FMCSA-RRA-07-022

Compliance Review Cost Estimation

Contract No.: GS-10F-0269K

Order No.: DTMC75-06-F-00013

Project No.: 1020-000

Submitted To:

Federal Motor Carrier Safety Administration U.S. Department of Transportation

Attn: Mr. Michael Johnsen, Acting Chief Regulatory Evaluation Team 400 7th Street SW Washington, DC 20590

Submitted By:

Econometrica, Inc.

4416 East-West Highway Suite 215 Bethesda, Maryland 20814

October 10, 2007

ECONOMETRICA, INC.

October 10, 2007

Mr. Michael Johnsen, Acting Team Leader Regulatory Evaluation Team Federal Motor Carrier Safety Administration U.S. Department of Transportation 400 7th Street SW Washington, DC 20590

Reference: Contract No.: GS-10F-0269K; Order No.: DTMC75-06-F-00013; Economic, Environmental and Statistical Support (Project No.: 1020-000).

Dear Mr. Johnsen:

Econometrica is pleased to submit its Final Report, "Compliance Review Cost Estimation." If you wish to discuss any aspect of the attached report, please feel free to contact me at (240) 333-4806.

Sincerely,

Econometrica, Inc.

Warren J. Prunella Vice President

cc: Contract File

Table of Contents

Background1
Method and Purpose of the Estimation1
Estimated Costs2
Additional Costs
Cost Summary6
Appendix A – The Compliance Review ProcessA-1
Appendix B – Cost Comparison with the 2004 Cost EstimateB-1

Compliance Review Cost Estimation

Background

Compliance reviews (CRs) are onsite examinations of motor carrier operations by Federal and State safety investigators to determine whether a motor carrier is complying with applicable regulations. Investigators examine motor carriers and their activities, such as drivers' hours of service, vehicle maintenance and inspection, driver qualifications, commercial driver's license requirements, financial responsibility, accidents, hazardous materials, controlled substance and alcohol testing, and other safety and transportation records. A description of the CR procedures is included in Appendix A.

A compliance review may be conducted in response to a request to change a safety rating, to investigate potential violations of safety regulations by motor carriers, to investigate complaints or other evidence of safety violations, or in lieu of a safety audit as determined by the safety auditor. A compliance review may result in the initiation of an enforcement action.

Method and Purpose of the Estimation¹

This report is an update of a cost estimate produced by the Federal Motor Carrier Safety Administration (FMCSA) Analysis Division in 2004. It develops costs for both enforcing agencies and motor carriers. The previous report used 2002 data and information provided by the FMCSA Compliance Review Working Group during 2003. The current report uses data from Fiscal Year 2006 where available. In some cases, this report relies on assumptions made in the earlier cost estimate. All assumptions and statistics carried over from the 2004 cost estimate were confirmed to be still valid and reasonable by members of the Working Group.

The FMCSA Compliance Review Working Group met several times during 2003 to ascertain the time requirements for completing CRs. The Working Group agreed upon size categories based on the number of drivers employed by the motor carrier and estimated the amount of time to perform each portion of the CR required by the Federal Motor Carrier Safety Regulations (FMCSRs) for each size category. The Working Group then added time for CR preparation and for summarizing and recording the CR results. Since the time allocations are based on the size of the motor carrier, they are very useful for safety investigators trying to schedule compliance reviews efficiently. This information can be used to allocate agency resources, as an input in research and regulatory evaluations, and to measure program effectiveness. Because data on drivers

¹ We would like to thank Margie McQueen at the National Training Center and Stephanie Mann at FMCSA/Tennessee Division for their assistance in developing this cost estimate. They were especially helpful by providing background information on compliance review procedures and clarifying certain operational costs.

were not available, this report uses the number of power units as a proxy for the number of drivers.

