

**Brian Sandoval**  
*Governor*

**Jeff Mohlenkamp**  
*Director*

**David Gustafson**  
*Chief Information Officer*



**STATE OF NEVADA**  
**DEPARTMENT OF ADMINISTRATION**

*Enterprise I.T. Services Division*

***A TECHNOLOGY INVESTMENT REQUEST (TIR) GUIDE:***  
***Evaluating Non-Financial Benefits***

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## ***A TIR Guide: Evaluating Non-\$\$ Benefits***

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This guide should be used in conjunction with the ***Technology Investment Request (TIR) Guide: Defining, Mapping and Tracking Benefits*** which details how to develop a Benefits Map for the TIR. This, ***A TIR Guide: Evaluating Non-\$\$ Benefits***, provides additional guidance for the evaluation of TIRs using the Cost Benefit Analysis (CBA) Workbook <hyperlink>. The CBA Workbook allows the evaluation of benefits, risks and costs for multiple solution alternatives. This guide particularly addresses the use of the Non-\$\$\$ Benefit worksheets for evaluating benefits. Further details on the full CBA methodology can be found in ***A TIR Guide: Cost Benefit Analysis***.

### **Definition of Terms**

#### Major Benefit Categories

Identifying a financial return on investment is a primary goal when making a business case for an IT project. **Financial Benefits** take the form of cost savings or revenue increases. Cost savings may be in the form of reductions (cost cutting), or avoidance (costs not incurred). If financial benefits are identified they should be captured in the Service and Resource Planner, C-8 \$Benefits worksheet. This guide details the definition and analysis of two other categories of non-financial benefit:

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- **Non-Financial, Tangible Benefits** – These are measurable benefits related to business and technical improvements. They may measure improvements to process, output, outcome, or customer satisfaction.
- **Intangible Benefits** – Intangible benefits include those benefits that are difficult to count or measure, such as stress reduction, improved teamwork and job satisfaction. These can often be significant in making a business case for a technology improvement. They can be captured in the CBA Workbook, Project Setup worksheet <hyperlink>.

#### Classification of Benefits

The following definitions apply to the major classification of benefits used in the Benefits Evaluation Table. They are based on the classification of benefits in the ***Technology Investment Request (TIR) Guide: Defining, Mapping and Tracking Benefits***. The classification listing here, however, also includes a two letter code that can be used to identify a benefit class in the Benefits Evaluation Table. This code, along with a sequence number is the means of uniquely identifying each benefit entered into the table.

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- **Public Safety (PS)** – This includes benefits that improve or support public safety and security such as: improved emergency response, improved staff safety, improved customer safety, adherence to public safety policies, and meeting federal requirements (ex. HIPPA).
- **Process Operational Improvements (PI)** – These benefits measure improved processes and business operations. Examples include: elimination of redundant efforts, improved internal controls, more effective processing and achieved economies of scale.
- **Improved Service (SI)** – These benefits measure improved services to the customer or constituent. New service offerings also are included here, along with improvements in service quality, delivery and access.
- **Stakeholder Satisfaction (SS)** – This primarily focuses on external stakeholder satisfaction, expressly customers and constituents. However, improvements in general public impression and political image are also included.
- **Strategic & Compliance Benefits (SC)** – These measures focus on how well the project fits a strategic direction (agency, department, state, or federal initiative). It also includes improved accountability and capability to comply with statutes and mandates.
- **Technology Benefits (TI)** – This includes all benefits related to an improved IT environment, whether it be for technical architecture improvements or support and maintenance. This includes: IT administration; end-user support; application development & maintenance; workstation and peripherals; servers, mainframe and storage; and network communications and telephony.
- **Security Benefits (SB)** – This is a grouping of all benefits related to improved information security, including security architecture and infrastructure, compliance with security standards, and improved capabilities in disaster recovery and continuity of operations. These may be technical benefits such as improved security infrastructure, or business benefits, such as improved confidentiality of sensitive or confidential information.

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### Benefit Rating Factors

Benefits are rated based on three factors: Probability, Level of Improvement, and Difficulty in Measuring and Tracking the benefit. Each of the three factors can be scored as High (3), Medium (2) or Low (1) in the Benefit Evaluation Table.

