve

- Yes, 5
- No, 11

**Improved Communication = Improved Allocation?**
Effective Use of Information

Is the information generated by the reporting of infrastructure assets being utilized by parties outside the DOT?

Yes, 28
No, 22

Of those that answered yes, who is using the information?

- Used in state financial statements, 16
- Presented to legislature, 4
- Other, 5
- Used by bond rating agencies, 3
• Section 1: Overview Questions
• Section 2: Depreciation
• Section 3: Modified Approach
• Section 4: Organization and Decision Making
• Section 5: Costing Methodology
• Section 6: Condition Assessment
Section 5: Costing Methodology

- Capitalization Policies
- Capitalization Thresholds
- Historical Cost Methodologies
Less than half of states capitalize administrative costs attributable to a project.
There is a lack of standardization of policies for when to capitalize project costs.
Just over half of DOTs use capitalization thresholds.
Notwithstanding the FY06 effective date, most states are well along in the calculation of historical cost. Only 5 states reported little activity in this area.
States obtained information to calculate historical cost from a variety of sources.

Sources of Historical Costs

- Financial Statements (26)
- Budget Records (9)
- Internal Project Reports (5)
- Bond Records (3)
- Current Replacement Calculation (19)
- "AASHTO: The First 50 Years" (10)
27 DOTs used a deflated current replacement cost calculation to find the historical cost of assets
• Section 1: Overview Questions
• Section 2: Depreciation
• Section 3: Modified Approach
• Section 4: Organization and Decision Making
• Section 5: Costing Methodology
• Section 6: Condition Assessment
Section 6: Condition Assessment

- System Modifications
- Bridge and Pavement Inspections
- Total Value of Assets
- Respondent Comments on the Survey
To What Degree Were Existing Automated Financial / Accounting Systems Modified?

- Major Modifications (3), 6%
- Minor Modifications (27), 54%
- No Modifications Needed (15), 30%
- No Relevant Systems in Place (5), 10%
Changes to Automated Systems

• Major Modifications included:
  – Changes to condition assessment data collection and reporting
  – Restructuring how financial statements were presented

• Minor Modification included:
  – Providing additional levels of cost breakdowns
  – Providing additional asset categories
  – Procedural changes
  – Data coding changes
New Ways in Which DOTs Plan to Use Information From Their Condition Assessments

- (24 states) No new plans to use the information, other than to comply with GASB 34.
- (17 states) Aid in budgeting and funding requests.
- (16) Strategically allocate dollars to parts of the system with the greatest need.
- (15) Development of long range plans.
30 DOTs reported using the PONTIS bridge inspection system. 25 DOTs reported having an in-house developed system.

Are there different cycles for inspecting bridge structures based on span length or other criteria?

- Yes, 19
- No, 31

If yes, what are the reasons behind differing cycles?

- Poor Condition: 12
- Major Bridges: 4
- Other: 3
Pavement Inspections

What is the cycle for inspecting pavements?

- Every year, 20
- Every two years, 16
- Every three years, 2
- Continuously

13 DOTs reported using an instrument equipped vehicle only to perform pavement inspections

36 DOTs reported using both a vehicle and visual inspections by engineers

What pavement management system does the DOT use?

- Vendor-supplied system, 9
- Vendor-customized system, 10
- In-house developed system, 31
- None, 2

31 DOTs reported using an in-house developed pavement management system
• Of 41 respondents, the average book value reported was $15 billion.
• For these 41 respondents, the aggregate book value reported was $631 billion.
Of 27 respondents, the average replacement value reported was $52 billion.

For these 27 respondents, the aggregate replacement value reported was $1.41 trillion.
Book to Replacement Ratio
(Replacement Value / Book Value)

• The average replacement value to book value ratio for the 25 states reporting both values is 3.8

• There is no material difference in the averages of depreciation versus modified states

• The highest ratio is 10 while the lowest is 1.1
DOT’s View of Overall Usefulness of Information From GASB 34 Reporting

- A majority of DOTs report that the additional information required by GASB 34 will be useful for a variety of purposes.
- A minority (13) indicate that it will not be useful. Of these 13, 8 are depreciation states, 5 are modified.