An average cost per CR was calculated based upon the number of CRs performed on each class size in FY2006 as recorded in the Motor Carrier Management Information System (MCMIS).² The average cost assumes that increases and decreases in the number of CRs are in proportion to the number performed in FY2006. Currently, CRs are not distributed evenly according to the distribution of motor carriers. More CRs are performed on small carriers than on large carriers. This results from experiences indicating that the larger carriers tend to implement more and better safety controls for their drivers and have better safety records than smaller carriers.

Estimated Costs

All costs are estimated based on the size of the motor carrier (number of power units) and summarized in the table below. We also calculated an overall average cost based on the costs and frequencies of CRs in each size category. There are a number of conditions and situations that will add time and cost to a CR. These conditions and situations occur infrequently and are not included in the cost estimates. Three of these situations are discussed in the following section.

The only costs borne by the motor carrier are labor costs (wages and time); all other costs listed below are agency costs.

Changes from 2004 – There have been major changes in some of the cost categories since the 2004 cost estimate. Most notable are personnel and time allocation changes. Technology has allowed the enforcing agencies to decrease overhead and preparation time. In this estimate, the safety investigator is the primary agency staff member involved, with the only other agency staff member being a Federal Program Specialist who approves the Part C. Motor carrier staff costs may have been overestimated in the 2004 cost estimate, and their time is reduced by 50 percent. Other changes are discussed in the section on additional costs, and a side-by-side comparison of average costs is included in Appendix B.

Wages – Agency wages are derived from the 2006 General Schedule (Base) without adjusting for geographic areas.³ Following Office of Management and Budget (OMB) guidance⁴ we add 32.85% of base pay as fringe benefits and add 12% of base pay plus fringe as overhead to calculate total labor cost incurred by the enforcing agency. A typical safety investigator is a GS-12 Step 5, with a base wage of \$30.06 per hour and total labor cost of \$44.73 per hour. A typical Federal Program Specialist is a GS-13 Step 5 with a base wage of \$35.75 per hour and total labor cost of \$53.19 per hour.

² MCMIS snapshot of FY2006 data retrieved on November 13, 2006.

³ http://www.opm.gov/oca/06tables/html/gs_h.asp.

⁴ OMB Circular No. A-76 – Revised Supplemental Handbook and Memorandum M-07-02

Motor carrier (MC) wages are taken from the BLS wage table for NAICS 484000 (Truck Transportation Industry) published in May 2005. Total labor cost incurred is calculated by adding benefits (34.6% of total compensation⁵) and overhead (an additional cost calculated by multiplying total compensation by $5\%^{6}$). The mean base wage of MC General and Operations Managers is \$33.74 per hour, and total labor cost is \$54.17 per hour. The mean base wage of MC General Office Clerks is \$10.96 per hour, and total labor cost is \$17.60 per hour.

Total Labor Cost (Time) – The total labor cost incurred by the enforcing agency and by the motor carrier depends on the time spent by each employee during the CR process. The base time for a CR depends on the size of the MC and the experience level of the SI. We use the times provided by the FMCSA Compliance Review Working Group for the onsite portion of the CR. These times are for experienced investigators; investigators with fewer than ten previous CRs will take longer to review MC records. In addition to the onsite portion of the CR, the safety investigator spends approximately 2 hours in preparation. After the CR is finished, the safety investigator spends approximately 30 minutes completing, copying, and uploading the Part C, and a Federal Program Specialist spends approximately 10 minutes reviewing and approving the Part C.

A representative of the motor carrier is not required to accompany the safety investigator onsite except for the opening and closing interviews, although it is reasonable to include MC staff to assist the safety investigator with pulling and replacing records. This cost estimate allocates MC employee times based on a reasonable assumption of their required commitments during the onsite portion of the CR. The highest-ranking motor carrier official (Manager) is present for the opening and closing interview for a total of 2 hours. A motor carrier clerk is available to assist the investigator but is also able to conduct unrelated business and is not present during the opening and closing interviews. A motor carrier clerk thus has a total of one-half the length of the CR net of the interviews. (For the smallest carriers, this would be (13.5-2)/2 or 5.75 hours). In addition, both the manager and the clerk spend approximately 2 hours preparing for the CR.

