

{Company Logo}

{Name of Program for Supervisors} Business Impact and ROI Case Study

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1 GENERAL INFORMATION

1.1 Executive Summary

This case study presents a return on investment analysis of {Name of Program for Supervisors} training program for Supervisors. This program consists of several pre-workshop Web-based training modules, a 8.5-day workshop, and follow-up developmental activities for ninety days after the course. This course is the second course developed for the company's contextualized training facility, the first being the Drivers. Because the Supervisor has the responsibility to manage the Drivers, it is anticipated that the program will not only benefit the Supervisor, but will demonstrate an exponential impact on the business as the Supervisor applies new skills with his/her direct reports.

1.1.1 Abstract

This case study presents a return on investment analysis of the {Name of Program for Supervisors} training program for Supervisors. The design of {Name of Program for Supervisors} training curriculum was an outgrowth of the {Program for Drivers Name} training curriculum, taking a dynamic, interactive approach to integrate the various skills that the Supervisor needs to perform effectively.

The development of {Program for Drivers Name} training utilized the knowledge of experts and PhDs at leading universities such as Virginia Tech, Georgia Tech, and MIT as {Company Name} sought to learn how to train the next generation of drivers. Researchers found that hands-on experience, combined with technology and real-time feedback were the most critical factors in designing an effective training program. Supervisors are frontline supervisors that manage, train, and coordinate Drivers. Logically, the driver curriculum was used in part and built upon to create the {Name of Program for Supervisors} curriculum.

The group in the study consisted of Supervisors who attended {Name of Program for Supervisors} training during the pilot phase of the training and took place during the first half of 2011. The data used consisted of results in areas associated with safety, service, production, and staffing and growth.

The following groups/managers provided data for the evaluation:

- Site Managers Administration and facilitation of the {Name of Program for Supervisors} training program was conducted by the managers and facilitators of the two contextualized training facilities.
- Corporate Industrial Engineering– The data collection tool used to for aggregate business impact data was the "{Program Name} Supervisor Tracking Tool". The web-based tool was developed by End User Development, a unit of Corporate Industrial Engineering. The data collected included: safety auto, safety personal, Next Day Air delivered late, missed delivery, and over-allowed hours of the direct reports of the participating Supervisor.

Business Information and Analysis – Provided business analytics and cost data for many of the business elements.

Performance Support – Cost per student – Directors of Performance Support and Training and Development. The "Training Cost Calculator" was used to determine the cost per student in both models.

The evaluation report was presented to the Director of Training and Development, the Director of Performance Support, and the Vice President of Learning and Development.

1.1.2 Need for the Program

The {Name of Program for Supervisors} training program was developed to fill a need created by changes in the demographics of newly promoted supervisors, the need to update the training material to include operational changes and new technology, and the need improve the training using new learning technology and practices. Specifically, 40% of new Supervisors were not Drivers previously, indicating the need for increased attention to delivery and pickups methods.

The workshop portion of the program places supervisors in a learning space that is similar to the actual performance space, which enhances the transfer of knowledge and skills. A comprehensive approach to the jobs duties of a Supervisor blended with the available technology and necessary professional skills, will equip today's Supervisor with the knowledge to perform at the level {Company Name} needs them to actualize business results.

Additionally, there has been a significant need to create a new training program for Supervisors. Previouslydesigned training programs did not include demonstration of integrated skills. The training includes the basic knowledge and demonstration of skills in a blended approach in a contextualized training facility. A contextualized training facility is composed of learning stations where participants complete hands-on activities that replicate activities performed on the job. The facility also has an area designed as a small town where participants practice delivering and picking up packages, in order to provide hands-on application of the delivery and pickup methods taught during the instructor-led and web-based training. Once the participant has gained the necessary knowledge to perform the methods, the area changes focus to train the participants the proper way to observe, correct, and train their direct reports to perform delivery and pickup methods.

1.1.3 Need for Evaluation

The {Name of Program for Supervisors} training program met the specific characteristics defined by the ROI Institute as being among the types of programs that should be considered for ROI evaluation. This program is important to the organization's strategic objectives by directly linking to the organization's operational goals and issues. The design and development of the program was based upon in depth internal and external research and needs assessments. Because of the high profile nature of the program, there has been much interest in the program's impact on business results and ROI from senior level management. The Corporate Learning and Development team was challenged to identify the business impact of {Name of Program for Supervisors} in several key areas associated with safety, service, and production.

1.1.4 Evaluation Methodology

The return on investment study was conducted using the Phillips ROI Methodology. The steps included collecting relevant data about the participant and his/her direct reports, analyzing the data, isolating the effects of the program through manager estimates of the effect of the program on performance, converting the data to monetary value, and calculating the ROI of the {Name of Program for Supervisors}.

1.1.5 Key Findings

The {Name of Program for Supervisors} study resulted in an ROI of 9.20% on a goal of 5%.

Based upon the findings, the following recommendations were made:

- Continue to hold {Name of Program for Supervisors} training offerings
- Evaluate the possibility of expanding the number of offerings of the program to provide more availability on an annual basis
- Evaluate the possibility of expanding the number of contextualized training facilities to increase the volume of participants that could participate in the program

1.2 Background

1.2.1 Objectives of the Program

{Name of Program for Supervisors} was designed to improve Supervisors' ability to:

• {Bulleted list of corporate-determined job-specific competencies - 7 competencies}

1.2.2 Workshop Design

The development of the {Name of Program for Supervisors} project began in development 2010 and was piloted in January 2011 through April 2011. Full implementation of the program began in July 2011.

The design concept uses a blended learning approach which integrates a variety of training methodologies, learning strategies, and facilitation methods. The design also takes full advantage of the synergy created by multiple trainers in a centralized (regional) training location.

There are three distinct phases of the training:

- Learning Preparation
- Workshop (8.5 days)
- Post-workshop Development Activities

To achieve the most successful learning experience requires considerable cooperation from each center where pre-course and post-workshop experiences take place. The center management teams provided valuable assistance in coordinating participants in the completion of the pre-course and post-workshop activities.

- Learning Preparation
 - It is recommended that the candidate be in his/her position between three and six months.
 - Supervisors who have been in the position for a longer duration of service may attend if they need improvement in most of the following job-specific competencies: {6 of the 7 corporate-determined job-specific competencies}
 - In addition, each Supervisor should have at least one month of experience working with their driver group.
 - Candidates participate in Web-based training modules to establish baseline knowledge and skills that would be built upon in the workshop.
- Workshop
 - During the 8.5 day workshop, Supervisors will learn both Driver and Supervisor methods by participating in web-based training, instructor-led sessions, and hands-on activities in the contextualized training facility.

- Post Workshop
 - During the first 90 days after the workshop, the Supervisor will participate in monthly meetings with their manager and work on development activities.
 - Meaningful completion of the development activities helps the learner to absorb the knowledge and skills learned in the workshop, apply the learning to the job, monitor for success, and demonstrate job competency.