**Probability** – What is the likelihood that this benefit can be achieved? This evaluation should help screen out unlikely benefits.

**Level of Improvement** – If it does occur, what is the significance of the benefit? Level of improvement applies to both the magnitude of the benefit, and to the range of stakeholders who will benefit. This evaluation can help screen out benefits of limited range or minor impact.

**Difficulty in Tracking** – How difficult will it be to measure, track and report on this benefit? This also approaches the question of credibility. Please refer to the ***Technology Investment Request (TIR) Guide: Defining, Mapping and Tracking Benefits*** for details on developing, mapping and tracking benefit measurements.

### Benefit Rating

The Benefit Evaluation Table calculates Benefit Ratings based on the evaluation of these three factors. The Benefit Rating is calculated using the formula: Probability + Level of Improvement - Difficulty in Tracking.

### Benefit Evaluation Categories

Benefits are evaluated based on a 5 level continuum, ranging from a minimal benefit level (level 1) to a benefit that provides an extremely important value to the business (level 5). The assigned level of benefit is based on the benefit rating formula previously discussed.

**Minimal Benefit** – Agencies should not spend much effort defining and tracking benefits that are not likely to happen and have little consequence. In fact, there are probably only a handful of significant non-financial benefits that account for most of a project's positive impact. However, the Benefit Evaluation Table allows low level benefits to be recorded, especially as some mandated projects may have little else. Because of the remote possibility of a negative benefit being created, the Benefit Evaluation Table has been set up to convert all Benefit Ratings below "1" to a value of "1."

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**Low Benefit** – The Low Benefit Classification occurs for Benefit Ratings between 1.5 - 2.5. Again, the value of the Benefits Evaluation Table is that it should help screen out lower level benefits in favor of those that are most significant.

**Medium Benefit** – This category captures benefits that are significant but difficult to measure and track. It also covers benefits with moderate Probability and/or Impact. This Benefit Classification covers rating values from 2.5 to 3.5.

**High Benefit** – This is the most likely category of benefits once the benefits screening and prioritizing process has been completed. It covers benefits that are quite likely and may have a great positive impact, as well as moderate benefits that are easily measured and tracked. Benefit Ratings between 3.5 and 4.5 are included in this Benefit Classification.

**Extreme Benefit** – These are the most significant non-financial benefits. When there is a lack of compelling financial benefits, the business case often depends on a strong statement of non-financial benefits in the High and Extreme Categories. Benefit Ratings greater than 4.5 are included here.

