



ALVAREZ & MARSAL
INSURANCE & RISK ADVISORY
SERVICES, LLC (IRAS)

**FEDERAL FUNDS RISK MODEL
BRIEFING**

**PREPARED FOR:
FEDERAL FUNDS COMMISSION
OF THE STATE OF UTAH**

August 27, 2015





AGENDA

- I. Meeting Objectives and Milestones
- II. RAM-tool Status Update
- III. RFP Digital Web Interface
- IV. Live Demo of Digital Web Interface
- V. Scenario Example Screenshots
- VI. Top Findings & Recommendations
- VII. Report / Playbook Status Update
- VIII. Next Steps / Questions
- IX. Appendix



PROJECT OVERVIEW

Project Overview



- ▶ **Alvarez & Marsal is building a Federal Funds risk framework and risk model for the Utah State Legislature’s Federal Funds Commission.**

- ▶ **Project deliverables include assessing various Federal Fund risk scenarios:**
 - overall reductions of federal funds, as in a sequester;
 - effects on the value of federal funds, as with interest rate changes;
 - specified reductions of federal funds, as with Medicaid reduction/expansion.

- ▶ **A&M is assessing these scenarios, and others, by:**
 - Modeling the risks to guide legislators’ decisions and policy making,
 - Showing the impacts on the state of various federal funding scenarios,
 - Suggesting ways to mitigate the risks, with plans that can be implemented if they occur,
 - Helping the state avoid these risks, through proactive steps that the state can take now.

MEETING OBJECTIVE AND MILESTONES

Meeting objectives and project milestones

- ▶ **Provide a project status update related to the RAM-t**
 - The RAM-t has undergone a series of rigorous tests and subsequent updates and was delivered last week for review and user testing by the LFA team
 - Obtained short term access to REMI to finalize testing

- ▶ **Discuss the web front-end requirements and functionality**
 - Phase I delivery of web interface with limited functionality delivered on 8/25/15
 - Phase II delivery of web interface with full functionality delivered on 9/08/15
 - Web Hosting Process

- ▶ **Provide a project status update related to the Final Report / Playbook**
 - We will deliver a Final Report / Playbook for the RAM-t to describe the ongoing processes for maintaining and updating the model by 9/11/15

PROJECT STATUS UPDATE : RAM-TOOL

Completion of a rigorous testing process and updates to the model based on the outcomes of the testing process

- ▶ **The Risk Assessment and Modeling tool (RAM-t) has undergone a significant testing process**
 - In addition to receiving feedback from the LFA, the A&M team has tested and identified numerous improvement items for the modeling tool including;
 - Revisions to the mitigation calculations, limits and the rollup of mitigation capabilities
 - Treatment and presentation of indirect federal funding risks
 - Updates to the treatment of service level mitigations
 - Updates to the form and functionality of the tool