Figure 1 provides a visual of the design of {Name of Program for Supervisors} training content.



Figure 1. Workshop Design

1.3 Objectives of the Study

Because of its high degree of visibility, broad reach, and {Company Name}'s significant investment level, the {Name of Program for Supervisors} training was selected for an ROI level of evaluation. The initiative had components that fit the typical criteria for measuring programs at higher levels of evaluation, which included:

- Long-term viability
- Importance to overall strategic objectives
- High visibility
- Senior management interest

2 EVALUATION PLANNING

2.1 Levels of Evaluation

Most training solutions at {Company Name} are evaluated at Levels 1 and 2. For this case study, all five levels of evaluation were examined. Additionally, inputs and indicators were analyzed. The data integration plan below (Table 1) provides a snapshot of how the data were collected for each data category.

Data Categories	LMS	Participant	WBT Knowledge Checks	Facilitator Observations	End of WS Survey	Mgr. Observations	Co. Records	External Standards
0 Inputs/ Indicators	~	~						
1 Reaction/ Perceived Value					~			
2 Learning			~	✓				
3 Application/ Implementation		1				✓		
4 Impact / Consequences							√	
5 Return on Investment		✓						✓

Table 1. Data Integration Plan

2.1.1 Chain of Impact

The chain of impact in the figure below must be evident in determining whether a particular learning program or project is adding business value. The data increases in value to the organization as the chain moves from reaction to ROI. The relevance of each level of measurement is predicated on the degree of success of the previous level.

For example, a participant must attend the workshop (Level 0) in order to rate their reaction and perceived value of the program favorably (Level 1). When participants perceive value of the program (Level 1) highly, they are more likely to learn and perform well (Level 2). It would follow that a participant must have learned the material in the workshop (Level 2) in order to apply the new skills to the job (Level 3). In turn, the skills learned in the workshop must be applied on the job (Level 3) in order for there to be impact on the business (Level 4). The more favorable of an impact on the business (Level 4) will lead to a greater return on investment (Level 5).

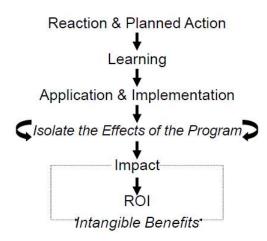


Figure 2. The Chain of Impact

Note. From data in "MEASURING ROI IN LEARNING AND PERFORMANCE IMPROVEMENT" by ROI Institute p.2.8

2.2 Impact Study ROI Methodology

The return on investment study was conducted using the Phillips ROI Methodology. The steps used included collecting data about Integrad - Managing Performance participants from internal and external data sources, analyzing the data, isolating the effects of *Integrad - Managing Performance* program, converting the data to monetary value, and calculating the ROI (Phillips 2003). See Figure 3, below.

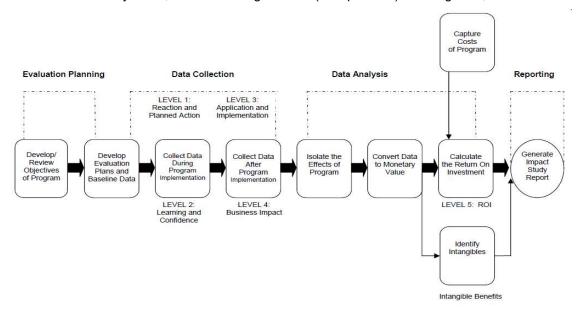


Figure 3. The ROI Methodology

Note. From data in "MEASURING ROI IN LEARNING AND PERFORMANCE IMPROVEMENT" by ROI Institute p.2.5

2.3 Data Collection and ROI Analysis Plans

2.3.1 Data Collection Plan

Table 2 shows the completed data collection plan for this project. Data collection for the project was comprehensive but necessary in order to meet all the requirements of the ROI Institute Guiding Principle number 1, "when a higher level of evaluation is conducted, data must be collected at lower levels".

The first column states the level of evaluation for which data were collected while the second column describes the objectives for that evaluation level. The third column defines the specific measure(s) collected and the method used to collect the data is in the fourth column. The data source, timing of data occurrence, and person/group responsible for collecting that data are respectively in the fifth, sixth, and seventh columns.

Level	Broad Program Objective(s)		Measures	Data Collection Method/Instruments	Data Sources	Timing	Responsibilities
1	REACTION AND PLANNED ACTION Alignment and relevance of program to position.		A minimum combined score of 4.0 on a 5-point scale	Web-based questionnaire	Participant	Last day of workshop	Integrad Facilitator/ Administrator
2	2 LEARNING AND CONFIDENCE Degree to which participants gained or improved in the knowledge and skills taught in the program.		A minimum score of 90% on pre-course Web- based training.	Web-based management knowledge assessments.	Participant	Completion of pre-course WBTs, within 1 month prior to workshop	Integrad Facilitator/ Administrator
			Passing of all performance certifications	Facilitator observations	Participant	Certification:(Days 6 - 9)	Integrad Facilitator/ Administrator
3	APPLICATION AND IMPLEMENTATION Frequency and effectiveness of the use of		A combined learning gain of 20% when comparing the pre- and post- job-specific competency assessments	Manager Observations	Manager	Between 2 – 4 weeks prior to participant workshop attendance 90 days after workshop	Manager/ Integrad Administrator
	the knowledge and skills or		The degree to which the manager perceives the participant's improvement is directly related to the training. Used to isolate the business impact of the training.	Manager Observations	Manager	90 days after workshop	Manager/ Integrad Administrator
4	BUSINESS IMPACT For targeted drivers who ar of the supervisor-participan						
	•		Compared cost of prior and 120 days after WS	Internal statistic	i-Gate	1 month before and 120 days after WS	ROI Evaluators
	•		Compared cost of prior and 120 days after WS	Internal statistic	i-Gate	1 month before and 120 days after WS	ROI Evaluators
	•		Compared cost of prior and 120 days after WS	Internal statistic	i-Gate	1 month before and 120 days after WS	ROI Evaluators
			Compared cost of prior and 120 days after WS	Internal statistic	i-Gate	1 month before and 120 days after WS	ROI Evaluators
			Compared cost of prior and 120 days after WS	Internal statistic	i-Gate	1 month before and 120 days after WS	ROI Evaluators
			Compared cost of prior and 120 days after WS	Internal statistic	i-Gate	1 month before and 120 days after WS	ROI Evaluators
	•		Compared cost of prior and 120 days after WS	Internal statistic	i-Gate	1 month before and 120 days after WS	ROI Evaluators
5	ROI	Baseline Data:					
J	Achieve a 5% ROI Comment						

Table 3. The Data Collection Plan

Note. From data in "MEASURING ROI IN LEARNING AND PERFORMANCE IMPROVEMENT" by ROI Institute p.3.26

2.3.2 ROI Analysis Plan

Table 3 below shows the completed ROI Analysis Plan. The first column includes the data item used in the study. The second column identifies the method of isolating the effect of the program on the business results. The third column identifies the method used for converting the data to monetary values. The fourth column identifies the cost categories used to calculate the cost of the program. Intangible benefits are those that are not converted to monetary value. The next two columns list the target audience to receive the final report and other influencing factors in the study. The final column provides a space for any additional comments to be added.

