# Office of Inspector General Audit Report

#### FAA NEEDS TO STRENGTHEN CONTROLS OVER THE 2009 FAA/NATCA COLLECTIVE BARGAINING AGREEMENT

Federal Aviation Administration

Report Number: AV-2011-120

Date Issued: June 9, 2011





### Memorandum

Date:

U.S. Department of Transportation

Office of the Secretary of Transportation
Office of Inspector General

Subject: ACTION: FAA Needs To Strengthen Controls

Over the 2009 FAA/NATCA Collective

**Bargaining Agreement** 

Federal Aviation Administration

Report Number AV-2011-120

From: Jeffrey B. Guzzetti

for Aviation and Special Program Audits

Reply to Attn. of: JA-10

June 9, 2011

To: Director, Audit and Evaluation

**Assistant Inspector General** 

On October 1, 2009, the Federal Aviation Administration (FAA) entered into a 3-year collective bargaining agreement (CBA) with the National Air Traffic Controllers Association (NATCA). This agreement is the first successfully negotiated CBA since a 5-year agreement ratified with the union in 1998. The 1998 agreement was the first one between FAA and NATCA that included pay and benefits; however, it far exceeded FAA's initial \$200 million cost estimate, eventually requiring more than \$1 billion in additional funds. The 2009 CBA reinstates numerous provisions of the 1998 agreement. FAA estimates that the 2009 agreement will cost \$669 million more than extending the controller work rules that were in place prior to implementing the new agreement.

Representative John L. Mica, Chairman of the House Committee on Transportation and Infrastructure, requested that we review the costs associated with the 2009 CBA given the significant cost overruns associated with the 1998 agreement. Accordingly, our objectives were to (1) evaluate the accuracy and completeness of FAA's cost estimate of the new CBA, (2) identify contract provisions that could escalate the cost, and (3) determine if FAA has sufficient controls in place to prevent such escalations. Exhibit A details our scope and methodology. Exhibit C lists the FAA facilities visited or contacted during this audit.

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FAA refers to the personnel system changes made in 2006 as a "contract" with the controllers union. In contrast, the union refers to the changes as "imposed work rules." For the purposes of this report, we will refer to them as the "2006 work rules" to differentiate them from the agreements that were successfully negotiated in 1998 and 2009.

We conducted this review between March 2010 and April 2011 in accordance with government auditing standards prescribed by the Comptroller General of the United States.

#### RESULTS IN BRIEF

FAA estimates that the 2009 CBA will cost the Agency \$669 million more than it would have cost to extend the 2006 work rules for 3 more years. While FAA's methodology for developing this estimate appears to be reasonable, it includes several key assumptions that may increase the total costs. For example, most of the costs associated with the 2009 CBA were for increased salaries and benefits for air traffic controllers. However, these costs will be directly influenced by factors such as the rate at which veteran controllers retire and are replaced by new controllers with lower salaries and benefits. In developing its estimate, FAA assumed that the retirement rate of veteran controllers and overtime usage would be comparable to historical data. However, if either of these factors varies from FAA's projections, the portion of the cost estimate related to controller pay and benefits could be impacted. For instance, FAA projected in its 2009 Controller Workforce Plan that 779 controllers would retire in fiscal year (FY) 2010.<sup>2</sup> However, the actual number of controller retirements for FY 2010 was 468. As a result of the lower retirement rate, FAA personnel costs under the 2009 CBA were \$14 million higher than it initially estimated for the first year of the contract.

We identified provisions in the 2009 CBA, such as negotiated memoranda of understanding (MOU) and controller workgroups,<sup>3</sup> that could escalate costs beyond FAA's estimate. Similar provisions in the 1998 agreement that were not effectively managed ultimately led to significant additional costs. For example, in 2003 we identified hundreds of negotiated MOUs that resulted in \$23 million in overtime costs, \$1.8 million in cash awards, \$30 million in additional salary incentives, and 65,000 hours in time-off awards.<sup>4</sup> We found that FAA officials could not reliably estimate the costs of these provisions in the 2009 CBA cost projection but assumed that FAA management would control costs to minimize the impact.

FAA established controls in 2003 that it believes will be sufficient to prevent additional costs with MOUs in the 2009 CBA. These include reviews by Agency officials and budgetary analysis of MOUs before they can be signed. We found, however, that those controls are insufficient to prevent cost escalations and that Agency personnel do not consistently adhere to them. We identified three areas

<sup>&</sup>lt;sup>2</sup> The Federal Aviation Administration's 10-Year Strategy for the Air Traffic Control Workforce 2009-2018. Report Number 2009-AJF-137.

<sup>&</sup>lt;sup>3</sup> The 2009 CBA allows NATCA and air traffic facility managers to negotiate issues involving personnel policies, practices, and matters affecting working conditions that are not specifically addressed by the national agreement.

OIG Report Number AV-2003-059, "FAA's Management of and Control Over Memorandums of Understanding," September 12, 2003. OIG reports are available on our Web site: <a href="http://www.oig.dot.gov">http://www.oig.dot.gov</a>.

where FAA's internal controls are currently insufficient to prevent contract cost escalations. First, although FAA has a detailed policy for reviewing and approving MOUs before they can be implemented, we found that some local air traffic managers and regional managers do not strictly comply with the steps specified in the policy. Second, we found that the national MOU database, FAA's primary tool for tracking all national, regional, and local MOUs, is not yet fully operational. Finally, FAA does not have adequate controls over union participation in workgroups. Without sufficient internal controls covering these areas, FAA risks repeating the mistakes that contributed to some of the cost overruns that occurred during the 5-year term of the 1998 CBA.