Based on the findings of the CR, various results can occur, including enforcement actions. It is not appropriate to include the cost of the enforcement actions and especially not appropriate to include the cost for carriers to comply with sanctions. However, the threat of enforcement action induces better compliance with the rule. Since 2003, pursuing an enforcement action has greatly increased the time spent on a CR. This situation is discussed in the next section.

Travel and Per Diem – Safety investigators have other indirect costs associated with conducting CRs. The largest of these are travel and per diem expenses. Travel to and from the motor carrier office is best captured by a per diem of $$39.00^7$ for each

⁵ Employer Costs for Employee Compensation – Dec. 2006, Table 10, Transportation and warehousing (BLS, Mar 2007).

⁶ 5% overhead load taken from previous FMCSA cost estimates.

⁷ This is the GSA fiscal year 2006 standard rate of \$39.00 for travel, covering round trip travel from the investigator's base of operations to the motor carrier's office.

compliance review, plus \$4.45⁸ for each 8-hour day on-site. Based on the average time onsite for each motor carrier size category, travel costs range from \$39.00 for the smallest carriers to \$65.70 for the largest carriers.

We use General Services Administration FY2006 standard per diems of \$39.00 per day and \$60.00 per night to account for food, lodging, and incidental expenses, and \$29.25 (the maximum 75% of \$39.00) for the first and last days. We assume every 8 hours or fraction of this is one day onsite, and the number of nights is one fewer than the number of days. Based on the average time onsite for each motor carrier size category, per diems range from \$118.50 (2 days, 1 night) for the smallest carriers to \$712.50 (8 days, 7 nights) for the largest carriers.

*Equipment and Supplies*⁹ – Each investigator is provided with a laptop computer and printer.¹⁰ In addition, investigators carry the equipment necessary to conduct a Level I Vehicle Inspection. The laptop computer and printer are fixed expenses whose costs are amortized over a 3-year functional life. The laptop computer and the printer cost approximately \$3,000.00 (including software) and \$450.00, respectively.¹¹ The average amount spent on equipment needed for the Level I Vehicle Inspections per investigator is \$121.89 annually.¹² Safety investigators typically use their personal vehicle for transportation. In some cases, the investigator uses a government-issued vehicle, and the cost of the vehicle is appropriated to other programs such as the Roadside Inspections Program.

The annual costs of equipment are divided by the average number of compliance reviews conducted by the investigator each year. Using MCMIS data from fiscal year 2006, 15,007 compliance reviews were conducted by 798 unique investigators.¹³ The average number of compliance reviews conducted by a full-time investigator in FY2006 was 23. Since safety investigators are required to perform at least 6 CRs within 12 months to preserve their certification, we only included investigators with 6 or more CRs when calculating the average (629 investigators). Thus the equipment cost per CR is \$55.30 (\$50.00 for the laptop and printer and \$5.30 for the vehicle inspection equipment).

Training – Training costs for safety investigators are one-time costs incurred at the beginning of an investigator's career. As long as an investigator performs at least 6 CRs within 12 months, there is no refresher course or retraining requirement. All Federal investigators must complete the Federal SI Academy, an eight-week course with an

⁸ Estimate a 10 mile round trip from hotel or lodging to the motor carrier office and back, at a GSA calendar year 2006 privately owned vehicle mileage reimbursement rate of \$0.445 per mile.

⁹ Equipment costs are derived from FY 2006 Commercial Vehicle Safety Plans (CVSPs).

¹⁰ Some investigators are equipped with portable scanners. While a scanner increases efficiency, it is not yet standard equipment and is not included in this cost estimate.

¹¹ The printer was included as a line item in fewer than three CVSPs, so the cost reported here is the approximate retail price which is within the range given in the CVSPs.