Data Items (Usually Level 4)	Methods for Isolating Effects of Program/ Process	Methods of Converting Data to Monetary Values	Cost Categories	Intangible Benefits	Communication Targets for Final Report	Other Influences/ Issues During Application
Reduction	Manager estimations of percent that change can be attributed to program	Internal standard	Internal costs associated with		 {Name of Program for Supervisors} program owners Operations Corporate Learning and Development 	
Reduction in	Manager estimations of percent that change can be attributed to program	Internal standard	Internal costs associated with		 { Name of Program for Supervisors} program owners Operations Corporate Learning and Development 	
Reduction in	Manager estimations of percent that change can be attributed to program	Internal standard	Costs associated when		{ Name of Program for Supervisors} program owners Operations Corporate Learning and Development	
Reduction in	Manager estimations of percent that change can be attributed to program	Internal standard	Internal costs associated with	Customer loyalty	 { Name of Program for Supervisors} program owners Operations Corporate Learning and Development 	
Reduction	Manager estimations of percent that change can be attributed to program	Internal standard	Internal costs associated with	Customer loyalty	 { Name of Program for Supervisors} program owners Operations Corporate Learning and Development 	
Reduction in	Manager estimations of percent that change can be attributed to program	Internal standard	Internal costs associated with	Sustainability	 { Name of Program for Supervisors} program owners Operations Corporate Learning and Development 	
Reduction in	Manager estimations of percent that change can be attributed to program	Internal standard	Internal costs associated with	Customer Loyalty	 { Name of Program for Supervisors} program owners Operations Corporate Learning and Development 	

Table 3. The ROI Analysis Plan

Note. From data in "MEASURING ROI IN LEARNING AND PERFORMANCE IMPROVEMENT" by ROI Institute p.3.27

3 DATA COLLECTION

3.1 Satisfaction and Planned Action

At the conclusion of the workshop, participants completed a Web-based survey to gauge their reaction to the program, perception of the workshop's value, and expectation for applying the content to their jobs.

Participants were asked to indicate their level of agreement with statements about the training by selecting one of five levels of agreement. Each level of agreement and its corresponding numeric value is listed below.

- Strongly agree (5)
- Agree (4)
- Neutral (3)
- Disagree (2)
- Strongly disagree (1)

The minimum acceptable score for the reaction survey was determined to be 4.0 out of 5.0.

Participants also were asked to provide comments about the content, facilitation, and class activities. The Level 1 survey may be found in Appendix A.

3.2 Learning

3.2.1 Knowledge

Participants were assessed on their knowledge of the pre-course material, driver methods, and management knowledge through Web-based multiple-choice assessments.

The pre-workshop assessment focused on material in the pre-workshop Web-based Training activities. It was administered following completion of the pre-course materials. Results of the pre-workshop assessment were used on an individual basis to determine participation in the course. In order for candidates to participate in the workshop, they were required to earn at least 90% on the pre-workshop assessment.

The knowledge assessment was administered on the first day of the workshop and an assessment with similar questions was administered on the last day of the workshop. Participants were required to earn 90% on the post-workshop assessment to earn a completion status for the course.

Skills/Hands-on Application

During the workshop, each participant was observed by the facilitator in order to be certified during the workshop in the areas listed below.

- Pre-trip
- Post-trip
- Safety Methods
- Driving Habits

- 10 Point Checklist
- Backing
- Practice Drive
- On-the-Job Supervision

Observation forms for each certification skill is in Appendix 7.2.

3.3 Application of Skills and Knowledge

Level 3 data were collected in the following ways: job-specific competency assessments and completion of post-course development activities. Assessments of knowledge and skill applications may be found in Appendix 7.3.

3.3.1 Job-specific competency assessments

The managers completed a job-specific competency assessment for each participant via a survey delivered prior to workshop attendance. The manager also completed the same survey approximately 85 to 90 days after the workshop. At that time, the manager also assessed the degree to which the supervisor's behavior change for each competency is due to the workshop. The pre- and post- workshop job-specific competency assessments may be found in Appendices 7.3.1 and 7.3.2, respectively.

3.3.2 Post-course development activities

The data related to the post-course development activities were entered into the Talent Management System by the Supervisor's manager. The description of the development activities are in Appendix 7.3.2,

3.4 Business Impact

Level 4 data were collected using the {Name of Program for Supervisors} – Supervisor Tracking Tool. The {Name of Program for Supervisors} – Supervisor Tracking Tool captures data from the driver group that reports to the each supervisor. These measures are related to safety (Injury OSHA Cost and Accident Cost), production (over/under-allowed hours, mileage), and service (total late air, missed deliveries, and total send again packages). The objective of {Name of Program for Supervisors} is to lead a reduction in over-allowed hours, injuries, accidents, mileage, and service failures.

Category of Data	Data Elements
Health and Cafaty	Injury OSHA Cost
Health and Safety	Accident Cost
	Over-allowed/Under-allowed Hours
	Total Late Air
Production and Service	Missed Delivery On-Road
	Mileage
	Total Send Again Packages

3.5 Return on Investment

The final measure of success answers the question: "Do the monetary benefits of the program exceed the costs?" The organization does not always measure the return on investment in its training programs.

{Name of Program for Supervisors} is a major investment in time and resources for the company. Because of the high profile nature of the program, there has been much interest in its impact on business results and ROI. The Corporate Learning and Development team was challenged to identify the business impact of the {Name of Program for Supervisors} Program in several key areas to determine the programs ROI.

4 DATA ANALYSIS

4.1 Isolating the Effects of the Program

4.1.1 Methodology

The method used for isolating the effects of the program was trend analysis and manager assessment. This methodology was used to determine if there were differences in the group performance of {Name of Program for Supervisors} graduates as compared to one month before attending the workshop in each of the level 4 program measures. These measures were driver safety (auto accidents and injuries), driver service (late Next Day Air and missed delivery), and production (over-allowed hours and mileage).

4.1.2 Reasons for Selection

Trend analysis and manger assessment was chosen as the approach to isolating the impact of the program because of the accessibility to impact data and the manager being the best available assessment of participant performance (Wang, Dou, and Lee, 2002). Because of the interdependencies of the measures, an aggregate of the isolation factors was applied to the total monetary benefits.

4.2 Converting Data to a Monetary Value

An important step in determining the ROI of any program is identifying the numerator (top number) in the ROI equation. Of the 10 methods for converting data to a monetary value, (Phillips, 2003), 4 were used in this study.

The monetary value for auto accidents and injuries is tracked via the Integrad – Supervisor Tracking Tool. This internal tracking tool calculates auto and injury frequency for both groups and converts each to a monetary value. Therefore, there was no need to convert these measures to a monetary value, as it was provided.

