

Robert Ridgeway

**FEDERAL AVIATION
ADMINISTRATION (FAA)**

#SGP16



Main Challenges in Portfolio Optimization

- Decision making and budget formulation were loosely coupled
- Uncoordinated and tactical decisions lead to future liabilities (requirements creep)
- Insufficient management oversight and financial controls

Solution: Develop and institutionalize repeatable corporate operations budget processes with more structure and transparency in support of budget execution and program prioritization.

For Instructional Purpose Only

Decision Lens Process Overview



Outline Decision

- ✦ Criteria Development
- ✦ Participant Identification
- ✦ Project / Alternative identification
- ✦ Participant Group and Alternative Category development

Establish Priorities

- ✦ Pairwise Process
- ✦ How important is each criterion?
- ✦ Capture key insights and determine criteria weighting

Evaluate Alternatives

- ✦ What determines whether an alternative performs well against your criteria?
- ✦ How well do your alternatives perform?

Optimize

- ✦ Review Value Results
- ✦ Conduct Sensitivity Analysis
- ✦ Which alternatives give the best ROI?
- ✦ What must you fund?
- ✦ Perform real-time and what-if analysis

For Instructional Purpose Only

Outline Decision



Outline Decision

- Criteria Development
- Participant Identification
- Project / Alternative identification
- Participant Group and Alternative Category development

Establish Priorities

- Pairwise Process
- How important is each criterion?
- Capture key insights and determine criteria weighting

Evaluate Alternatives

- What determines whether an alternative performs well against your criteria?
- How well do your alternatives perform?

Optimize

- Review Value Results
- Conduct Sensitivity Analysis
- Which alternatives give the best ROI?
- What must you fund?
- Perform real-time and what-if analysis

For Instructional Purpose Only

Outline Decision - Discussion

- Conducted executive offsite during which a series of prioritization decision criteria were identified.
 - The resulting criteria model identified strategic drivers as well as operational focal points necessary to move the organization forward.
 - These strategic drivers aligned with overarching organizational priorities

For Instructional Purpose Only

Establish Priorities



Outline Decision

- Criteria Development
- Participant Identification
- Project / Alternative identification
- Participant Group and Alternative Category development

Establish Priorities

- Pairwise Process
- How important is each criterion?
- Capture key insights and determine criteria weighting

Evaluate Alternatives

- What determines whether an alternative performs well against your criteria?
- How well do your alternatives perform?

Optimize

- Review Value Results
- Conduct Sensitivity Analysis
- Which alternatives give the best ROI?
- What must you fund?
- Perform real-time and what-if analysis

For Instructional Purpose Only

Establish Priorities - Discussion

- No “right” or “wrong” answer
- The definitions of the criteria are understood, but each group is valuing them differently
- We are thinking both strategically and tactically (operationally)
- The question when viewing the priority graph is:
 - Can I live with and support the decision?