¹² This cost is based on equipment costs per Safety Inspector in the Roadside Inspection Program and includes creepers, gloves, flashlight, and other equipment and supplies.

¹³ This does not include compliance reviews conducted on carriers based in Mexico.

average total cost per investigator of \$5764.26¹⁴. This cost is amortized over the number of compliance reviews conducted over the course of the investigator's career. The length of a career for a safety investigator varies greatly, especially considering the opportunity for promotion to a position that no longer requires the performance of CRs. Therefore, following assumptions made in the 2004 estimate, we use 10 years as a conservative estimate. Assuming the average number of compliance reviews remains constant at the FY2006 level (23 CRs per year), the amortized cost of training per CR is \$25.06.

Additional Costs

The above costs are for a typical compliance review. There are many factors that may influence the above, including the safety investigator's past experience and the motor carrier's organization and willingness to cooperate. Two situations in particular occur often enough to be notable and have quantifiable costs. A third situation should be noted as it is a direct consequence of the purpose of the Compliance Review Program.

The first situation occurs when a motor carrier has been subject to too few roadside inspections. In this case, the safety inspector will conduct one or more Level 1 Vehicle Inspections as part of the compliance review, provided that a vehicle is available onsite. The primary cost component of a vehicle inspection during a compliance review is labor, with other costs (training, equipment, etc.) already included as CR fixed costs or as costs borne by the Roadside Inspection Program. Based on calendar year 2005 MCMIS data, a Level I Vehicle Inspection takes approximately 36 minutes, plus 5 minutes for the investigator to record and upload the results. The additional labor costs incurred when a CR includes a Level I Vehicle Inspection are \$30.56 per inspection for the investigator and \$16.77 per inspection for the motor carrier.¹⁵

The second situation involves Hazardous Materials (HM) shippers. For HM haulers, the investigator must review the following: insurance and other certificates, HM incident documentation, HM shipping papers, any HM packages currently onsite, and HM training and security. If the carrier ships and/or transports HM requiring a security plan, a Security Contact Review (SCR) must be conducted. Any cargo tanks are inspected for markings and certifications. The safety investigator may be required to conduct a Cargo Tank Facilities Review and/or a Hazardous Material Safety Permit Review in conjunction with the CR. The costs for these additional reviews are not included. A CR conducted on a small HM hauler will add approximately 2 hours to the average time onsite. As with the vehicle inspection, the additional cost is due to labor. Other costs (training, equipment, etc.) are already included as CR fixed costs. The additional labor costs incurred when a CR is conducted on a small HM hauler are \$89.45 for the investigator and \$35.19 for the motor carrier.

¹⁴ Non-Federal investigators must complete one-week training courses on North American Standards Part A, North American Standards Part B, and General Hazardous Materials, and a two-week compliance review training course. The average total cost per investigator of the 5 weeks of training is \$3,602.66.

¹⁵ NAICS 484000 (Truck Transportation), Truck Driver, Heavy and Tractor Trailer with mean hourly wage of \$17.41 and total labor cost of \$27.95 (BLS May 2005).

The third situation is when the safety investigator decides to pursue an enforcement case. Due to successful court challenges, investigators are now required to document all reported violations when pursuing an enforcement case, even if there are more violations than are necessary for enforcement. Collecting evidence involves photocopying or scanning all documents related to the violations, a task that can be increasingly time-consuming and difficult as the motor carrier becomes less cooperative. For example, the motor carrier may have 100 violations in its maintenance records, many more than are necessary to bring an enforcement case. Regardless, the safety investigator must document and duplicate evidence of all 100 violations. The motor carrier could choose to force the safety investigator to check out the files, copy them at a commercial shop offsite, and return the files, adding hours to the CR. The costs involved are again purely labor costs, but there is too much potential variance to attempt to estimate the additional time needed to document all the violations.