To calculate the monetary value of missed delivery packages and Next Day Air (NDA) delivered late, an internal standard was used that was obtained from the Business Information Analysis (BIA group). The cost of delivering a single late NDA is determined to be \$1.34. The cost of a missed delivery package is determined to be \$3.16. The cost of mileage is \$0.773 per mile.

To convert over-allowed hours to a monetary value, we multiplied the overallowed hours against the fully loaded hourly wage rate for drivers (\$61.60) and then again against the number of reports for each period to obtain the total monetary value of overallowed hours.

4.3 Cost of the Intervention

4.3.1 Costs of the Program

{Name of Program for Supervisors} is held at one of the two contextualized training facilities in Maryland or Illinois. Among the items included in determining the cost for the program are costs associated with the design and development of the program, student travel/lodging/and opportunity, facilitator travel/lodging/and opportunity, facilities, materials, "training the trainer" workshop, and evaluation.

Table 5 below details the fully-loaded cost of {Name of Program for Supervisors}, \$724,837.47.

Facilities Cost	
Participant Cost	
Content Creation	
Total	

Table 5. Cost Summary

4.4 Assumptions

4.4.1 Assumptions

The following basic assumptions were present in the study:

- 1. No significant process or operational changes occurred during the pilot period.
- 2. Manager competency observations were knowledgeable and truthful.
- 3. Integrad facilitators conducting application observations/assessments were knowledgeable and truthful.

4.4.2 Guiding Principles

The following guiding principles (ROI Institute) were used to frame the study:

- 1. When a higher level of evaluation is conducted, data must be collected at lower levels.
- 2. When an evaluation is planned for a higher level, the previous level of evaluation does not have to be comprehensive.
- 3. When collecting and analyzing data, use only the most credible sources.
- 4. When analyzing data, choose the most conservative alternative for calculations.
- 5. At least one method must be used to isolate the effects of the solution.
- 6. If no improvement data are available for a population or from a specific source, assume that little or no improvement has occurred.
- 7. Estimates of improvements should be adjusted for the potential error of the estimate.
- 8. Extreme data items and unsupported claims should not be used in ROI calculations.
- 9. Only the first year of benefits (annual) should be used in the ROI analysis of short-term solutions.
- 10. Costs of the solution should be fully loaded for ROI analysis.
- 11. Intangible measures are defined as measures that are purposely not converted to monetary values.
- 12. The results from the ROI Methodology must be communicated to all key stakeholders.

4.4.3 Credibility of the Data

The ROI Guiding Principles were used on multiple occasions throughout the study to ensure credibility of the data. Though all twelve principles were used to frame our research, the following were used specifically throughout the analysis:

- When collecting and analyzing data, use only the most credible sources
- At least one method must be used to isolate the effects of the solution
- Estimates of improvements should be adjusted for the potential error of the estimate
- Costs of the solution should be fully loaded for ROI analysis
- Intangible measures are defined as measures that are purposely not converted to monetary values
- The results from the ROI methodology must be communicated to all key stakeholders

4.5 Results

4.5.1 Level 1

At the conclusion of the program, the participants completed an evaluation that consisted of questions related to the prequalification process, pre-course work, course content, and course delivery. The average overall score based upon a 5-point scale was 4.80, which exceeded the minimum acceptable score of 4.0. However, since the ultimate goal was to measure the ROI of the program, the Level 1 data was not considered vital to the successful outcome. A copy the reaction survey questions can be found in Appendix A.

4.5.2 Level 2

Level 2 results were measured using an end of class assessment. The exam covered skills and knowledge learned in the program related to auto and personal safety, customer service, and delivery methods. The average score on the exams was 94.65%, exceeding the minimum acceptable score of 90%. The learning levels of each participant were considered adequate to apply and implement successfully on the job. Again, because the ultimate evaluation goal of the program was ROI, this method of learning levels measurement was considered adequate.

4.5.3 Level 3

Level 3 evaluation included two components, a pre- and post-workshop competency assessment. The managers' of the participants completed a job-specific competency assessment for each participant via a survey delivered prior to workshop attendance. The manager also completed the same survey approximately 80 to 90 days after the workshop. At that time, the manager also assessed the degree to which the supervisor's behavior change for each competency is due to the workshop. The weighted average change for the competency assessment was 30%.

4.5.4 Level 4

Auto accident cost is the cost charged to an accident that occurred within the driver group of the participants, either in the Baseline month or subsequent observation period. {Name of Program for Supervisors} auto accident cost was more in the Baseline Month as compared to subsequent observation months.

Injury OSHA cost is the cost charged to an OSHA reportable injury that occurred within the driver group of the participants, either in the Baseline month or subsequent observation period. For injury cost, the Baseline Month was more than the subsequent observation months.

Table 6a and 6b below illustrate the difference in accident and injuries costs.

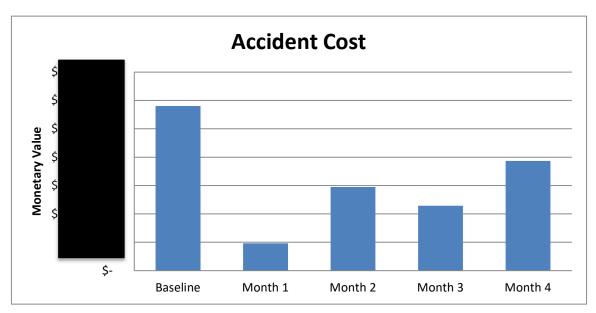


Table 6a. Accident Cost

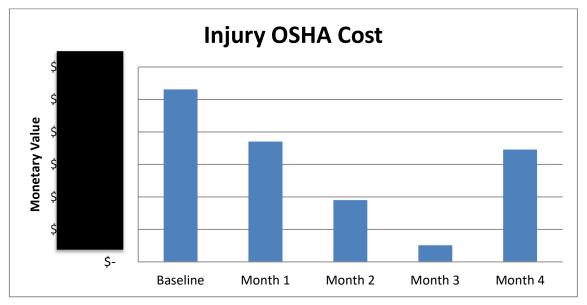


Table 6b. Injury OSHA Cost

Next Day air is defined as a package that has a service commitment to be delivered the next operating day by a certain predetermined time. A package is determined to have missed service or be late when it is delivered after the commit time. Late Next Day Air, the Baseline Month was more than the subsequent observation months except in observation month 3.

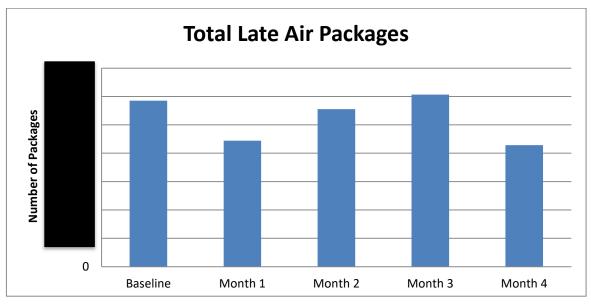


Table 7a and 7b below illustrate the difference in Next Day Air raw values and cost.