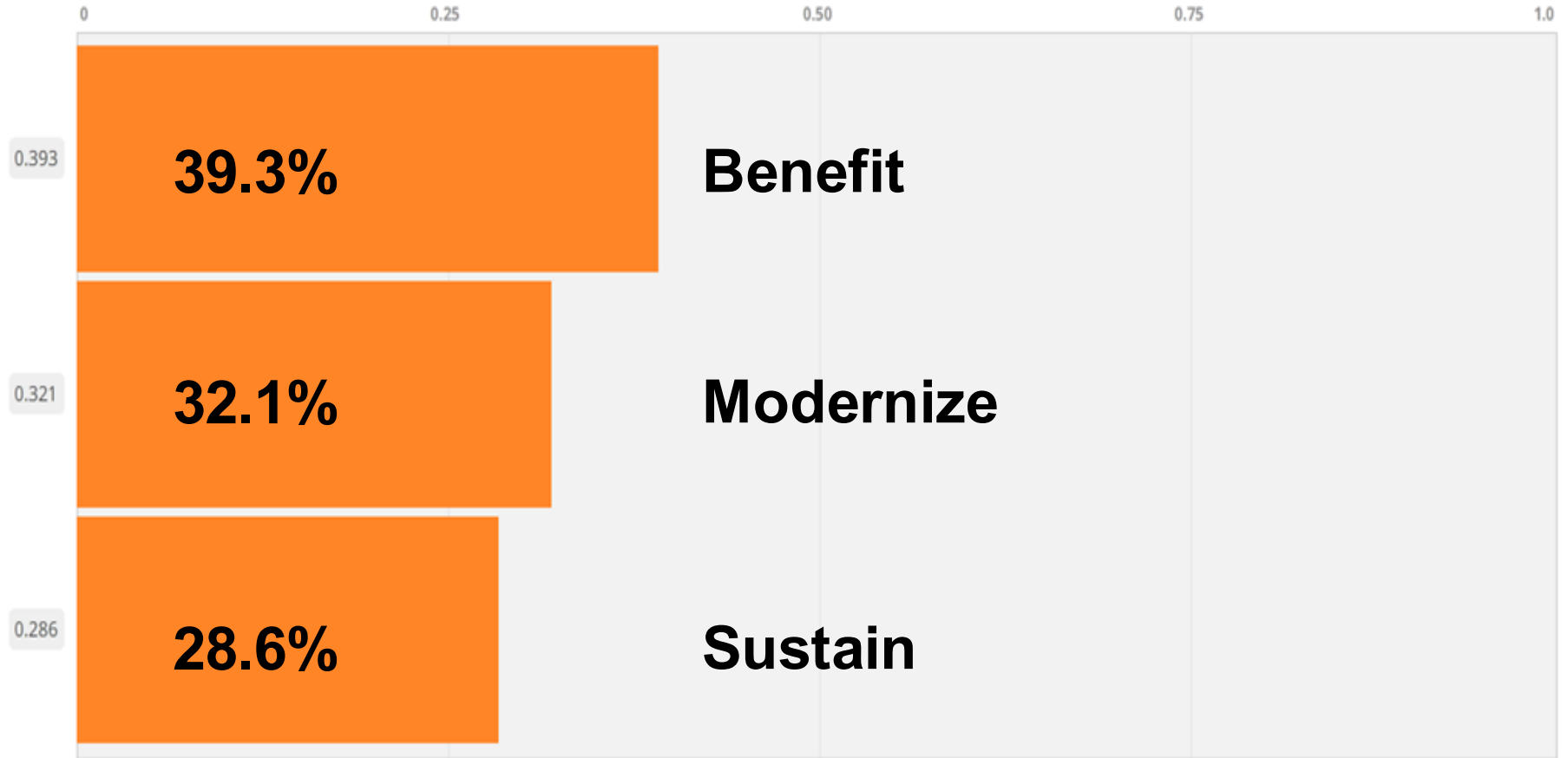
For Instructional Purpose Only

Establish Priorities: Pairwise

- **Pairwise the importance of the criteria to each other with the following groups:**
 - VPs (7 of 7)
 - DVPs (7 of 7)
 - Directors (32 of 32)

Establish Priorities: Pairwise (Cont.)

Priority with respect to: Portfolio Goal:



Alignment: 62.7%

Total Inconsistency: 11% [Click to View](#)

For Instructional Purpose Only

Establish Priorities: Pairwise Comparison

% Importance			
	Benefit	Sustain	Modernize
VP	40.4%	24.5%	35.1%
DVP	42.2%	29.1%	28.1%
Directors	42.3%	26.5%	31.3%
50/30/20	39.3%	28.6%	32.1%

Rank Importance			
	Benefit	Sustain	Modernize
VP	1	3	2
DVP	1	2	3
Directors	1	3	2
50/30/20	1	3	2

For Instructional Purpose Only

Evaluate Alternatives/Optimization



Outline Decision

- Criteria Development
- Participant Identification
- Project / Alternative identification
- Participant Group and Alternative Category development

Establish Priorities

- Pairwise Process
- How important is each criterion?
- Capture key insights and determine criteria weighting

Evaluate Alternatives

- ✦ What determines whether an alternative performs well against your criteria?
- ✦ How well do your alternatives perform?