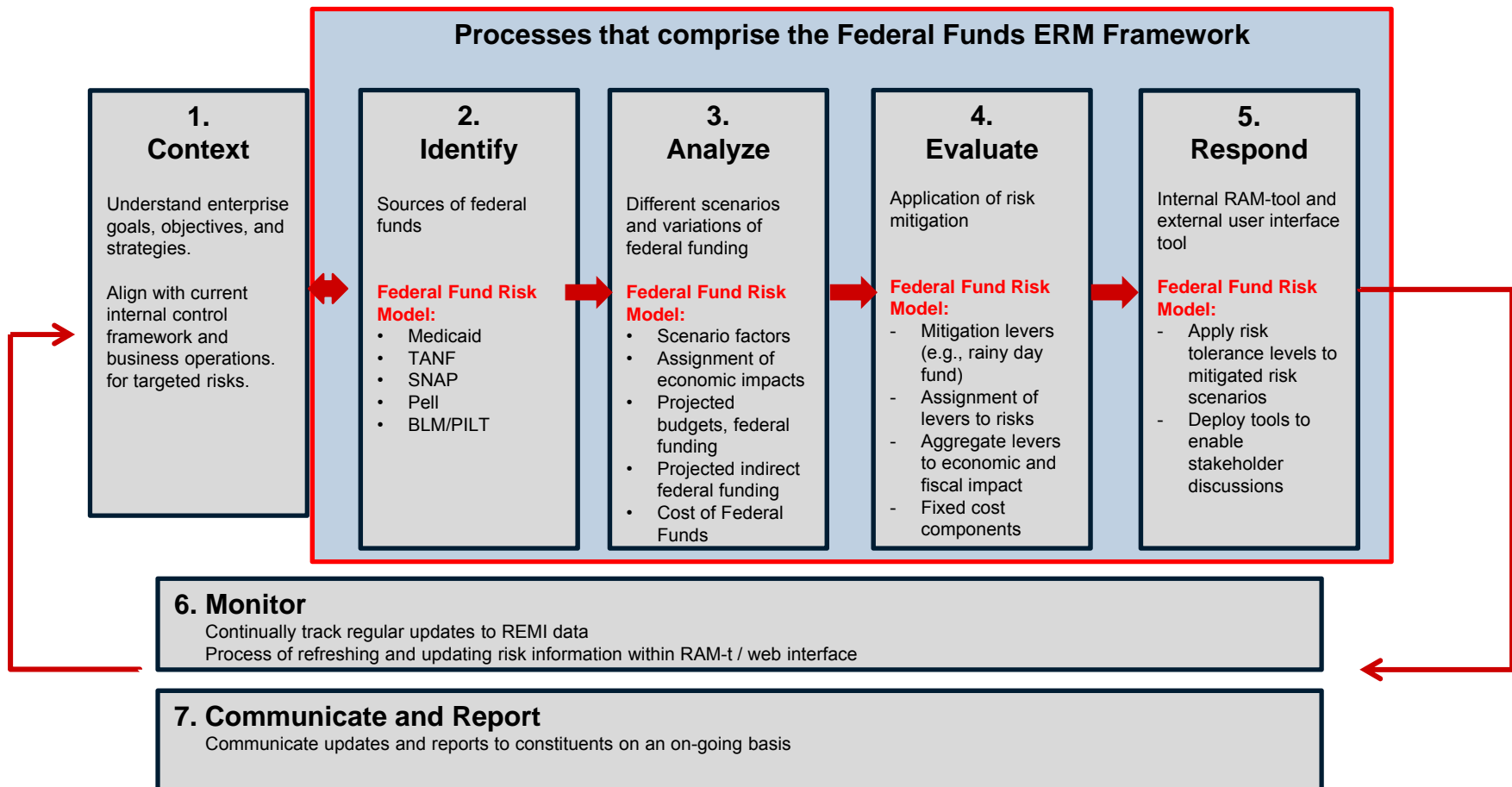
- ▶ **These RAM-t updates have resulted in the model's ability to**
 - Estimate impacts and mitigations more accurately
 - Describe sequester in more detail for current understanding
 - Show net effects of changes in personal income
 - Estimate state revenues based on personal income

INTEGRATING RISK DECISION MAKING

Linking Governance and Policymaking with the Federal Funds Risk Model



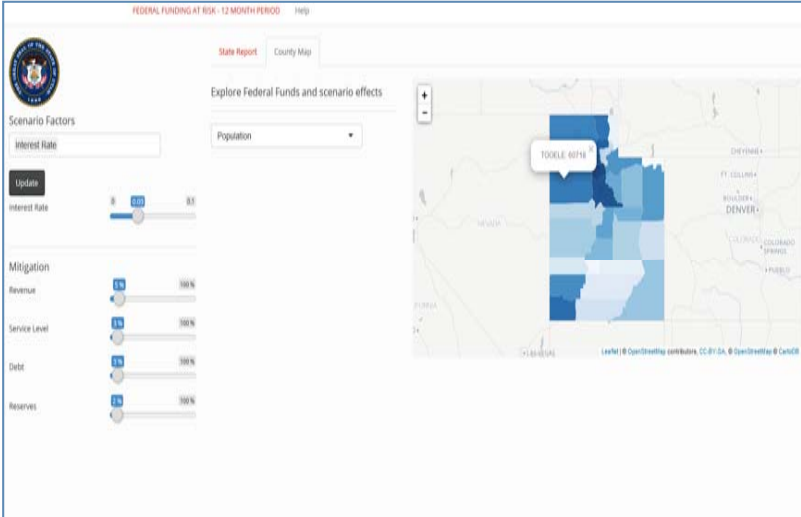
ERM Process: Link to Federal Funds Risk Model