Table 7a. Late Next Day Air

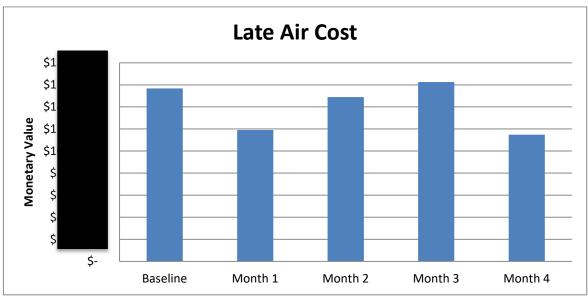


Table 7b. Late Next Day Air Cost

Delivery Missed On-Road is defined as a package that was dispatched to be delivered and a delivery attempt was not made. Delivery Missed On-Road was greater in the Baseline Month than in the observation months. Table 8a and 8b below illustrate the difference in missed delivery packages and associated costs.

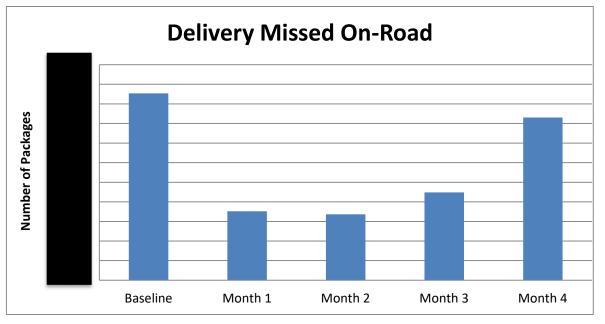


Table 8a. Delivery Missed On-Road

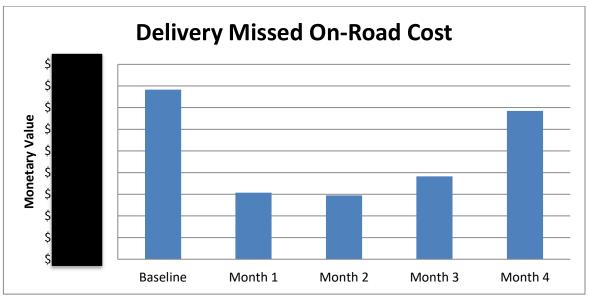


Table 8b. Delivery Missed On-Road Cost

Over-allowed hours are defined as when actual time to deliver the route exceeds the planned time to deliver the route. Conversely, under-allowed hours occur when the actual time to deliver the route is less than the planned time. Over-allowed hours were greater in the Baseline Month than in the observation months.

Table 9a and 9b below illustrate the difference in Over-/Under Allowed Hours and associate costs.

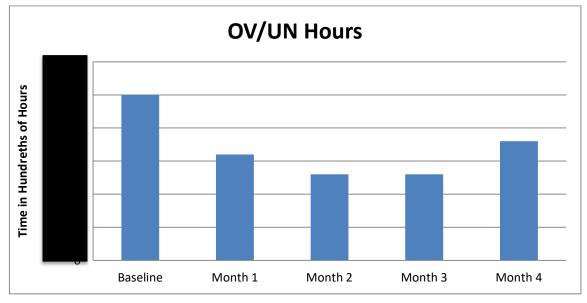


Table 9a. Over/Under-Allowed Hours

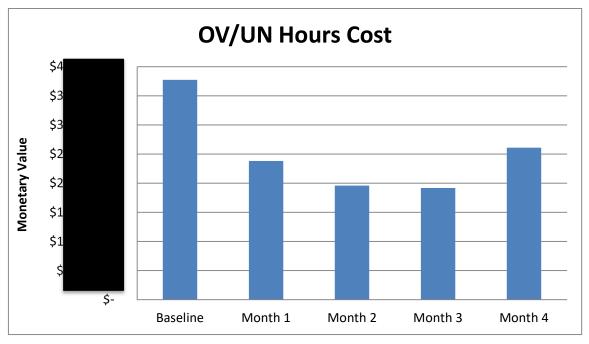


Table 9b. Over/Under-Allowed Hours Cost

A send again package is defined as a package that was dispatched to be delivered and a delivery attempt was made but, a completion of the delivery did not occur. Send again packages were greater in the Baseline Month than in the observation months.

Table 9a and 9b below illustrates the change in Send Again Packages and Send Again Cost.

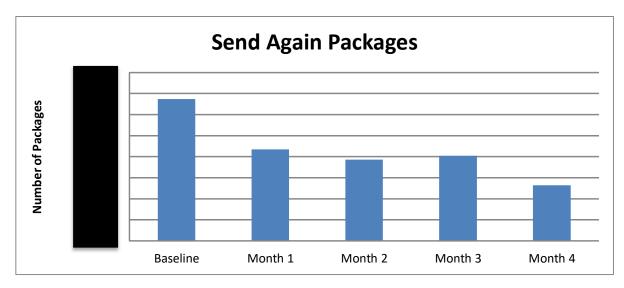


Table 9a. Send Again Packages

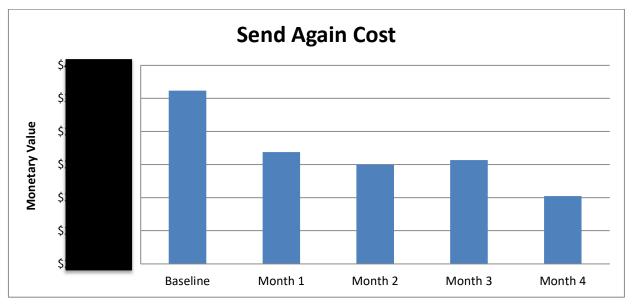
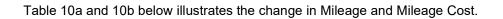


Table 9b. Send Again Cost

Mileage is defined as associated mileage accumulated by Drivers when delivering or picking up packages. Mileage was greater than the Baseline Month in observation months two and four.



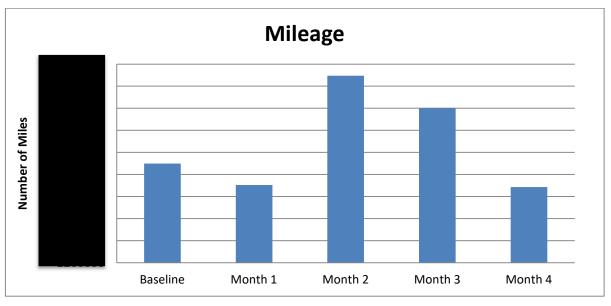


Table 10a. Mileage

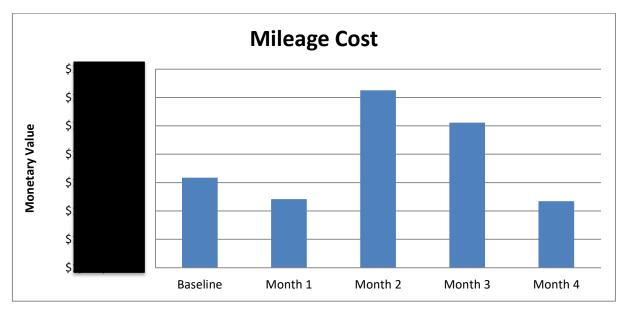


Table 10b. Mileage Cost

4.6 Data Conversion

Auto accident and injury data are provided in a monetary format and no data conversion is necessary. Benefit was calculated as the difference in the baseline and each month.