Cost Summary

As indicated by discussions above, cost estimates for CRs can vary. The estimates provided in Table 1 are averages for each size category, and actual time and cost will depend on the motor carrier and the experience level of the investigator. Whether to include all of the costs estimated above depends upon the purpose and scope of the action considered. If there is an interest in increasing the number of CRs by a significant amount, all of the costs listed above are relevant and should be considered. For decisions of whether to increase or decrease the number of CRs conducted by a given field office by a small amount, fixed costs of training, equipment, and supplies will not change. Since only the number of CRs changes, and not the number of investigators, only the marginal cost should be considered. The costs for training and equipment only increase when additional personnel are hired to do the additional work and only decrease when personnel can be reassigned to other tasks. Therefore, these are only relevant for large changes in the number of CRs.

The total costs of a CR are found on the bottom rows of Table 1: the cost to the enforcing agency, the cost to the motor carrier, and the overall cost. We include a detailed cost breakdown partly to help explain how we got to this cost and partly because many users of our analysis only concern themselves with a portion of the overall cost. For example, motor carriers may want to know how much time and money to budget for the process, while government budget officials will need to know the marginal and fixed costs accruing to the government.

For each size category, we calculated the cost to conduct a compliance review. Then we calculated an average cost based on the weighted average of CRs. The weights are the distribution of CRs actually performed in FY2006. Of these, 51.2 percent of CRs were conducted on carriers with 1 to 5 power units, and 43.5 percent were conducted on carriers with 6 to 50 power units. The remaining 5.3 percent were split between the larger motor carrier categories. These data omit firms with no power units (3 CRs) and firms with more than 300 power units (120 CRs).

Econometrica, Inc.

	Number of Units				
	1-5	6-50	51-99	100-300	Average
Number of CRs FY2006	7,617	6,468	480	319	
% of CRs	51.2%	43.5%	3.2%	2.1%	
SI Hours Onsite	13.5	16.8	23.25	42.5	15.9
Enforcing Agency Costs					
SI Labor Cost	\$715.63	\$863.23	\$1,151.72	\$2,012.71	\$821.63
Program Specialist	\$8.87	\$8.87	\$8.87	\$8.87	\$8.87
Travel	\$39.00	\$43.45	\$47.90	\$65.70	\$41.79
Per Diem	\$118.50	\$217.50	\$316.50	\$712.50	\$180.64
Marginal Costs	\$882.00	\$1,133.04	\$1,524.98	\$2,799.77	\$1,052.93
Training	\$25.06	\$25.06	\$25.06	\$25.06	\$25.06
Equipment and Supplies	\$55.30	\$55.30	\$55.30	\$55.30	\$55.30
Fixed Costs	\$80.36	\$80.36	\$80.36	\$80.36	\$80.36
Total Agency Costs	\$962.36	\$1,213.41	\$1,605.34	\$2,880.14	\$1,133.29
Motor Carrier Costs					
Manager Labor Cost	\$216.68	\$216.68	\$216.68	\$216.68	\$216.68
Clerk Labor Cost	\$136.37	\$165.41	\$222.15	\$391.52	\$157.22
Total MC Costs	\$353.05	\$382.08	\$438.83	\$608.20	\$373.90
Total Cost	\$1,315.41	\$1,595.49	\$2,044.18	\$3,488.33	\$1,507.19

Table 1	Estimated	Costs	hy Size	Category	of Moto	r Carrier
	Lotimateu	00313	NY JIZC	Caleyon		Carrier

The average marginal cost to the enforcing agency is \$1,052.93 per CR and the fixed cost is \$80.36 per CR. The fixed cost is amortized over the average number of CRs conducted per year, and, in the case of training, over a ten-year career. Investigators that conduct fewer CRs and/or have shorter careers will have higher fixed costs, while those that conduct more CRs and/or have longer careers will have lower fixed costs. The average total cost to the enforcing agency is \$1,133.29. The motor carrier costs are limited to labor costs and do not include training, equipment, or supplies, so their average marginal cost of \$373.90 per CR is the same as their average total cost per CR. The average overall cost is \$1,507.19 per CR.