We are making recommendations to help FAA ensure its internal control policies are sufficient to prevent cost escalations associated with the 2009 CBA.

#### **BACKGROUND**

NATCA represents FAA's largest labor force, with over 15,000 controllers nationwide. The 2009 CBA between FAA and NATCA is the first successfully negotiated Agreement since the 5-year CBA in 1998. The 1998 agreement was extended past its 2003 expiration date while FAA and NATCA negotiated a new labor agreement. After negotiations failed in 2006, FAA submitted its last offer to Congress. When Congress did not take action within the 60 days prescribed by law, FAA imposed its last offer, effective September 3, 2006. The 2006 work rules lowered the pay bands that set controller pay, which significantly lowered the salaries of developmental controllers as well as those hired after the implementation of the 2006 work rules.

On May 19, 2009, FAA announced the start of mediation talks between the Agency and NATCA. The parties agreed to extensive mediation sessions and binding arbitration of any unresolved issues. On September 23, 2009, the final mediation agreement was ratified by NATCA's membership. The new Agreement will remain in effect from October 2009 through September 2012. FAA currently estimates that the Agreement will cost \$669 million over and above what it would have cost had the 2006 work rules been extended for 3 more years. Figure 1 shows a timeline of negotiations between FAA and NATCA for the 2006 work rules through the implementation of the 2009 CBA.

<sup>&</sup>lt;sup>5</sup> Under the Federal Aviation Administration personnel management system (49 U.S.C. § 40122), if after using the services of the Federal Mediation and Conciliation Service the FAA Administrator does not reach an Agreement with employee unions during labor negotiations, the Administrator must submit the proposed changes with the union's reasons for its objections, to Congress. After submission to Congress, the Administrator's proposed changes may take effect 60 days later.

<sup>&</sup>lt;sup>6</sup> The unresolved issues that were decided by the arbiter included the pay bands that FAA uses to set controller pay.

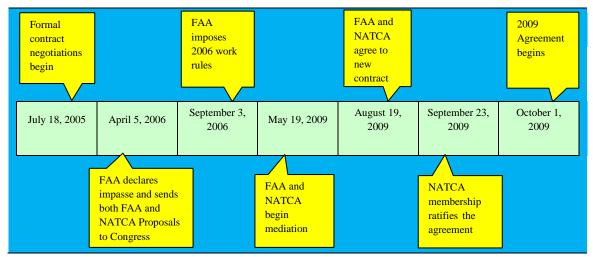


Figure 1. Collective Bargaining Timeline

## FAA'S METHODOLOGY FOR CALCULATING THE 2009 CBA ESTIMATE IS REASONABLE BUT RELIES ON ASSUMPTIONS THAT COULD IMPACT COSTS

While FAA's methodology for calculating its \$669 million cost estimate for the 2009 CBA is reasonable, it includes some assumptions that could impact costs. FAA estimates that the 2009 CBA will cost the Agency \$669 million more than it would have cost to extend the 2006 work rules for 3 more years. The majority of FAA's estimate (\$645 million) will result from increases in pay and related benefits for controllers. The remaining \$24 million will cover the non-pay provisions in the contract. However, the accuracy of FAA's pay estimates will ultimately depend on unknown factors, such as the rate and timing of controller retirements over the 3 years of the CBA.

#### The Majority of the Contract Cost Is From Increased Pay and Benefits

FAA calculated that \$645 million of its cost estimate for the 2009 CBA would come from three sources: increased salaries and benefits for controllers (\$527 million—salaries and benefits), a local incentive pay for controllers at specific facilities (\$86 million—controller incentive pay), and additional pay for controllers who fill in for a supervisor if one is not available (\$32 million—controller-in-charge pay). Based on FAA's methodology for estimating the costs related to pay, we consider this estimate to be reasonable.

To develop its estimate, FAA used a computerized model that enabled it to estimate the cost of proposed provisions during negotiations with NATCA.

<sup>&</sup>lt;sup>8</sup> Pay rates for controllers can be found in Exhibit B of this report.

#### Salaries and Benefits

When calculating the cost of increased controller salaries, FAA differentiated between controllers who were certified as of September 30, 2006 (shortly after the 2006 work rules were implemented), and those still in training or not yet hired as of that date. FAA estimated that:

- pay increases and benefits for controllers who were fully certified (known as Certified Professional Controllers or CPCs) as of September 30, 2006, will cost the Agency \$117 million.
- pay increases and benefits for newly hired prospective controllers and developmental controllers in training at facilities as of September 30, 2006, will cost the Agency \$410 million.

Despite the current 2-year pay freeze on civilian Federal employees and the lack of any provisions in the contract that relate to controller productivity, both groups of controllers are also contractually guaranteed to receive a 3-percent annual salary increase in January 2010, 2011, and 2012. Controllers who are retirement eligible received an additional 1-percent annual raise in January 2010 and 2011. Controllers are exempt from the pay freeze because these annual raises were part of a negotiated agreement between FAA and NATCA. Based on the FAA's methodology, we consider FAA's estimate of \$527 million for increased pay and benefits to be reasonable.

#### Controller Incentive Pay

FAA also incorporated Controller Incentive Pay (CIP) into its cost estimate. CIP is a locally based incentive paid in addition to locality pay. It is designed to encourage controllers to transfer to designated hard-to-staff facilities. Under the terms of the 2006 work rules, CIP was scheduled to be phased out by FY 2010. However, CIP has been reimplemented under the 2009 CBA and is capped at \$30 million per year.

During this audit, we found that CIP cost FAA about \$27 million in FY 2010, or about 10 percent less than the annual CBA cap of \$30 million. Overall, FAA estimated that CIP will cost \$86 million over the 3-year life of the CBA. Since the CBA caps the amount of CIP, we consider FAA's estimate of an additional \$86 million for FYs 2010 through 2012 to be reasonable.

