

# BUSINESS CASE ANALYSIS



*Business Case Analysis (BCA) provides decision makers with quantitative, return-on-investment metrics to proactively manage the allocation of capital assets across their investment portfolio; through the process of integrating project cost, benefit, schedule, and risk into an evaluation of overall value across a range of potential investment alternatives,*

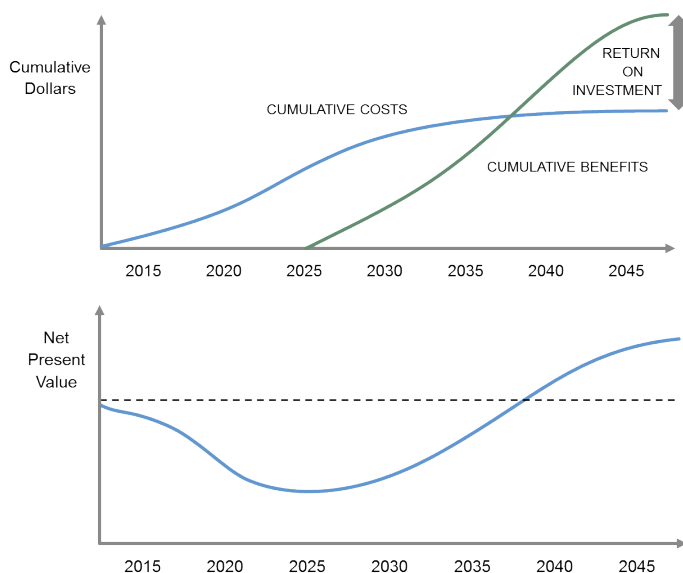
## The Challenge

The Federal Government must effectively manage its portfolio of capital assets to ensure scarce public resources are wisely invested. A data-driven determination of best-value is vital to prioritizing investment alternatives. All Executive Branch agencies are subject to the requirement of using BCA methods, when developing policy and budget justification principles for new and existing major investments. BCA informs critical choices:

- Where do we best allocate our resources?
- Will the new design or program justify the investment?
- Should we lease or buy the equipment?
- Should we continue to modernize and sustain the existing equipment or replace?

Choosing the proper path requires collaborative problem solving, analytical rigor and innovative thinking. As discretionary budgets tighten, the ability to communicate the worth of any particular program to key stakeholders is required in order to achieve success.

*The Federal Government must successfully navigate the tradespace between cost, benefit and risk to deliver best-value solutions to our nation's challenges.*

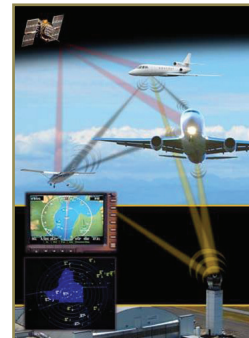


*MCR's BCA led to 70 successful acquisition milestones across more than 40 FAA investment programs*

## Our Response

Leveraging our long history of providing financial analysis, cost estimating, operations research and risk analysis support to major constituents in the government, MCR integrates best practices to develop comprehensive BCA and provide superior guidance to our customers. Our products are complete, concise, credible, and defensible. Government leaders are provided with the right information they need to make best value choices.

The FAA's Next Generation Air Transportation System (NextGen) represents the transformation of the National Airspace System (NAS), including our national system of airports, using 21<sup>st</sup> century technologies to ensure future safety, capacity and environmental needs are met. Business case and operational impact assessments are essential to properly guiding the evolution of the system. MCR was a key contributor to the Surveillance and Broadcast Services System (SBS), the \$1.7B transformation of the NAS from radar to satellite-based surveillance and produced the analysis to justify a new service provider acquisition approach to maximize value for the FAA and the taxpayer. MCR continues to serve as a partner with the FAA in applying BCA methods to support major evolving NextGen technologies across communications, surveillance, navigation, weather and aeronautical information dissemination projects.