In FY2006, FMCSA and enforcing agencies conducted 14,884 compliance reviews on motor carriers with 1 to 300 power units. Based on the estimates described above, the aggregate cost to the enforcing agencies is \$16.9 million.

Appendix A – The Compliance Review Process

The compliance review begins when the safety investigator receives his/her assignment. The investigator will make an appointment with the motor carrier so that the carrier has at least 48 hours to prepare. Once the appointment is scheduled, the investigator conducts background research on the motor carrier. This includes downloading the carrier profile and other information from MCMIS and FMCSA databases, checking insurance records and licensing web sites, and using QUERY-CENTRAL to view recent roadside inspection documents. The investigator uses this information to determine problems or potential problems to investigate and whether more information is needed and in what areas. For large carriers, the investigator will use this information to develop a selection list of records. He/she will send that list to the motor carrier so that it can pull the appropriate records in advance. For a small carrier, the background research takes approximately two hours.

The onsite portion of the compliance review begins with an opening interview and tour of the facilities. The opening interview is held with the ranking officer at the motor carrier. For smaller carriers, this person also conducts the tour; but at larger carriers, a safety point of contact will assist the investigator during the compliance review.

The investigator proceeds through the seven areas (listed below) that correspond to the Federal Motor Carrier Safety Regulations (FMCSRs). The number of records examined in each category depends on the size of the motor carrier. The approximate times listed here are for small motor carriers. (Larger carriers require more records and more time.)

- 1. Insurance (5 minutes): The investigator checks or confirms proof of insurance.
- 2. Accidents (30 to 120 minutes): The investigator reviews the accident register. He/she determines preventability and audits post-accident procedures conducted by the motor carrier (e.g., drug/alcohol tests and vehicle maintenance).
- 3. Drug and Alcohol Testing (30 minutes for no positive results; a minimum of 2 hours for positive results): Most violations are found in this area. The investigator examines drug and alcohol testing procedures and results. Any positive results are thoroughly scrutinized, particularly documented actions taken by the motor carrier. In some cases, the investigator will interview drivers regarding drug and alcohol policy and testing. The safety investigator also educates motor carrier staff about these issues.
- 4. Driver Qualifications (1 hour): The safety investigator checks a random sample of driver qualification files. He/she will also check qualification files for drivers involved in accidents, drug or alcohol violations, and failed roadside inspections. Depending on the investigator's experience, this area may take as little as 30 minutes.

- 5. Commercial Driver License Information System (CDLIS) Checks (10-30 minutes): The safety investigator must conduct and review CDLIS checks for all drivers for carriers with 20 or fewer drivers. Larger carriers will require a higher number of CDLIS checks.
- 6. Maintenance (1 hour plus 35 minutes for each vehicle inspection): This area is similar to the driver qualifications area. The safety investigator checks a sample of vehicle maintenance records—some chosen randomly, others chosen based on accidents and roadside inspection results. The investigator also checks driver daily vehicle inspection reports. If the motor carrier does not have enough roadside inspections on record, the investigator will perform one or more Level 1 vehicle inspections (provided that vehicles are available onsite).
- 7. Drivers Logs (1 hour per driver): The investigator reviews driver records of duty status (logs) for the previous six months.
- 8. HM (varies): This area only applies to motor carriers who haul HM loads, either frequently or infrequently. This is discussed in the Additional Costs section in the body of this cost estimate.

The safety investigator enters observations, violations, and recommendations on a laptop computer throughout the compliance review. After examining all seven areas, the investigator finishes entering all review information into the computer. If an enforcement case is warranted, the investigator will revisit the area(s) where the violation(s) occurred in order to collect evidence of all violations. This includes evidence of violations beyond those necessary to initiate the enforcement action.