Table 11 below illustrates the monetary values of all other measures that will be used in the benefit calculation.

Element	Unit	Value	Source
Over/Under-allowed Hours	Hour	\$	Business Information and Analysis
Late Air	Package	\$	Package Operations Support Group
Deliveries Missed	Package	\$	Package Operations Support Group
Send Again	Package	\$	Business Information and Analysis
Mileage	Mile	\$	Business Information and Analysis

Table 11. Monetary Conversion of Data

To obtain a monetary value for under/over-allowed hours additional calculations were necessary. The reporting tool provided the average number of under/over-allowed hours, which needed to be converted to a total number of hours, and the multiplied by the standard wage rate.

Table 12 below shows the calculation for over-allowed hours and the conversion to a monetary value.

	Average OV/UN Hours	Number of Reports	Over- allowed Hours	Hourly Wage Rate	Over- allowed Hours Cost	Gross Benefits
Baseline	0.25			\$	\$	N/A
Month 1	0.16			\$	\$	\$
Month 2	0.13			\$	\$	\$
Month 3	0.13			\$	\$	\$
Month 4	0.18			\$	\$	\$
Calculation		(OV/UN Hours) * (Number of Reports)= Over-allowed Hours		(Over-allowed Hours) * (Hourly Wage Rate) = Over-allowed Hours Cost		(Baseline Over- allowed Hours Cost) - (Month # Over-allowed Hours Cost) = Gross Benefits

Table 12. Data conversion, Over-allowed hours

All other measures needed a simple conversion to provide the monetary cost and benefit.

Table 13 below shows the raw data, frequencies, and monetary conversion of all other elements.

	Baseline	Month 1	Month 2	Month 3	Month 4
Injury Raw					
Injury Freq.					
Injury Cost	\$	\$	\$	\$	\$
Accident Raw					
Accident Freq.					
Accident Cost	\$	\$	\$	\$	\$
Late Air Raw					
Late Air % Eff.	%	%	%	%	%
Late Air Cost	\$	\$	\$	\$	\$
Delivery Missed Value					
Delivery Missed 1/per					
Delivery Missed Cost	\$	\$	\$	\$	\$
Send Again Value					
Percent Send Agains	%	%	%	%	%
Send Again Cost	\$	\$	\$	\$	\$
Mileage					
Mileage Cost	\$	\$	\$	\$	\$

Table 13. Monetary conversion

Benefit Categories	Month 1	Month 2	Month 3	Month 4
Injury Benefit	\$	\$	\$	\$
Accident Benefit	\$	\$	\$	\$
Over/Under- Allowed Benefit	\$	\$	\$	\$
Late Air Benefit	\$	\$	-\$	\$
Delivery Missed Benefit	\$	\$	\$	\$
Send Again Benefit	\$	\$	\$	\$
Mileage Benefit	\$	-\$	-\$	\$
Monthly Gross Benefit	\$	\$	\$	\$
Total Gross Benefit		\$		

Table 14 below provides a summary of the program benefits.

Table 14. Summary of Benefits

4.7 Return on Investment

Table 15 below shows the technique used to calculate the ROI.

ROI Calculation	
Monetary Benefits	\$2,638,459.53
Program Cost	\$724,837.47
*Isolated Monetary Benefits = Monetary Benefits X Isolation Factor	
(\$ <mark>2,638,459,53</mark> x 30%)	
Net Monetary Benefits = Isolated Monetary Benefits – Costs	
(\$791,537.86 - \$724,837.47)	\$66,700.39
ROI = (Net Monetary Benefits / Program Costs) X 100	
(\$ <mark>86.700.39)</mark> / \$724,837,47 x 100)	9.20%
BCR (Benefit Cost Ratio) = Isolated Monetary Benefits / Costs	
(\$791,537.86 / \$724,837.4)	1.0920
ROI	9.20%
BCR	1.0920:1 For every dollar invested, we got back 109.20 cents.

Table 15. ROI Calculation

^{*} Isolated Monetary Benefits is calculated by comparing the Pre and Post Workshop Job Competency Assessment for the participant completed by his/her direct manager. On the Post Workshop assessment, the manager estimates the amount of improvement observed that he/she believes is attributable to the training received by the participant. See sections 4.5.3 and 7.3.2 for more information about isolating the benefits.

5 **REPORTING**

5.1 Conclusions

The {Name of Program for Supervisors} study resulted in an ROI of 9.20% on a goal of 5%. The result was achieved through the positive gains in all of the monetized elements with a large portion of the benefit coming from Injury Cost, Accident Cost, and Over/Under-allowed Hours Cost.

5.2 Recommendations

Based upon the findings, the following recommendations were made:

- · Continue to hold {Name of Program for Supervisors} training offerings
- Evaluate the possibility of expanding the number of offerings of the program to provide more availability on an annual basis
- Evaluate the possibility of expanding the number of contextualized training facilities to increase the volume of participants that could participate in the program

5.2.1 Lessons Learned

This evaluation provides important insights into the ROI process. {Company Name} has traditionally collected data at levels 1 and 2 only and on a site by site basis. The ROI approach provides a systematic approach to calculating the benefits of training in terms of its business impact so that training gaps can be identified and funding decisions made scientifically rather than based upon reaction data.

It is critical to build evaluation into the design phase of training programs. One of the challenges that occurs in measuring the ROI of a program is the lack of articulated objectives at all five levels of measurement (Phillips, 2003). {Name of Program for Supervisors} was constructed to have objectives at all five levels of measurement and this helped to provide the link between the training and the results. Learning objectives were written in the beginning of each training module throughout the coursework and the program had overarching objectives at the other levels. It is important that training programs move beyond learning objectives to carefully constructed performance objectives if they are to be measured in terms of their business impact and ROI.

5.2.2 Communication Strategy

The communication strategy was outlined in the ROI Analysis Plan. A summary of findings will be communicated to the Senior Staff Manager of Learning and Development, the Director of Small Package Training and Development, Director of Performance Support, and the contextualized training facility Coordinators.

6 References

- ROI Institute, Inc. (2008). *MEASURING ROI IN LEARNING AND PERFORMANCE IMPROVEMENT*, A Two Day Skill Building Workshop, p 2.8, 3.1,
- Phillips, J. (2003). *Return on Investment in Training and Performance Improvement Programs 2nd edition*. Butterworth-Heinemann publisher.

Pulliam Phillips, P. and Phillips, J. (2007) PROVING THE VALUE OF HR. ROI Institute publisher.

