

LCCA

LIFE CYCLE COST ANALYSIS

Updates to Technical Bulletin

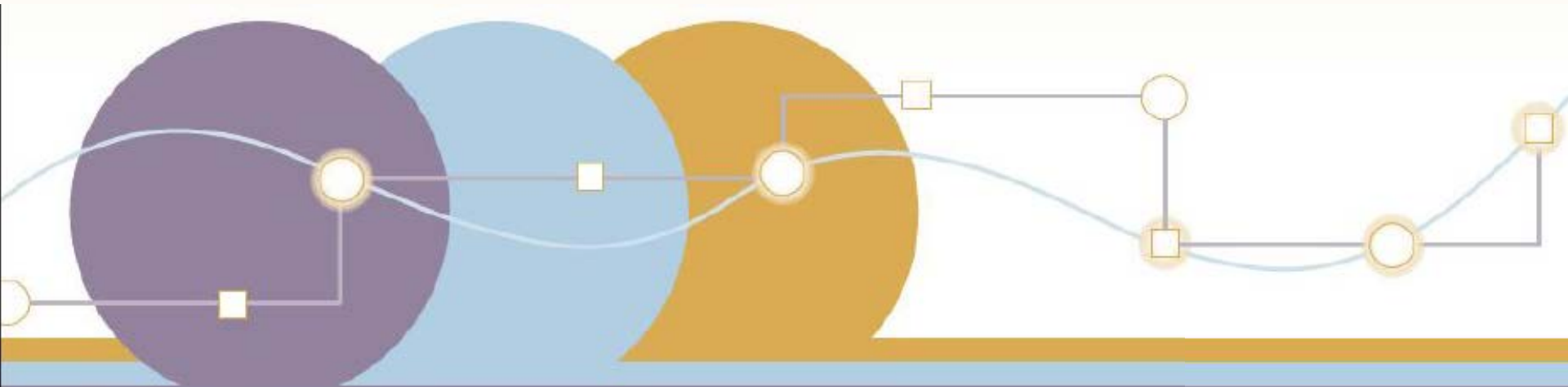
An Overview of GAO identified Updates

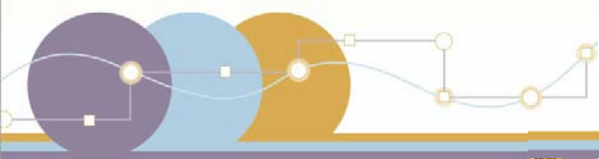
NCC

September 24, 2013

Eric Ross

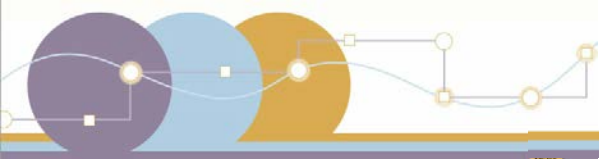
Federal Highway Administration



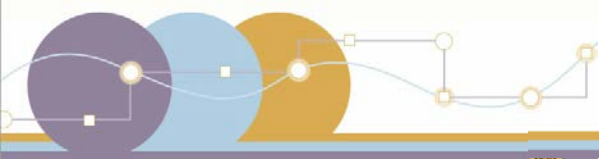


Objectives

- LCCA Overview
- MAP-21 and LCCA
- GAO review and next steps
- Resources



LCCA Overview

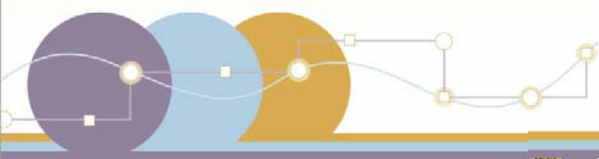


LCCA Overview

- Life-Cycle Cost Analysis is a **process** for evaluating the total economic worth of a usable project segment by analyzing initial costs and discounted future costs, such as maintenance, user, reconstruction, rehabilitation, restoring, and resurfacing costs, over the life of the project segment.