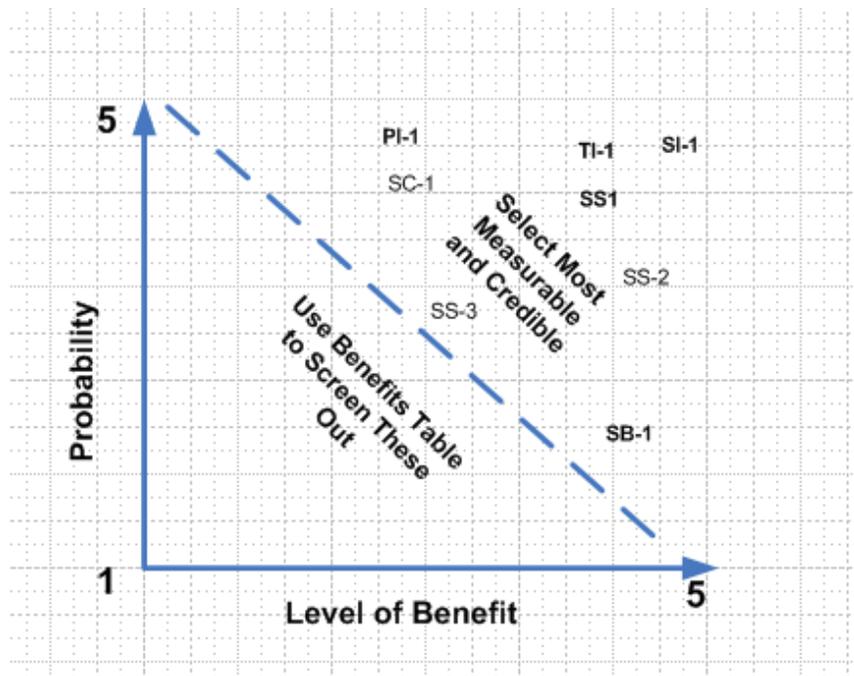


Figure 1. Example Ranges in Benefit Scores

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The above figure, *Example Ranges in Benefit Scores*, characterizes the best benefits as occurring in the upper right quadrant. The Benefits Evaluation Table can help screen out lower level benefits so that there is a focus on the best possible case for non-financial improvements. It also helps select those benefits that will be most meaningful (i.e. measurable and credibly tracked). Only the strongest, credible benefits should be used in the business case.

### **Measurement Methodologies and 5 Year Targets**

The **Technology Investment Request (TIR) Guide: Defining, Mapping and Tracking Benefits** provides guidance on projecting financial benefits over a five year period. It also discusses means of converting tangible non-financial benefits into financial benefit measures <hyperlink>.

### Benefits Evaluation and Cost Benefit Analysis

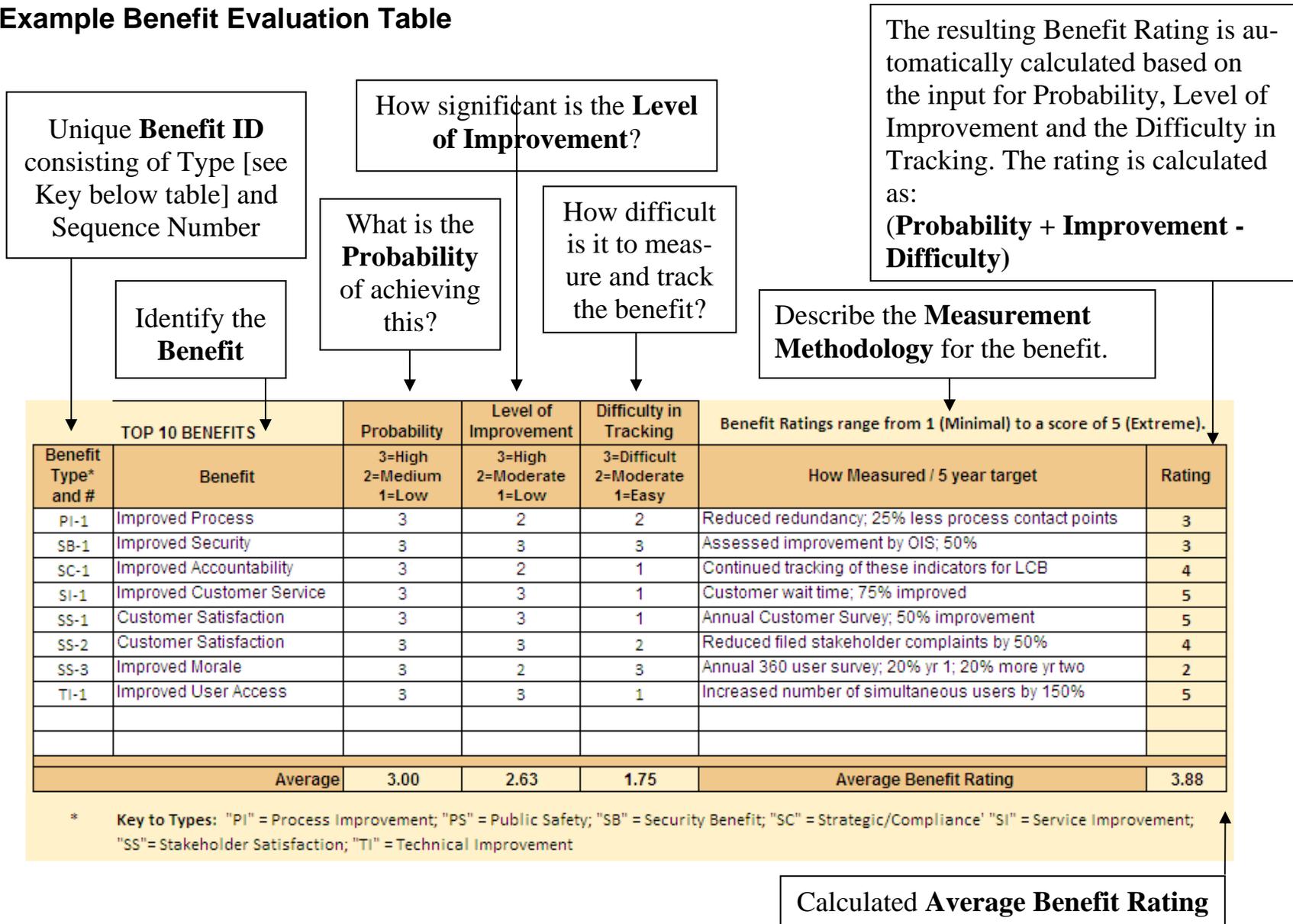
The cost benefit analysis workbook includes Benefit Evaluation Tables for up to three different alternatives. The results are used along with risk, cost and functional fit information in a comparative Cost Benefit Analysis: Alternative Comparison Summary