#### Controller-In-Charge Pay

FAA estimated that Controller-In-Charge (CIC) pay will cost the Agency \$32 million over the 3-year period of the Agreement. CIC pay provides

<sup>&</sup>lt;sup>9</sup> 49 U.S.C. § 40122 permits FAA to negotiate pay as a part of collective bargaining.

controllers that perform supervisory roles with a temporary 10-percent pay increase when filling in for a supervisor. CIC pay was eliminated from the 2006 work rules but was reinstated as part of the 2009 Agreement. FAA facilities that we visited reported that CIC usage has not changed since the effective date of the 2009 CBA. Although FAA estimated that CIC pay would cost approximately \$9.7 million in 2010, the actual expense was about \$9.0 million, or about 7.2 percent less than anticipated in the contract cost estimate. For the last 2 years of the labor agreement, FAA expects to spend \$10.8 million and \$11.3 million, respectively on CIC pay. The estimated cost of was calculated using a percentage of past salary data. Therefore, if CIC use follows historical trends, FAA's estimate should be accurate, and we consider FAA's CIC pay estimate to be reasonable.

### Provisions Not Directly Related to Controller Pay Are Also Included in FAA's Estimate

FAA also included an estimate for provisions of the 2009 CBA that were not directly related to controller pay and benefits such as policy changes, controller workgroup participation, and resolution of grievances that controllers filed before the 2009 CBA. FAA estimated that these items and other non-pay provisions would cost \$24 million more than it would have to extend the 2006 work rules for 3 years. The majority of these costs are associated with the requirement to include NATCA representatives in workgroups, which was projected to cost roughly \$16 million over the life of the contract. Other non-pay elements include costs such as the increase in official time for facility representation, changes to grievence procedures, holiday duty assignment changes, and other excused absences. Many of these costs are either defined by provisions in the 2009 CBA or are not expected to vary.

The cost to arbitrate more than 400,000 outstanding NATCA grievances (as of September 30, 2009) was also included in FAA's estimate, but not the cost of grievance settlements against the Agency because the grievances were filed prior to the implementation of the 2009 CBA. While FAA is still addressing these grievances, a large number of them have been closed without significant cost to FAA. As of October 2010, FAA had yet to settle approximately 15,000 grievances that were filed prior to the 2009 CBA. Although the cost of individual judgements for pre-existing grievances are not considered a contract cost, the Agency will still have to pay out any resulting judgements, which could limit resources available for other programs or needs. We consider FAA's estimate for non-pay costs to be reasonable.

## FAA's Methodology for Calculating Pay Is Reasonable but Some Key Assumptions Could Impact Costs

While FAA's methodology for calculating pay is reasonable, the accuracy of FAA's pay estimate will ultimately depend on the accuracy of its assumptions. For example, FAA formulated its cost estimate based on the assumption that controllers would retire at the rate reported in its 2009 Controller Workforce Plan (CWP). However, that rate was based in part on past retirement rates, which were higher than anticipated in 2007 and 2008 following the implementation of the 2006 work rules. Conversely, controller retirements since the 2009 CBA became effective have been less than projected in the 2009 CWP. For example, during FY 2010, about 300 fewer controllers retired than FAA projected.

As a result of fewer controllers retiring than expected, FAA's pay and benefits costs under the current contract were \$14 million higher than it initially estimated for the first year of the contract. Table 1 shows the estimated pay and benefits cost for air traffic controllers for FY 2010 through FY 2012.

Table 1. Estimated Air Traffic Controller Pay and Benefits, FY 2010–FY 2012 (\$ in millions)

Cost	FY 2010	FY 2011	FY 2012
Estimated Cost	\$2,596	\$2,727	\$2,866
Actual Cost	\$2,610	TBD	TBD
Difference	\$14	TBD	TBD

Source: FAA

Given the potential impact of retirements on the accuracy of FAA's estimate, potentially higher pay and benefits costs in the second and third years of the CBA, and FAA's history of cost escalations with the 1998 agreement, the contract costs could increase.

## SOME PROVISIONS OF THE 2009 COLLECTIVE BARGAINING AGREEMENT COULD ESCALATE COSTS ABOVE FAA'S ESTIMATE

We identified provisions of the 2009 CBA that could escalate costs. These provisions include mid-term bargaining, or MOUs, at the national and local levels and the use of overtime associated with controller workgroups. These provisions were strictly controlled under the 2006 work rules after they led to cost overruns with the 1998 agreement. However, we found that FAA officials could not reliably estimate the costs of these provisions in the 2009 CBA cost projection but

assumed that FAA management would control costs to minimize the impact. If FAA does not properly manage these provisions, they could once again lead to significant cost growth for FAA.

#### Memoranda of Understanding Must Be Carefully Monitored

FAA must carefully monitor its MOUs to avoid cost escalation. While we did not find any specific instances of costly or problematic MOUs during our review, MOUs have been a problem in the past. During our past work on FAA's management and controls over MOUs, we found that FAA had significant problems with MOU provisions that were expensive or not in the Government's best interest. For example, we found that between FY 2001 and FY 2003, FAA and NATCA agreed to MOUs that resulted in:

- \$23 million in overtime costs,
- \$1.8 million in cash awards,
- \$30 million in additional salary incentives, and
- 65,000 hours in time-off awards.