SBS: Cornerstone to FAA's NextGen



## Our Methods

MCR's proven approach to business case analysis (BCA) is designed to provide decision makers with the right information and decision support framework to make best-value decisions. Our approach leverages talented personnel, who are skilled in best-in-class tools and standardized processes, and who develop innovative methods that also adhere to the latest policy and guidelines to meet requirements.

**PROCESS.** We have created repeatable steps and proven processes to ensure BCA activities deliver results.

1. Establish objectives and identify alternatives. MCR collaborates directly with you to develop a clear understanding of your program's requirements. This allows us to easily identify and evaluate all of your options for achieving those requirements.
2. Determine methodology. We tailor a customized BCA process that addresses your program's specific requirements and defines the rules for analysis, laying the foundation for a strong E300 or other reporting and tracking mechanism.
3. Identify and estimate key benefits. MCR lists the potential benefits of every alternative and determines which are best for your program.
4. Analyze benefits and costs for all alternatives. We apply the customized process we developed in Step 2 to determine total Return on Investment (ROI) for all of your program's alternatives (evaluating both quantitative and qualitative benefits).
5. Conduct risk and sensitivity analysis. Every cost-benefit analysis that MCR conducts features a thorough risk assessment to show the potential impact of assumptions and specific conditions, as well as to provide the confidence levels associated with the various results.
6. Produce conclusions and document process. MCR determines and recommends the best course of action for your organization to take, documenting the entire process in the format required for future use.

### PEOPLE

Industry leaders across the cost, benefit, risk and schedule domains, carrying credentials from industry organizations such as the International Cost Estimating and Analysis Association (ICEAA), Program Management Institute (PMI) and the Defense Acquisition University (DAU).

Published on BCA in numerous forums to include:

- Program AIAA Aviation Technology Integration, and Operations Conference
- Air Traffic Control Quarterly/ATCA Conference Proceedings
- Institute for Operations Research and the Management Sciences (INFORMS) Conference
- Military Operations Research Society (MORS) Conference

### TOOLS

At the forefront in guiding the development of BCA processes and related support tools; custom economic analysis models using:

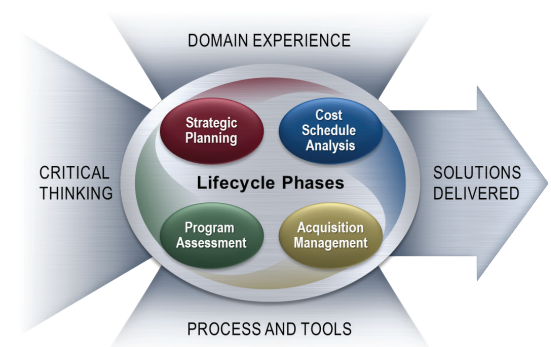
- MS Excel
- Crystal Ball
- Expert Choice
- ACEIT
- Analytica

### POLICY & GUIDANCE

Intimately familiar with agency-specific BCA policies:

- Clinger-Cohen Act and OMB directives such as OMB Circular A-11
- OMB Circular A-94 using Exhibit 300
- DoDI 7041.3 Economic Analysis for Decision Making

*Critical Thinking.  
Solutions Delivered.*



### CUSTOMERS

We have delivered thousands of well documented, defensible business cases, and are recognized as an unbiased honest-broker partner.

- DoD
- Civilian Agencies
- Intelligence Community
- NATO
- Industry

## The MCR Difference

### BUSINESS CASE ANALYSIS WITHIN THE FRAMEWORK OF INTEGRATED PROGRAM MANAGEMENT

MCR approaches every step of Integrated Program Management (IPM) with a focus on customer success. Our disciplined process begins with strategy and analysis, followed by rigorous systematic execution, and ends with measurable, real-world results. Business Case Analysis is closely related to other MCR services including; financial analysis, cost estimating, benefits analysis, EVM, and risk management. With MCR, agencies have confidence that their E300s support strategic goals, achieve favorable OMB scores, and provide the quality data that reflects program objectives.

Founded in 1977, MCR provides the highest quality solutions for its clients. Our integrated approach expands the range of lifecycle services to customers through comprehensive and credible analytical processes, strategies, and tools.