### Entering Data into the Benefit Evaluation Table:

Benefits should be grouped and listed by type. Each benefit should be assigned a unique Benefit ID starting with a designation of the Benefit Type Code, followed by a sequence number (see *Classification of Benefits* above). For instance, **PI-1** indicates the **P**-rocess **I**-mprovement benefit that is listed **first** in the PI benefits group. Explanations of what goes into each of the table's sections are shown in the example on the following page. This is followed by an example of the Excel worksheet used as the Benefit Evaluation Table.

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### Example Benefit Evaluation Table



Benefit Ratings range from 1 (Minimal) to a score of 5 (Extreme).

\* **Key to Types:** "PI" = Process Improvement; "PS" = Public Safety; "SB" = Security Benefit; "SC" = Strategic/Compliance; "SI" = Service Improvement; "SS" = Stakeholder Satisfaction; "TI" = Technical Improvement

Calculated **Average Benefit Rating**

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**TIR Benefit Worksheet:** The example below represents the complete Excel worksheet used as the Benefit Evaluation Table <hyperlink>. The **Benefit Rating** is automatically calculated, as are the Frequency Table and Chart.

					For Fiscal Year	2010
TIR Name:		Large Example Project				
Agency Name:		Division of xyz, Department of zyx				
Budget Account:		9999	Decision Unit:		E-582	
Alternative 1: Web Services						

Benefit Value	Benefit Level	Frequency	Cumulative
1	Minimal	0	0
2	Low	1	1
3	Medium	2	3
4	High	2	5
5	Extreme	3	8

Average Benefit	3.88
Benefit Classification	High



- Minimal
- Low
- Medium
- High
- Extreme

TOP 10 BENEFITS		Probability	Level of Improvement	Difficulty in Tracking	Benefit Ratings range from 1 (Minimal) to a score of 5 (Extreme).	
Benefit Type* and #	Benefit	3=High 2=Medium 1=Low	3=High 2=Moderate 1=Low	3=Difficult 2=Moderate 1=Easy	How Measured / 5 year target	Rating
PI-1	Improved Process	3	2	2	Reduced redundancy; 25% less process contact points	3
SB-1	Improved Security	3	3	3	Assessed improvement by OIS; 50%	3
SC-1	Improved Accountability	3	2	1	Continued tracking of these indicators for LCB	4
SI-1	Improved Customer Service	3	3	1	Customer wait time; 75% improved	5
SS-1	Customer Satisfaction	3	3	1	Annual Customer Survey; 50% improvement	5
SS-2	Customer Satisfaction	3	3	2	Reduced filed stakeholder complaints by 50%	4
SS-3	Improved Morale	3	2	3	Annual 360 user survey; 20% yr 1; 20% more yr two	2
TI-1	Improved User Access	3	3	1	Increased number of simultaneous users by 150%	5
Average		3.00	2.63	1.75	Average Benefit Rating	3.88

\* **Key to Types:** "PI" = Process Improvement; "PS" = Public Safety; "SB" = Security Benefit; "SC" = Strategic/Compliance; "SI" = Service Improvement; "SS" = Stakeholder Satisfaction; "TI" = Technical Improvement

**NOTE:** A Benefits Rating with a score less than "1" will be shown as the lowest possible Benefit Rank ("1"), and included that way in the Average Benefit calculation.