Given FAA's past problems, it needs to closely monitor these agreements going forward. FAA officials expressed concern that an expensive MOU implemented at one facility could establish a precedent that would enable union representatives at other facilities to negotiate similar agreements. Consequently, one costly or problematic MOU has the potential to impact negotiations and the costs incurred at facilities nationwide. FAA would be obligated to honor the agreement, provided it did not contain illegal provisions or did not conflict with the national agreement. In 2003, FAA identified 14 MOUs that it regarded as "problematic" or costly and asked NATCA to renegotiate. The negotiations took months to resolve, and the MOUs' costly provisions remained in effect during that time.

#### Overtime Costs Could Increase With Workgroup Participation

Overtime usage could increase the cost of the 2009 CBA above the \$669 million estimate. FAA officials assumed that overtime costs for the 3-year period of the 2009 CBA would remain similar to what they were under the 2006 work rules. During this audit, we discussed the use of overtime with facility managers who stated that overtime usage has been a useful management tool for meeting facility-level staffing needs and has not changed as a result of provisions in the 2009 CBA. Figure 2 below shows how the trend in overtime cost has fallen over the past 3 years, including FY 2010, the first year of the 2009 CBA. From FY 2008 through FY 2010, the overall cost of overtime has decreased by 10.4 percent.

\$68.0 \$66.0 \$62.0 \$60.0 \$58.0 \$56.0 \$56.0

Figure 2. Overtime Costs - FY 2008–FY 2010 (\$ in millions)

Source: FAA Payroll Database: Federal Personnel and Payroll System (FPPS)

Although overtime decreased in FY 2010, facility managers we interviewed expressed concern that it may begin to increase. They specifically cited controller participation in workgroups on technological or procedural changes as a potential source of cost escalation. Although the facility managers stated that workgroups can offer positive benefits by involving controllers in the decision-making process, they also noted that union participation in workgroups has been expensive in the past because of the need to backfill controller absences with overtime.

A past MOU between FAA and NATCA concerning National Airspace Redesign (NAR) specified that all facilities involved in airspace redesign would receive overtime to cover absences for controllers involved in NAR activities. In our report on MOUs, we found that at one facility alone, FAA spent approximately \$843,000 in overtime to cover for six part-time participants, and three full-time participants on various NAR workgroups.

While overtime has not increased in the first year of the 2009 CBA, it has been an issue in the past, particularly following the 1998 agreement.

## FAA LACKS ADEQUATE CONTROLS OVER CONTRACT COST ESCALATION IN THREE KEY AREAS

We identified three areas where FAA's internal controls are currently insufficient to prevent contract cost escalations. First, although FAA has a detailed policy for reviewing and approving MOUs before they can be implemented, we found that some local air traffic managers and regional managers do not strictly comply with

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Workgroups are temporary groups consisting of management and labor representatives that are established to answer a technical question.

the steps specified in the policy. Second, we found that the national MOU database—FAA's primary tool for tracking all national, regional, and local MOUs—is not yet fully operational. Finally, FAA does not have adequate controls over union participation in workgroups. Without sufficient internal controls covering these areas, FAA risks repeating the mistakes that contributed to some of the cost overruns that occurred during the 5-year term of the 1998 CBA.

#### FAA Is Not Consistently Following Its MOU Review Policy

FAA is not consistently following its policy designed to ensure that all MOUs are reviewed in a timely manner. This policy was implemented during our prior review of FAA's management and controls over MOUs. Two months after initiating our prior review, we briefed the FAA Administrator on our concerns over the significant control weaknesses and budgetary impact that we identified. As a result of that meeting, FAA issued an Agency directive in June 2003. The Order made significant changes to the Agency's process for negotiating, approving, and implementing MOUs. For example, the Order specified the following requirements:

- 1. A labor-management relations specialist must lead all national and regional negotiations.
- 2. All MOUs must be reviewed by the next higher organizational level prior to signature.
- 3. Proposed agreements must be accompanied by a budget analysis.
- 4. MOUs must contain mandatory provisions, such as specific expiration dates.
- 5. All MOUs must be reviewed by officials designated by the FAA Administrator within 30 days of signature by the facility management and the union negotiators.

We found that FAA officials are not reviewing prospective MOUs according to the requirements outlined in the FAA Order. For example, of the 77 MOUs that FAA's Eastern Region reported to us:

- 9 (12 percent) were not reviewed by regional labor relations representatives before the negotiating parties signed them,
- 22 (29 percent) had no budget analysis, and
- 28 (36 percent) did not undergo required senior level review within 30 days after the negotiating parties signed the agreements.

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FAA Order 3710.18, "Internal Coordination Requirements for Negotiating Term and Mid-Term Agreements (Including Memoranda of Understanding and Memoranda of Agreement) with FAA Unions."

In other FAA regions we found additional indications that personnel did not consistently follow the procedures established in the FAA Order. For example, FAA's Southern Region MOU data indicated that 31 of 135 MOUs, or about 23 percent, had no Agency Head review within the required 30 days after signature. In addition, data from the Great Lakes Region indicated similar deviations from FAA policy. Of the 191 MOUs reported, 72 MOUs, or about 38 percent, also had not received appropriate review within the required 30 days after signature.

#### FAA's Database for Tracking MOUs Is Not Fully Operational

FAA's database for tracking all MOUs signed at the national, regional, or facility level is not fully operational. FAA developed this database in response to our 2003 report. The database had storage/retrieval capabilities and multiple search functions that allowed FAA to track all MOUs and identify their budgetary impact. The new procedures developed in 2003 provided FAA with much-needed controls over the MOU process.

However, the original MOU database was discontinued in 2009 when FAA decided to switch to a new Web-based system upon implementing the new CBA. FAA is currently creating another Web-based database and, as of November 2010, the new system did not contain all the MOUs that have been signed since the 2009 CBA. As a result, FAA Headquarters is unaware of agreements being signed at the regional and local levels and may not be aware of agreements that might increase FAA operational costs.