The onsite portion of the compliance review ends with a close-out interview with the highest-ranking motor carrier officer. The safety investigator prints the review documentation and presents the results to the motor carrier officer. Both parties may ask questions for clarification.

To complete and finalize the compliance review, the safety investigator completes and uploads a Part C - Reviewer's Notes form. The reviewer's notes include detailed commentary meant to reinforce the conclusions presented to the motor carrier, particularly with regard to violations. Part C Notes are for internal FMCSA use and are not shared with the motor carrier. The Federal Program Specialist assigned to that safety investigator will review and approve the Part C, and the compliance review will be complete.

Appendix B – Cost Comparison with the 2004 Cost Estimate

The 2004 Cost Estimate used data on the number of compliance reviews conducted in 2002 and cost data from 2003 as provided by the Compliance Review Working Group and other sources. In this appendix we compare data from the earlier cost estimate to data used in the current cost estimate. Table B.1 compares the distribution of CRs by size in 2002 to the distribution in FY2006. Table B.2 compares the costs in dollars in 2003 to those in 2006. It also includes a column adjusting the 2003 costs for inflation.

	Number of Power Units/Drivers				
	1-5	6-50	51-99	100-300	Total
% of CRs 2002	42%	50%	4%	4%	100%
% of CRs FY2006	51.2%	43.5%	3.2%	2.1%	100%

The distribution of compliance reviews changes in response to changing conditions in the industry. The decline in the frequency of CRs conducted on large carriers is due to consolidation trends. Further evidence of this is that in FY2006 120 CRs were conducted on motor carriers with more than 300 power units, compared to no CRs conducted on companies that size in 2002. The other change is in the distribution of CRs among the smaller carriers. The frequency shifted from favoring carriers with 6-50 drivers in 2002 to the smallest size carriers in FY2006. This may be due to an increase in small start-up motor carriers, or it may be due to the selection of carriers for review. If it is the latter then this trend may indicate deficiencies in safety procedures by small carriers (since FMCSR violations are a selection criteria for CRs).

Table B.2.	Weighted Aver	age Costs	

	2003	2003 (in 2006 dollars)	2006
Enforcing Agency Costs		(
SI Hours On Site	16.71	16.71	15.9
SI Labor Cost	\$666.02	\$729.73	\$821.63
Admin Cost	\$82.96	\$90.9	n/a
Program Specialist	n/a	n/a	\$8.87
Travel and Per Diem	\$200.00	\$219.13	\$222.43
Marginal Costs	\$948.98	\$1,039.76	\$1,052.93
Training	\$11.12	\$12.18	\$25.06
Equipment and Supplies	\$45.83	\$50.21	\$55.30
Fixed Costs	\$56.95	\$62.39	\$80.36
Total Agency Costs	\$1,005.93	\$1,102.15	\$1,133.29
MC Costs			
Manager Labor Cost	\$674.03	\$738.5	\$216.68
Clerk Labor Cost	\$61.88	\$67.8	\$157.22
Total MC Costs	\$735.91	\$806.30	\$373.90
Total Cost	\$1,741.84	\$1,908.45	\$1,507.19

The Total Agency Cost per CR, adjusted for inflation, has changed very little since the 2004 estimate. The changes in component agency costs are due to rising investigator salaries, increased training costs, and declining administrative costs. The average number of hours spent onsite has decreased due to the shift in CR frequency distribution from medium-size carriers to small carriers, yet salary and training cost increases offset time savings. The reduction in administrative costs offsets the residual salary increase and increases in equipment and training costs.

The major change in the overall cost is due to a methodological change in the calculation of motor carrier costs. The 2004 estimate assumed that a motor carrier manager accompanied the safety investigator during the entire onsite portion of the CR. The current estimate restates the manager's involvement, limiting it to preparation time and the opening and closing interviews. In the 2004 estimate, the motor carrier clerk assisted with preparation only. The current estimate assigns the clerk to accompany and assist the safety investigator, but only for half of the onsite time, not including the opening and closing interviews.