Pulliam Phillips, P. and Phillips, J. (2008) ROI IN ACTION CASEBOOK. Pfeiffer publisher.

Wang, G., Z. Dou, N. Lee. (2002.) "A Systems Approach to Measuring Return on Investment" for HRD Interventions." Human Resource Development Quarterly, 13 (2), 2002, pp.203-224.

7 Appendices

7.1 Participant Reaction and Perception of Program

Please use your experience in this training to rate the following statements. Your feedback will help us to ensure that we continue to meet your training needs.					
Instructor	Date:				
Course Title:	I				
Design & Delivery Statements	Agree		Dis	agree	
Overall Rating					
The training was worth attending.	5	4	3	2	1
Training Design					
The objectives were	5	4	3	2	1
The topics were	5	4	3	2	1
The pace of the training was	5	4	3	2	1
The level of difficulty of the content was	5	4	3	2	1
The program contains	5	4	3	2	1
Instructor					
The instructor performed	5	4	3	2	1
The instructor is knowledgeable about and a second se	5	4	3	2	1
The instructor practiced	5	4	3	2	1
The instructor answered	5	4	3	2	1
Training Exercises					
I found the exercises valuable	5	4	3	2	1
Training Applications					
The program is	5	4	3	2	1
The program is	5	4	3	2	1
I will apply	5	4	3	2	1
I will recommend	5	4	3	2	1
Logistics					
I was able to	5	4	3	2	1
Ample breaks	5	4	3	2	1
Comments	·				
What topics would you have liked to have spent more time on?					
What topics would you have liked to have spent less time on?					
What did the instructor do that worked well?					
What would you suggest the instructor do to improve his or her effectiveness?					
What was most useful about the exercises?					
What changes would you recommend to improve the course and make it more effective?					

7.2 In-class Certification Skills

7.2.1 Pre-trip

Yes	No	(Check Appropriate Box once complete or missed)	Sections
		1. List of checks performed when approaching cab. 2. 3. 4. 5. 6. 7	1 Approach/ In cab
		8.	
		 9. List of checks performed on left front of the vehicle . # 	2 Left front
		11. List of checks performed on front of the vehicle .	3
		 12. List of checks performed on right front of the vehicle. 13. 	Front 4 Right front
		14.	
		 15. List of checks performed on right side of the vehicle. 16. 	5 Right side

Yes	No	(Check Appropriate Box once complete or missed)	Sections
		17. List of checks performed on the rear of the vehicle.	
			6
		18.	
			Rear
		19. List of checks performed on left side of the vehicle.	7
			Left side
		Return to Inside of Vehicle	
		20. List of checks performed in the cab of the vehicle.	8
		21.	
		22.	In cab
		23.	
		24.	
		25	
		27.	
		28.	
		29.	
Comments	;		
Items Miss	od		
	eu	Employee Signature	
		Observer's Name	

7.2.2 Post-trip

Post-Trip Checklist

Participant must demonstrate the ability to complete a Post-Trip.

List of activities performed after returning for the day.	□ Yes □ No
	□ Yes □ No
	□ Yes □ No

7.2.3 Safety Methods

Lifting and Lowering Participant must be able to successfully recite and demonstrate Lifting and Lowering. Verbal Demonstrate □ Yes □ No □ Yes □ No

Preventing Slips and Falls

Participant must be able to successfully recite ways to Prevent Slips and Falls.		
	Verbal	
	□ Yes □ No	

. . . . **..**.... 01

7.2.4 Driving Habits

Seeing Habits

Participant must be able to successfully recite and demonstrate the Driving Habits.

	decessionly recite and demonstrate the Driving Habits.	Record of Response
{HABIT 1}		□Yes □No
How do you do it?		□Yes □No
What does it do for you?		□ Yes □ No
Key Phrase		□Yes □No
{HABIT 2}		□Yes □No
How do you do it?		□Yes □No
What does it do for you?		□Yes □No
Key Phrase		□Yes □No
{HABIT 3}		□ Yes □ No
How do you do it?		□Yes □No
What's does do for you?		□Yes □No
Key Phrase		□Yes □No
{HABIT 4}		□ Yes □ No
How do you do it?		□Yes □No
What does it do for you?		□Yes □No
Key Phrase		□Yes □No
{HABIT 5}		□ Yes □ No
How do you do it?		□Yes □No
What does it do for you?		□Yes □No
Key Phrase		□Yes □No

7.2.5 10 Point Checklist

10 Point Checklist Checklist

Participant must be able to successfully recite the 10 Point Checklist and provide the explanation for the points.

	Record of Response
{Point 1}	□ Yes □ No
	□ Yes □ No
{Point 2}	□ Yes □ No
	□ Yes □ No
{Point 3}	🗆 Yes 🗖 No
	□ Yes □ No
{Point 4}	🗆 Yes 🗆 No
	🗆 Yes 🗆 No
{Point 5}	🗆 Yes 🗖 No
	🗆 Yes 🗆 No
{Point 6}	🗆 Yes 🗖 No
	□ Yes □ No
{Point 7}	□ Yes □ No
	□ Yes □ No
{Point 8}	🗆 Yes 🗖 No
	□ Yes □ No
{Point 9}	□ Yes □ No
{Point 10}	
	🗆 Yes 🗆 No

7.2.6 Backing

Backing Checklist Participant must be able to successfully recite the Backing Checklist and provide the explanation for the points. Record of Response {Point 1} □ Yes □ No □ Yes □ No {Point 2} □ Yes □ No □ Yes □ No □ Yes □ No {Point 3} □ Yes □ No {Point 4} □ Yes □ No □ Yes □ No {Point 5} □ Yes □ No □ Yes □ No {Point 6} □ Yes □ No □ Yes □ No □ Yes □ No {Point 7} □ Yes □ No {Point 8} □ Yes □ No □ Yes □ No {Point 9} □ Yes □ No □ Yes □ No {Point 10} □ Yes □ No □ Yes □ No

7.2.7 The Practice Drive				
	Following Distance			
Left Lane(s)				Right Lane(s)
	Intersections			
	Traffic Lights			
Left Curb				Right Curb
Left Mirror	_		Right Mirror	
	Speed			
Instructions: For 2 minutes, the Observer should rec the changing traffic situations.	cord by stroke cou	unting potential h	azards as the	y discuss
Count the number of eye movements a	above and record	below:		
Following Distance		Other Lanes	·····	
Intersections		Traffic Lights _		
Curbs		Speed		
Mirrors		Total:		

{Program Name} Business Impact and ROI Study **7.2.8 The Practice Drive**

				Facilitator:		
Driver Name:						
Vehicle#:	Date:			ORS Observer:		
			-	DSP Score:		
Safety Car:	Point	Stroke Count	Total Demerits	Remarks		
	2.0					
400	1.0					
· · · · ·	2.0			-		
	1.0					
	1.0					
	1.0					
	2.0					
100 B	1.0	-				
	1.0					
	2.0					
	2.0			2		
	2.0					
	2.0					
	2.0					
Safety Personal:	Points	Stroke Coun	Total Demeri	Remarks		
	2.0					
	2.0					
1. A 10	1.0		<u>.</u>			
	2.0					
· · · ·	2.0			4		
A	2.0					
	2.0					
	2.0					
	2.0					
	1.0		-			

7.3 Forms for Rating On the Job Application

7.3.1 Job Pre-Workshop Job Competency Assessment

Prior to the workshop, you will receive a link to the electronic version of this assessment. Please assess the competency of the Supervisor based on observable/demonstrated behaviors.