The lack of a comprehensive database places FAA at a disadvantage during MOU negotiation. According to FAA officials, NATCA representatives have access to all current FAA/NATCA MOUs through a NATCA Web site when conducting negotiations. However, FAA representatives only have access to those MOUs at their own facility or regional office. Without the database in place, FAA lacks a critical control in avoiding costly or problematic MOUs.

#### FAA Has Limited Controls Over Controller Workgroups

FAA has limited controls over labor/management workgroups that are permitted under the 2009 CBA. According to the agreement, FAA and NATCA agree that it is mutually beneficial for the union to be involved in workgroups established at the local, regional, or national level to provide operational perspective in the development or deployment of technological, procedural, or airspace changes. Controller participation in various Next Generation Air Transportation System (NextGen) efforts has been limited thus far, but is expected to grow as efforts switch from planning to implementation. FAA has not assessed the potential impact of the CBA or controller participation on NextGen or other capacity-enhancing initiatives.

We are also concerned that FAA has very limited management controls to oversee the formation, employee participation, and productivity expectations of workgroups. While there may be legitimate needs for their formation, more clarity is needed with respect to the need for workgroups, when and where they meet, and any expectations of productivity. The only guidelines regarding the oversight of workgroups are listed in the 2009 CBA, and these guidelines do not contain clear requirements or criteria. They only address areas such as notification of the Union of new workgroups, defining their scope, and that the agreements reached will be in writing and binding to both parties. FAA has not developed effective policies and procedures to ensure that workgroup objectives are met, and that these collaborative efforts do not replace or erode its management authority or its rights as defined by Federal labor law.

#### CONCLUSION

FAA must ensure it does not repeat the management problems that occurred with the 1998 NATCA agreement that allowed significant cost increases. While both FAA and NATCA view the 2009 CBA as an improvement from the 2006 work rules, FAA must continually increase oversight of its policies and controls to ensure the agreement effectively addresses issues that impact one of the Nation's key workforces without creating an undue burden for taxpayers.

#### RECOMMENDATIONS

We recommend that FAA:

- 1) Update the contract cost estimate of the 2009 CBA annually to reflect any changes to the underlying assumptions and incorporate it into its annual budget request.
- 2) Expedite completion of the MOU database and enter all MOUs that were agreed to since the 2009 CBA was enacted.
- 3) Conduct an internal evaluation of its MOU policies and procedures to ensure that the guidelines incorporated in FAA Order 3710.18 are being followed.
- 4) Implement formal policies and procedures to oversee the formation of controller workgroups, workgroup productivity, and the implementation of workgroup results and agreements.

## AGENCY COMMENTS AND OFFICE OF INSPECTOR GENERAL RESPONSE

We provided FAA with a draft copy of this report on April 14, 2011, for comment and received FAA's response on May 19, 2011. FAA's entire response is included at the appendix to this report. In its response, FAA fully concurred with recommendations 1, 2, and 3 and provided reasonable timeframes for completing the planned actions. FAA partially concurred with recommendation 4, but provided alternative courses of action that meet the intent of our recommendation. Those actions are also expected to be completed within a reasonable timeframe.

#### **ACTIONS REQUIRED**

We consider all four recommendations resolved but open pending completion of the planned actions. We appreciate the courtesies and cooperation of FAA and NATCA representatives during this audit. If you have any questions concerning this report, please contact me at (202) 366-0500 or Bob Romich, Program Director, at (202) 366-6478.

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cc: Anthony Williams, AAE-001 Martin Gertel, M-100

#### **EXHIBIT A. SCOPE AND METHODOLOGY**

We conducted this audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. The audit was conducted between March 2010 and April 2011, and included site visits to FAA and NATCA Headquarters, 18 Terminal Services facilities (ATCTs and TRACONs), 6 ARTCCs, and 5 FAA Regional Offices. A full list of air traffic facilities we visited or contacted during this audit—which were judgmentally selected based on their geographic location, facility type, and history of labor relations—can be found in Exhibit C.

To evaluate the accuracy and completeness of FAA's cost estimate, we analyzed the estimate and met with FAA employees that developed the estimate in order to assess the methodology used to calculate the 2009 CBA's cost. This included analyzing the model used in the estimation process and evaluating the practices and assumptions used to develop the model. We also determined if FAA had included all costs of the 2009 CBA into its estimates. We did this by reviewing the 2009 CBA, comparing it to 2006 work rules, identifying changes that the 2009 CBA brought, and then determining whether these changes were accounted for in FAA's estimate. As the accuracy of the estimate relies on underlying assumptions, we interviewed FAA Headquarters Labor Relations officials to determine if the assumptions were fair. We also obtained 2009 CBA cost data for FY 2010 in order to determine the accuracy of FAA's projection relative to the first year of the contract.

To identify provisions of the 2009 CBA that could escalate costs beyond FAA's estimated amounts, we identified issues that FAA has historically undervalued based on prior work. We also reviewed the 2009 CBA and interviewed officials from FAA Headquarters, including the Strategy and Performance Business Unit, the National Policy and Programs Office, and the Human Resource Management branch, as well as representatives from NATCA to identify articles that had the potential to cause additional expense compared to the 2006 work rules. We conducted site visits and interviewed FAA air traffic officials at air traffic control facilities (see exhibit C) to identify the operational adjustments, cost changes, and financial impacts that the 2009 CBA has had on facilities.