RFP : DIGITAL WEB INTERFACE

Digital Web Interface

- ▶ **As per the original Federal Funds Risk Model RFP, Section IV, subsection 3:**
 - ‘The FEDERAL FUNDS RISK MODEL should allow policymakers and even members of the public, if feasible, to run different risk scenarios and receive output showing the impacts for state government, translated, if possible, to a level of service. Ideally, the FEDERAL FUNDS RISK MODEL will include a user-friendly digital interface that will allow policymakers and, if possible, the public to conduct “what if” analyses to show the impacts resulting from different possible efforts to respond to or mitigate the impacts from a reduction in the amount or value of federal funds.’



LIVE DEMO : DIGITAL WEB INTERFACE

Live Demo Presentation

- ▶ **Demo Scenarios**

- ▶ Medicaid
- ▶ Stock Market Devaluation and China's Quantitative Tightening

TOP FINDINGS : MODELING

Top findings for State of Utah as a resulting of our modeling efforts

- ▶ **There are significant implications from the loss of indirect federal funding sources such as Social Security and Medicare**
- ▶ **The state relies significantly on military and civilian employment, and loss of either of those through federal government reduction could have dramatic impacts on the state economy**
- ▶ **The loss of the military presence through Base Realignment and Closures (BRAC) is a significant risk to the state, and dedicated economic development tasks to protect those interests would be valuable**
- ▶ **Small losses in the significant federal funding areas including Medicaid, Education, and Federal Highways can have dramatic ripple effects on the state economy**
- ▶ **Broader impacts from economic turmoil, can have unexpected consequences as future planning may not consider these complex non-linear impacts**

TOP RECOMMENDATIONS : OPERATIONAL

Top operational recommendations for State of Utah based on our observations

▶ **Technology**

- Implement a centralized grants management module/system

▶ **People / Organization**

- Explore creation of a centralized grants office to manage the oversight, reporting, and compliance monitoring for federal grants and other types of grants

▶ **Process**

- Modify the reporting process for the receipt of federal funds report through use of a simplified database and use of standardized records

▶ **Process**

- Develop new centralized reporting and compliance under the direction of the centralized office of federal funds

PROJECT STATUS UPDATE : REPORT/PLAYBOOK

Development and delivery of a final Report / Playbook for the RAM-t

- ▶ **To create an ongoing sustainable process and document what we have done, we are developing a final Report / Playbook for the RAM-tool. The Report/Playbook includes:**
 - Executive Summary
 - Risk Identification
 - Economic Research and Modeling Scenarios
 - Individual Model Development
 - Risk Assessment and Modeling tool (RAM-t) Structure
 - Risk Mitigation and Reporting
 - Summary Findings and Next Steps
 - Appendix

- ▶ **Provide LFA draft copy of Report /Playbook on 9/11 for comment and feedback**

- ▶ **Delivery of final Report/Playbook on 9/21**

QUESTIONS AND NEXT STEPS

Project Wrap-up

▶ Immediate Next Steps

- Complete Phase II of web front end development on 9/8/15
- Full testing of web front end begins 9/8/15
- Submit draft Report / Playbook for review and feedback on 9/11/15
- Finalize development of Report / Playbook on 9/21/15
- Host in-service for LFA and operational turn-over and implementation of the RAM-tool, week of 9/21/15
- Project delivery by 9/24/15