Source: Transportation Equity Act for the 21st Century





LCCA Overview

An **analytical tool**

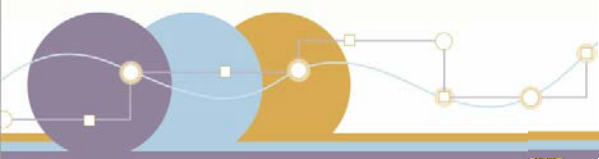
to provide a **cost comparison**

between two or more **competing design alternatives**

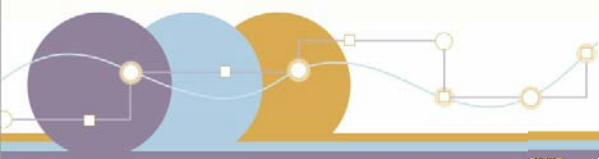
producing **equivalent benefits**

for **the project** being analyzed.





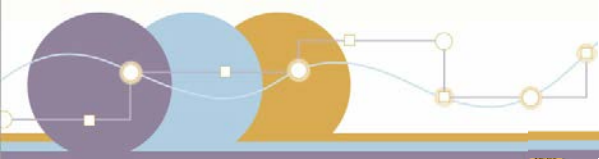
MAP-21 and LCCA



MAP-21 to asset management?

- Each State is required to develop a risk-based asset management plan for the National Highway System (NHS) to improve or preserve the condition of the assets and the performance of the system. (23 U.S.C. 119(e)(1), MAP-21 § 1106)
- USDOT is required to issue a regulation not later than 18 months after date of enactment, after consultation with the States and other stakeholders, which will establish the process to develop the State asset management plan for the NHS. (23 U.S.C. § 119(e)(8), MAP-21 § 1106)



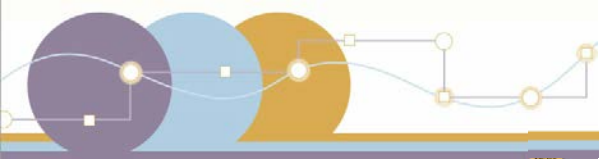


Highway Asset Management Plan

Plan Contents

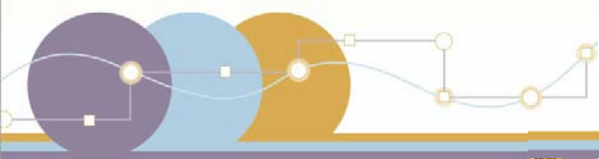
- pavement and bridge inventory and conditions on the NHS
- objectives and measures
- performance gap identification
- lifecycle cost and risk management analysis
- a financial plan
- investment strategies





GAO and Next Steps

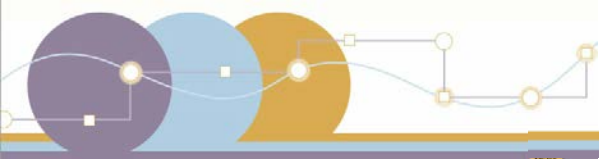




GAO and Next Steps

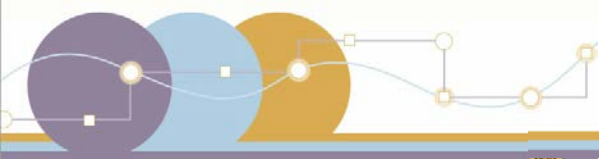
- Define Program Characteristics
 - Clearly Define what goes in
- Obtain Data
 - Utilizing actual data, what really happens
- Verify what was used was correct
 - Review LCCA, was the right data used, was it updated