To determine whether FAA had sufficient controls in place to prevent cost escalations from occurring, we met with Labor Relations Officials at FAA Headquarters and at five FAA Regional Offices, and we analyzed FAA's criteria

and established procedures to control items involved in the 2009 CBA. Such items included controls over MOUs, workgroups, overtime, CIC pay, and shift scheduling. We determined the effectiveness of FAA's controls by collecting data from air traffic officials at 24 air traffic facilities and Labor Relations Representatives at 5 ATO Regional Offices. We also identified future controls that FAA intends on implementing by meeting with representatives from FAA's Office of General Counsel at FAA Headquarters.

#### **EXHIBIT B. AIR TRAFFIC CONTROLLER PAY BANDS**

FY 2006 FY 2010 2006 Work Rules 2009 CBA\*

ATC Level	Minimum	Maximum	Minimum	Maximum
4	37,200	50,050	40,869	55,173
5	37,200	50,050	43,038	58,101
6	44,750	57,600	49,986	67,481
7	45,300	62,650	52,469	70,833
8	52,850	70,200	59,841	80,785
9	55,200	78,050	63,991	86,388
10	62,750	85,600	73,103	98,689
11	67,400	96,950	77,844	105,089
12	74,950	104,500	84,523	114,106

<sup>\*</sup>Only includes data for FY 2010. These pay bands will increase in FY 2011 and FY 2012.

## EXHIBIT C. FAA AIR TRAFFIC FACILITIES VISITED OR CONTACTED

Potomac TRACON Seattle TRACON

Washington ARTCC Seattle ARTCC

DeKalb-Peachtree ATCT Seattle Tacoma ATCT

Atlanta ARTCC Boeing Field ATCT

Atlanta TRACON New York ARTCC

Hartsfield-Jackson Atlanta ATCT New York TRACON

Dallas Fort Worth ATCT Islip Macarthur ATCT

Dallas Fort Worth TRACON John F. Kennedy ATCT

Fort Worth ARTCC LaGuardia ATCT

Chicago TRACON Eastern Service Center

Chicago ARTCC Central Service Center

Chicago O'Hare ATCT Great Lakes Regional Office

DuPage County (IL) ATCT Northwest Mountain Regional Office

Aurora (IL) Municipal ATCT Eastern Regional Office

Paine Field (WA) ATCT

#### **EXHIBIT D. MAJOR CONTRIBUTORS TO THIS REPORT**

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#### APPENDIX. AGENCY COMMENTS



#### **Memorandum**

Date: MAY 1 9 2011

To: Jeffery B. Guzzetti, Assistant Inspector General for Aviation and Special

**Program Audits** 

From: Clay Foushee, Director, Audit and Evaluations, AAE-1

Subject: OIG Draft Report: FAA Needs To Strengthen Controls Over The 2009

FAA/NATCA Collective Bargaining Agreement

During the 2009 contract negotiations with the National Air Traffic Controllers Association (NATCA), the Federal Aviation Administration (FAA) conducted detailed and comprehensive analyses to estimate the financial impact of the new collective bargaining agreement. This was a complex endeavor that involved multiple variables and detailed consideration of the factors that can affect each one. In light of the complexity of these estimates, it is particularly gratifying to have the Office of Inspector General (OIG), in its independent review of our process, conclude that FAA's approach was reasonable.

The OIG report could benefit from clarification with regard to its discussion of the effect of FAA's assumptions on the accuracy of its estimates. This is particularly true with regard to its discussion of controller retirements and its affect on the accuracy of FAA's absolute payroll and incremental contract cost estimates. FAA has separately provided more detailed technical comments to address this issue.

FAA is working to further strengthen its oversight of local memoranda of understanding (MOU) with clearer direction for both headquarters and regional staff, and better tracking. The need for controller participation in workgroups to provide operational perspective in the development and deployment of new technologies is well established. While there has been limited use of such mechanisms up to this point, we anticipate increased use with the implementation of NextGen technologies. FAA intends to supplement its policies and procedures in anticipation of this to ensure that workgroup roles are well defined with clear expectations.

<u>OIG Recommendation 1</u>: Update the contract cost estimate of the 2009 collective bargaining agreement (CBA) annually to reflect any changes to the underlying assumptions and incorporate it into its annual budget request.

**FAA Response:** Concur. The results from FAA's 2010 update demonstrated the strength of the process, as FAA's estimate for payroll costs in fiscal year 2010, the first year of the new contract, was within \$14 million of the actual \$2.61 billion cost. This reflects a very strong 99.5 percent accuracy. FAA recognizes that its assumptions are one important factor that could affect variance from estimated values and will update the payroll cost estimates annually to support FAA's budget process.

It is worth noting that the OIG report does not specifically discuss the difference between absolute payroll and incremental contract costs. The primary purpose for FAA's cost analysis in support of the 2009 negotiations was to isolate the incremental cost of changes in contract terms. These contract changes include guaranteed pay increases and 30-35 percent pay band growth, which constitutes the vast majority of the estimated incremental contract cost of \$669 million. (The 2009 – 2012 controller pay bands are attached.) In order to isolate the incremental cost of changes in contract terms, other non-contract factors, such as the number of retirements, are not assumed to vary between contract scenarios. Thus, while FAA recognizes that absolute payroll costs can change with variances in factors such as retirement patterns, overtime rates, and new hire forecasts, it is important to recognize these changes should not be assigned to or assumed to directly impact the incremental contract costs.

Again, FAA is encouraged that OIG repeatedly finds FAA's approach and analyses to be reasonable. Since FAA has already completed its first annual update of payroll costs under the contract, and intends to continue such analyses, we ask that this recommendation be closed.

**OIG Recommendation 2**: Expedite completion of the MOU database and enter all MOUs that were agreed to since the 2009 CBA was enacted.