▶ Question and Answers



APPENDIX



NORTH AMERICA EUROPE MIDDLE EAST LATIN AMERICA ASIA

PROJECT STATUS UPDATE : WEB FRONT END DEVELOPMENT

The development of the web front end will have five primary components. Phase I functionality completed by 8/25 ahead of the Federal Funds Commission Meeting on 8/27

- ▶ **Phase I: Complete Phase I development of the web based front end, using R, with five components by 8/25**
 - Replicate the matrix multiplication processes used in the RAM-t scenario generation page
 - Develop the front-end scenario selection processes
 - Integrate the County-Level Analyzer to distribute risks to the specific regions
 - Finalize the risk mitigations and display of information
 - Utilize the existing server to host and present the application

- ▶ **Phase I: Expected front end functionality by 8/25. The user will be presented with**
 - A functioning web interface allowing access to four risk scenarios and four mitigations
 - A slider for each of the four scenarios and each of the four mitigations
 - A graph depicting the change in each Federal Funding Source from Baseline to Mitigated at the State level
 - A chart displaying the Before Mitigation, After Mitigation, Cost of Funds and Improvement % for the particular Federal Funding Source
 - State-level Economic Impact to Jobs, GDP and State and Federal Direct and Indirect Funding resulting from users selections
 - The option to select a County-level view and select from all Federal Funding Sources and all economic impacts to the counties throughout the State

PROJECT STATUS UPDATE : WEB FRONT END DEVELOPMENT

The development of the web front end will have three additional tasks required for web hosting. Final delivery of web front end on or before 9/15

▶ Phase II: Refinement of the web front end development

- Incorporate feedback from Federal Funds Commission and LFA
- Refine user functionality, as necessary
- Build out additional risks scenarios and mitigations
- Provide updated front-end application to SOU Technology team for testing on 9/8
 - SOU receives the front-end application from A&M
 - SOU compiles the code and installs on the SOU Server
 - SOU tests the broadcasting web site for final bugs

▶ Phase II: Expected front-end functionality by 9/15

- Incorporates 20 scenarios, as in current RAM-t
- Mitigations at program level
- Extensive documentation via hovering
- Possible additional improvement to graphics, e.g., dials and gauges
- Possible display of revenue volatility numbers
- Graphics interactivity with links
- Tabular data with county-level hovering

FUTURE POSSIBLE WEB FRONT END DEVELOPMENT ITEMS

The development of the web front-end may involve future updates and enhancements that could include more dynamic scenario selection, implementing standardized scenarios

▶ Possible future enhancements that could be considered by Utah

- Provide additional dashboard gauges to reflect major mitigation levers (e.g., debt capacity, increased revenues, reserves and reduced services)
- Implement drop down boxes to enable selection of each scenario
- Create dynamic sliders for each scenario
- Implement standardized Sequester, Interest Rate, and Medicaid Analysis scenarios
- Develop the drop down ability in the scenario generation page to enable the creation of multiple concurrent scenarios
- Create gauges and KPIs that reflect debt capacity, VAR, and percentage of revenues
- Present the Federal Funds Risk Matrix by expected funding and CFDA code
- Demonstrate sub risks (budget + cost of funds + internal controls (i.e., AGA Framework), External Control (I/O Model/REMI)
- Present the severity impact by sub risk (time = 12 months; vs = VAR, Debt, Resources, Rainy Day Fund)

Yvette K. Connor | Managing Director
Alvarez & Marsal, LLC
Insurance & Risk Management Advisory Services
707 17th Street, Suite 2125
Denver, CO, 80202

ALVAREZ & MARSAL

© Copyright 2014. Alvarez & Marsal Holdings, LLC. All rights reserved. ALVAREZ & MARSAL®,
A® and A&M® are trademarks of Alvarez & Marsal Holdings, LLC.

www.alvarezandmarsal.com