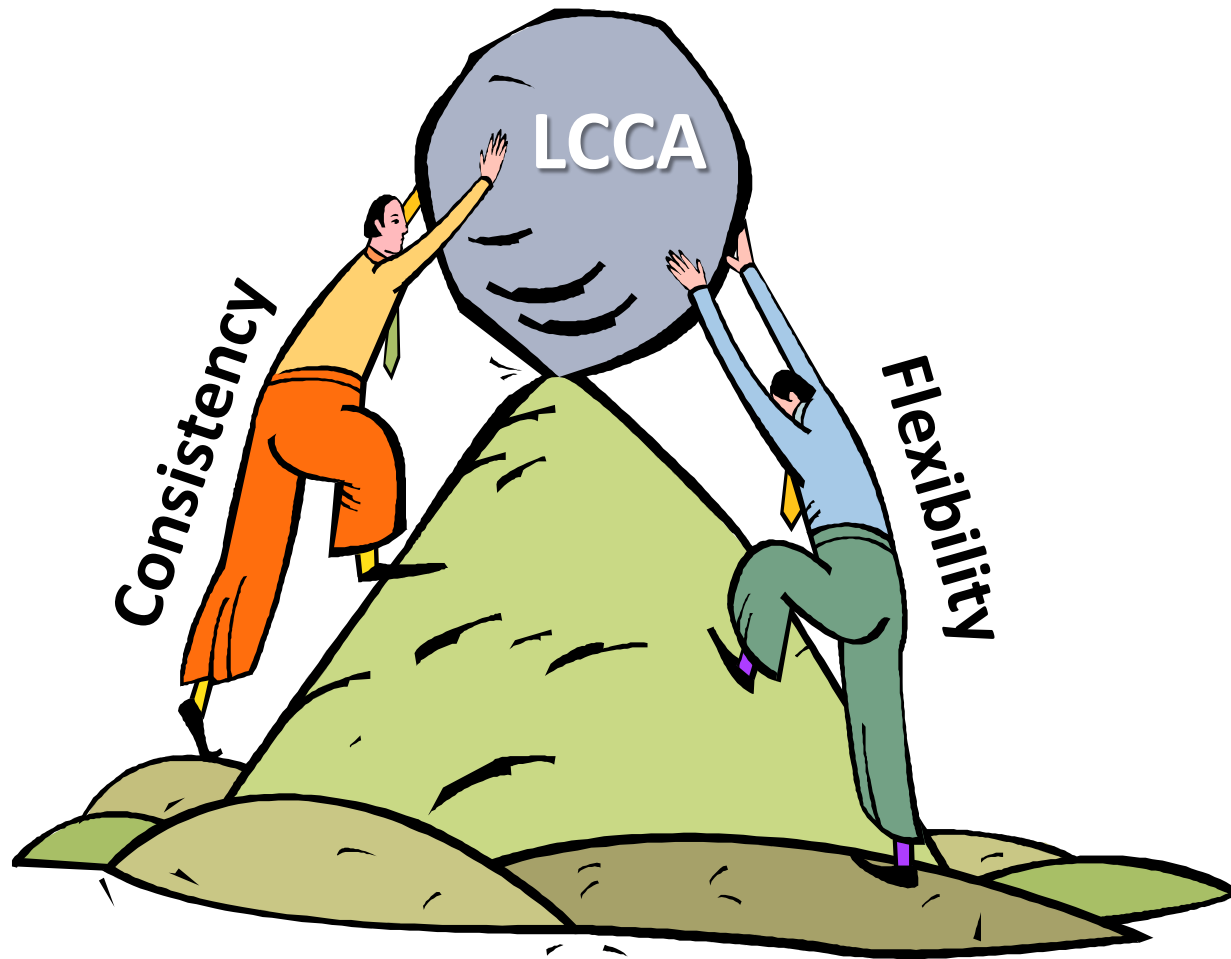


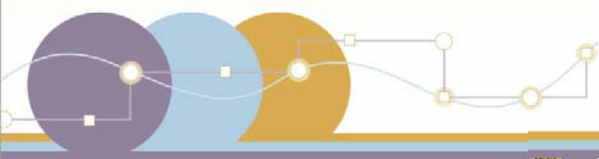
GAO and Next Steps

- Document the Estimate
 - Document the inputs/outputs
- Present Estimate for approval
 - How was the LCCA presented, where assumption clearly stated
- Update the Estimate
 - If changes happened was the LCCA updated

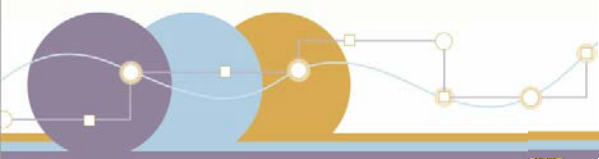


Consideration of Challenges





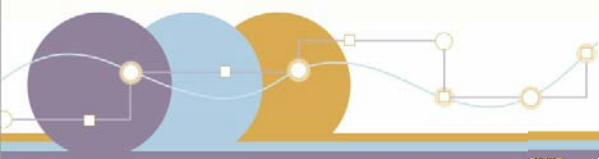
Resources



Resources

- www.fhwa.dot.gov/tpm
- <http://www.fhwa.dot.gov/infrastructure/asstmgmt/lccasoft.cfm>
- <http://www.gao.gov/products/GAO-13-544>





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