1 = Development Needed 3 = Fully Acceptable 5 = Exceptional Strength

Category	Competency	Rating
	Competency 1-1	1 - 2 - 3 - 4 - 5
Competency Category 1	Competency 1-2	1 - 2 - 3 - 4 - 5
	Competency 1-3	1 - 2 - 3 - 4 - 5
	Competency 1-4	1 - 2 - 3 - 4 - 5
Competency Category 2	Competency 1-1	1 - 2 - 3 - 4 - 5
Calegory 2	Competency 2-2	1 - 2 - 3 - 4 - 5
Competency Category 3	Competency 3-1	1 - 2 - 3 - 4 - 5
Category 5	Competency 3-2	1 - 2 - 3 - 4 - 5
Competency Category 4	Competency 4-1	1 - 2 - 3 - 4 - 5
Category 4	Competency 4-2	1 - 2 - 3 - 4 - 5
	Competency 4-3	1 - 2 - 3 - 4 - 5
Competency Category 5	Competency 5-1	1 - 2 - 3 - 4 - 5
Calegory 5	Competency 5-2	1 - 2 - 3 - 4 - 5
Competency Category 6	Competency 6-1	1 - 2 - 3 - 4 - 5
	Competency 6-2	1 - 2 - 3 - 4 - 5
	Competency 6-3	1 - 2 - 3 - 4 - 5

7.3.2 Post-Workshop Job Competency Assessment

Three months after the Supervisor completes the workshop, you will receive a link to the electronic version of this assessment. Please assess the competency of the Supervisor based on observable/demonstrated behaviors.

1 = Development Needed 3 = Fully Acceptable 4 = Exceptional Strength

Assign a percentage to the improvement notice that can be attributed to the contextualized training® - Managing Performance Workshop.

Category	Competency	Rating	% Change is from Course
	Competency 1-1	1 - 2 - 3 - 4 - 5	0 - 10 - 20 - 30 - 40 - 50 - 60 - 70 - 80 - 90 - 100
Competency Category 1	Competency 1-2	1 - 2 - 3 - 4 - 5	0 - 10 - 20 - 30 - 40 - 50 - 60 - 70 - 80 - 90 - 100
e liegely i	Competency 1-3	1 - 2 - 3 - 4 - 5	0 - 10 - 20 - 30 - 40 - 50 - 60 - 70 - 80 - 90 - 100
	Competency 1-4	1 - 2 - 3 - 4 - 5	0 - 10 - 20 - 30 - 40 - 50 - 60 - 70 - 80 - 90 - 100
Competency Category 2	Competency 1-1	1 - 2 - 3 - 4 - 5	0 - 10 - 20 - 30 - 40 - 50 - 60 - 70 - 80 - 90 - 100
Category 2	Competency 2-2	1 - 2 - 3 - 4 - 5	0 - 10 - 20 - 30 - 40 - 50 - 60 - 70 - 80 - 90 - 100
Competency Category 3	Competency 3-1	1 - 2 - 3 - 4 - 5	0 - 10 - 20 - 30 - 40 - 50 - 60 - 70 - 80 - 90 - 100
Category 5	Competency 3-2	1 - 2 - 3 - 4 - 5	0 - 10 - 20 - 30 - 40 - 50 - 60 - 70 - 80 - 90 - 100
Competency Category 4	Competency 4-1	1 - 2 - 3 - 4 - 5	0 - 10 - 20 - 30 - 40 - 50 - 60 - 70 - 80 - 90 - 100
Calegoly 4	Competency 4-2	1 - 2 - 3 - 4 - 5	0 - 10 - 20 - 30 - 40 - 50 - 60 - 70 - 80 - 90 - 100
	Competency 4-3	1 - 2 - 3 - 4 - 5	0 - 10 - 20 - 30 - 40 - 50 - 60 - 70 - 80 - 90 - 100

Category	Competency	Rating	% Change is from Course
Competency Category 5	Competency 5-1	1 - 2 - 3 - 4 - 5	0 - 10 - 20 - 30 - 40 - 50 - 60 - 70 - 80 - 90 - 100
	Competency 5-2	1 - 2 - 3 - 4 - 5	0 - 10 - 20 - 30 - 40 - 50 - 60 - 70 - 80 - 90 - 100
Competency Category 6	Competency 6-1	1 - 2 - 3 - 4 - 5	0 - 10 - 20 - 30 - 40 - 50 - 60 - 70 - 80 - 90 - 100
	Competency 6-2	1 - 2 - 3 - 4 - 5	0 - 10 - 20 - 30 - 40 - 50 - 60 - 70 - 80 - 90 - 100
	Competency 6-3	1 - 2 - 3 - 4 - 5	0 - 10 - 20 - 30 - 40 - 50 - 60 - 70 - 80 - 90 - 100

7.3.3 Action Plan

During the first three months after the workshop, the Supervisor will complete the action plan, which focuses on the job-specific competency, Managing On Road Performance. In the action plan, the Supervisor will:

- Identify 3 Drivers in need of improvement
- Perform on-the-job supervision each Driver
- Record historical performance statistics, action plan goals, lock-in statistics

7.3.4 Development Activities

In addition to completing the action plan, the Supervisor will perform development activities for the job-specific competencies which he/she need to improve. Suggestions of development activities are:

- Competency 1
 - Activity 1 related to Competency 1
- Competency 2
 - Activity 1 related to Competency 2
- Competency 3
 - Activity 1 related to Competency 3
- Competency 4
 - Activity 1 related to Competency 4
 - Activity 2 related to Competency 4
- Competency 5
 - Activity 1 related to Competency 5

7.3.4 Training Cost Calculator

Facilities Cost

	Annual Cost from Khalix	# Days in Year	Daily Operating Cost	# of Facilitation Days	Total Cost
Facilities/Facilitation Cost (Landover)					
Facilities/Facilitation Cost (Franklin Park)					

Participant Cost

	Travel,		Daily	# of	
	Room, &	# of	Wage	Facilitation	
	Board	Participants	Rate	Days	Total Cost
Landover					
Franklin Park					

ILT Content Creation ({Company

Name})

Team Member	# of weeks	# hours per week	Pay Rate	Sub-Total
Lead Supervisors				
Design Supervisors				
SME				
Manager				
Staff Manager				
<u> </u>				

Vendor Content Creation

Consultation		
Web-based Training		
Editing		

Total Cost

Facilities Cost	
Participant Cost	
Content Creation	
Total	