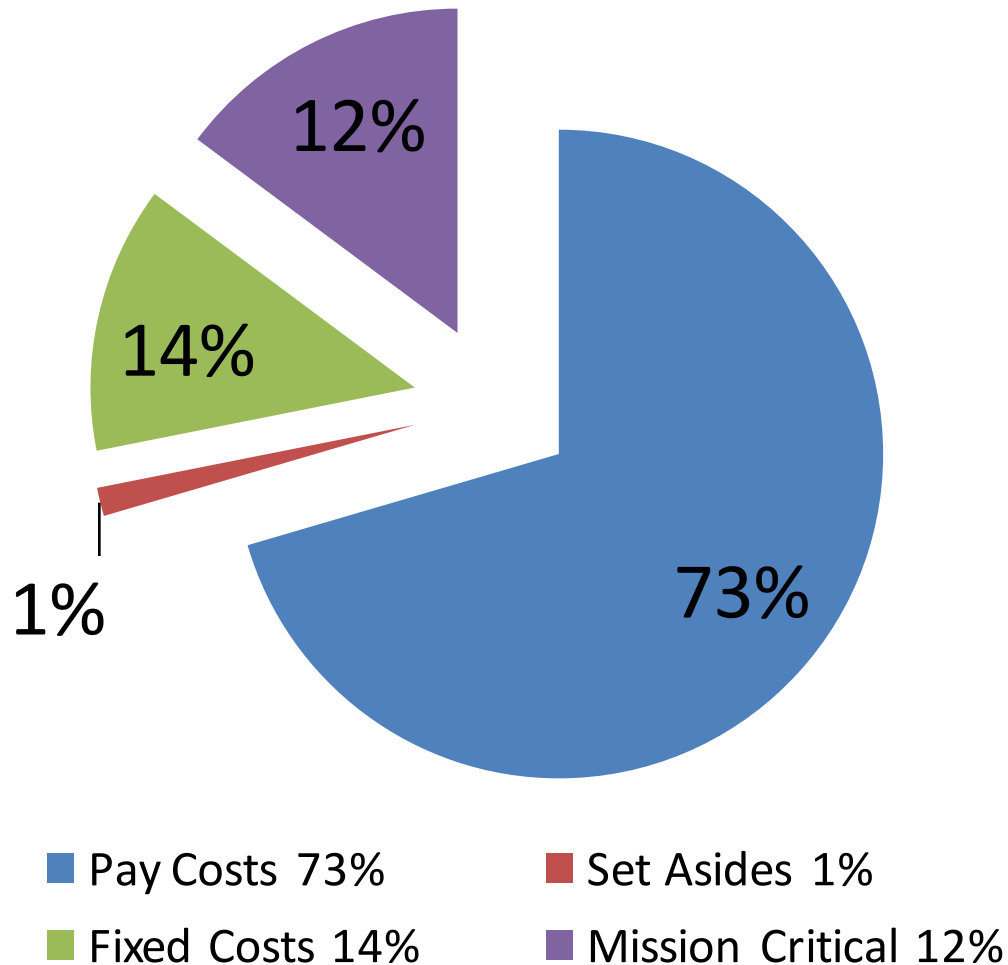
Optimize

- ✦ Review Value Results
- ✦ Conduct Sensitivity Analysis
- ✦ Which alternatives give the best ROI?
- ✦ What must you fund?
- ✦ Perform real-time and what-if analysis

For Instructional Purpose Only

Evaluate Alternatives/Optimization

Budget Framework (\$7.4B)



- With operations review board, consisting of cross organizational membership:
 - We rated 153 programs (alternatives) for their performance to the criteria.
- Conducted Sensitivity and What-if Analysis.
- Grouped mission critical programs into four (4) quartiles based on value.
- Funded each quartile to optimize portfolio score, issued allowances and executed budget.

For Instructional Purpose Only

DL Lessons Learned - Questions

- What worked well with entire DL process?
- What didn't work well?
- Do you think the DL criteria represents priorities? Should we make any changes to the criteria for out-years?
- Do you think the weightings of the criteria reflected priorities? Should we make any changes to the weighting for out-years?
- Did you understand the mechanics and role of the tool in Budget decision process?
- Should we continue to use Decision Lens for out-year budget process?
- What could be done better or differently for out-years?

For Instructional Purpose Only

DL Lessons Learned - Successes

Success	Factors
Transparency	<ul style="list-style-type: none">• Ability to review how we voted and drive discussion on the differences in how we understood the definitions of each subject.• Objective, transparent, corporate approach• Provide more systematic way to review spending by all organizations• Repeatable process
Prioritization	<ul style="list-style-type: none">• Drove broader conversation with leadership• Provided a baseline map of decisions• Allowed for open discussion between levels of leadership• Provided common starting point
Valuable Data	<ul style="list-style-type: none">• Provided baseline data• In better position to describe where OPS money goes• Standardization from year-to-year

For Instructional Purpose Only

DL Lessons Learned - Issues

Issues	Factors
Criteria & Rating Structure	<ul style="list-style-type: none">• Need more time to define criteria and rating scales• Rating scales inconsistency
Prioritization	<ul style="list-style-type: none">• Incomplete breakout of work being performed• Prioritization inconsistency• Needed program interdependencies factored in
Voting	<ul style="list-style-type: none">• Many alternatives to analyze• Incomplete alternative definitions• Labor intensive
Stakeholder Buy-in	<ul style="list-style-type: none">• Needed more engagement/education on tool/process• Up-brief needed outside of organization

For Instructional Purpose Only

Other Decisions using DL Process

- Training Solutions
- Facility Level Project Ranking
- Alternatives Analysis
- Information Technology (IT) Prioritization
- Strategic Initiatives Development
- Human Capital Selection
- Vendor Screening

For Instructional Purpose Only