<u>FAA Response</u>: Concur. As of March 30, the LERIS database became fully operational and available for uploading and searching for new MOUs. The MOUs that have been maintained in the labor relations (LR) regional offices since October 2009 are being uploaded and made available in the nation wide data basis. It is anticipated that this process will be accomplished by July 15, 2011. Prior MOUs, stored in the GETS data base replaced by LERIS, were migrated to the LERIS system in October of 2009 and are available nation wide. We are recommending that the OIG close this recommendation based on the actions taken.

<u>OIG Recommendation 3</u>: Conduct an internal evaluation of its policies and procedures for MOUs to ensure that the guidelines incorporated in FAA Order 3710.18 are being followed.

**FAA Response**: Concur. The OIG report afforded the Agency the opportunity to review each of the 77 MOUs cited with the respective facilities and to revisit compliance with

3710.18 procedures. The Director of Field Labor Relations evaluated each of the 77 MOUS and discussed applicable compliance and non-compliance issues with the facility. Field and Headquarters Labor Relations have reviewed and reinforced with their staffs and their line of business customers the imperative of following the Order. Additionally, a comprehensive written description of Order 3710.18 along with clear, concise instructions regarding adherence to and the application of the Order are included in the FAA Labor Relations Standard Operating Procedure manual. The 3710.18 SOP is being reissued by the Director of Field Labor Relations to the field staff reminding them of the guidance and the requirement to comply with it. This will be accomplished prior to the end of May, 2011. We are recommending that the OIG close this recommendation based on the actions taken.

<u>OIG Recommendation 4</u>: Implement formal policies and procedures to oversee the formation of workgroups, workgroup productivity, and implementation of workgroups results and agreements.

**FAA Response:** Partially-Concur. The Agency has met with NATCA to jointly address the appropriate and effective use of a collaborative process, including the use of workgroups. As a result of this process, the FAA and NATCA have formed a national Collaborative Work Group, and entered jointly into a formal program which requires managers and union representatives to receive structured training on the use of work groups as established in Article 48 of the parties CBA. This includes determining the appropriate need for workgroups, defining scope and authority, and establishing definitive measurable outcomes to be achieved.

In concert with the above, the Agency is developing a Knowledge Services Network (KSN) site to track the necessary data. When this site is operational, management and union co-leads of workgroups will have the joint responsibility to update the data on the KSN site. This site will collect workgroup statistical data such as travel expenses, travel time, time participating with the workgroup, and any overtime used to permit the bargaining unit member to attend the meeting. Other information that will be documented includes scope and/or expectations of the workgroup, estimated time to complete project, purpose, and expectations/goals of each subsequent meeting. This KSN site is in the final development stage and a document on "why and how" to use this site is also being developed. It is expected that this process will be implemented by May 31, 2011.

Additionally, the Agency is developing a formal labor strategy stressing the need for fiscal responsibility and prudence. This formal strategy is expected to conclude its formal development by the end of fiscal 2011. In consideration of this and that the Agency has entered into a formal process including national oversight and structured training with NATCA, and is implementing technological resources to track workgroup activity, cost and productivity, we expect these measures to suffice without the need for additional formal policies and procedures..

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We appreciate the opportunity to review and comment on a draft of this report. In addition to the information presented here, FAA also provided a number of technical comments on the report to OIG via email.

#### **Air Traffic Controller Pay Bands: 2009-2012**

				2000 Pay R	ands (Evelue	ling Locality	Payl - Per 20	06 Contract		
	Min/Max	4	5	6 6	7	8	9	10	11	12
	Maximum	\$53,075	\$53,075	\$61,100	\$66,575	\$74,600	\$82,675	\$90,700	\$102,775	\$110,800
CPC	Minimum	\$39,400	\$39,400	\$47,425	\$48,100	\$56,125	\$58,500	\$66,525	\$71,500	\$79,525
	· · · · · · · · · · · · · · · · · · ·	ψ05,400	ψου, του	<b>\$41,420</b>	ψ40,100	<b>400,120</b>	<b>\$55,555</b>	Ψ00,020	ψ11,000	<b>\$15,025</b>
	Maximum	N/A	\$39,400	\$47,425	\$48,100	\$56,125	\$58,500	\$66,525	\$71,500	\$79,525
D3	Minimum	N/A	\$37,975	\$43,994	\$44,500	\$50,519	\$52,300	\$58,319	\$62,050	\$68,069
							<b>\$00,000</b>			
D2 Maximum Minimum	Maximum	N/A	N/A	\$43,994	\$44,500	\$50,519	\$52,300	\$58,319	\$62,050	\$68,069
		N/A	N/A	\$40,563	\$40,900	\$44,913	\$46,100	\$50,113	\$52,600	\$56,613
					,				. ,	
	Maximum	N/A	N/A	N/A	\$40,900	\$44,913	\$46,100	\$50,113	\$52,600	\$56,613
D1	Minimum	N/A	N/A	N/A	\$37,300	\$39,306	\$39,900	\$41,906	\$43,150	\$45,156
	•									
- 10	Maximum	\$33,700	\$33,700	\$33,700	\$33,700	\$33,700	\$33,700	\$33,700	\$33,700	\$33,700
AG	Minimum	\$33,700	\$33,700	\$33,700	\$33,700	\$33,700	\$33,700	\$33,700	\$33,700	\$33,700
-										
	ı			0040 D. D.	· · · · /= · · ·	P I P4	D- \ D- 06	200 0		
						ling Locality				
<u> </u>	Min/Max	4	5	6	7	8	9	10	11	12
CPC	Maximum	\$55,173	\$58,101	\$67,481	\$70,833	\$80,785	\$86,388	\$98,689	\$105,089	\$114,106
	Minimum	\$40,869	\$43,038	\$49,986	\$52,469	\$59,841	\$63,991	\$73,103	\$77,844	\$84,523
	1									
D3	Maximum	N/A	\$43,038	\$49,986	\$52,469	\$59,841	\$63,991	\$73,103	\$77,844	\$84,523
	Minimum	N/A	\$41,546	\$46,757	\$48,619	\$54,148	\$57,261	\$64,095	\$67,651	\$72,660
	1									
D2	Maximum	N/A	N/A	\$46,757	\$48,619	\$54,148	\$57,261	\$64,095	\$67,651	\$72,660
	Minimum	N/A	N/A	\$43,528	\$44,770	\$48,456	\$50,531	\$55,087	\$57,457	\$60,797
	,									
D1	Maximum	N/A	N/A	N/A	\$44,770	\$48,456	\$50,531	\$55,087	\$57,457	\$60,797
	Minimum	N/A	N/A	N/A	\$40,920	\$42,763	\$43,800	\$46,078	\$47,264	\$48,933
				-	_	_	_			
AG	Maximum	\$37,070	\$37,070	\$37,070	\$37,070	\$37,070	\$37,070	\$37,070	\$37,070	\$37,070
	Minimum	\$37,070	\$37,070	\$37,070	\$37,070	\$37,070	\$37,070	\$37,070	\$37,070	\$37,070
	ı									
				2011 Pay Ba	ands (Exclud	ling Locality	Pay) - Per 20	009 Contract		
	Min/Max	4	5	6	7	8	9	10	11	12
CPC	Maximum	\$60,125	\$65,981	\$74,550	\$80,511	\$90,223	\$98,256	\$112,664	\$119,163	
	Minimum	\$44,537	\$48,875	\$55,222	\$59,638					\$127,030
		\$44,JJ1	<b>\$ 10,010</b>		* /	\$66,832	\$72,782	\$83,455	\$88,269	\$127,030 \$94,096
			<b>V</b> 10,010		, ,	\$66,832	\$72,782	\$83,455		
D3	Maximum	N/A	\$48,875	\$55,222	\$59,638	\$66,832	\$72,782	\$83,455	\$88,269 \$88,269	\$94,096 \$94,096
D3	Maximum Minimum			\$55,222 \$50,684					\$88,269	\$94,096
D3		N/A N/A	\$48,875 \$45,924	\$50,684	\$59,638 \$53,996	\$66,832 \$59,392	\$72,782 \$63,854	\$83,455 \$71,859	\$88,269 \$88,269 \$75,469	\$94,096 \$94,096 \$79,840
	Minimum	N/A N/A	\$48,875 \$45,924 N/A	\$50,684 \$50,684	\$59,638 \$53,996 \$53,996	\$66,832 \$59,392 \$59,392	\$72,782 \$63,854 \$63,854	\$83,455 \$71,859 \$71,859	\$88,269 \$88,269 \$75,469	\$94,096 \$94,096 \$79,840
D3	Minimum	N/A N/A	\$48,875 \$45,924	\$50,684	\$59,638 \$53,996	\$66,832 \$59,392	\$72,782 \$63,854	\$83,455 \$71,859	\$88,269 \$88,269 \$75,469	\$94,096 \$94,096 \$79,840
	Minimum Maximum Minimum	N/A N/A N/A N/A	\$48,875 \$45,924 N/A N/A	\$50,684 \$50,684 \$46,146	\$59,638 \$53,996 \$53,996 \$48,354	\$66,832 \$59,392 \$59,392 \$51,951	\$72,782 \$63,854 \$63,854 \$54,926	\$83,455 \$71,859 \$71,859 \$60,263	\$88,269 \$88,269 \$75,469 \$75,469 \$62,670	\$94,096 \$94,096 \$79,840 \$79,840 \$65,583
D2	Minimum  Maximum  Minimum  Maximum	N/A N/A N/A N/A N/A	\$48,875 \$45,924 N/A N/A	\$50,684 \$50,684 \$46,146	\$59,638 \$53,996 \$53,996 \$48,354 \$48,354	\$66,832 \$59,392 \$59,392 \$51,951 \$51,951	\$72,782 \$63,854 \$63,854 \$54,926 \$54,926	\$83,455 \$71,859 \$71,859 \$60,263	\$88,269 \$88,269 \$75,469 \$75,469 \$62,670	\$94,096 \$94,096 \$79,840 \$79,840 \$65,583
	Minimum Maximum Minimum	N/A N/A N/A N/A	\$48,875 \$45,924 N/A N/A	\$50,684 \$50,684 \$46,146	\$59,638 \$53,996 \$53,996 \$48,354	\$66,832 \$59,392 \$59,392 \$51,951	\$72,782 \$63,854 \$63,854 \$54,926	\$83,455 \$71,859 \$71,859 \$60,263	\$88,269 \$88,269 \$75,469 \$75,469 \$62,670	\$94,096 \$94,096 \$79,840 \$79,840 \$65,583
D2	Minimum  Maximum  Minimum  Maximum  Minimum	N/A N/A N/A N/A N/A	\$48,875 \$45,924 N/A N/A N/A	\$50,684 \$50,684 \$46,146 N/A N/A	\$59,638 \$53,996 \$53,996 \$48,354 \$48,354 \$42,712	\$66,832 \$59,392 \$59,392 \$51,951 \$51,951 \$44,511	\$72,782 \$63,854 \$63,854 \$54,926 \$54,926 \$45,998	\$83,455 \$71,859 \$71,859 \$60,263 \$60,263 \$48,666	\$88,269 \$88,269 \$75,469 \$75,469 \$62,670 \$62,670 \$49,870	\$94,096 \$94,096 \$79,840 \$79,840 \$65,583 \$65,583 \$51,327
D2	Minimum  Maximum  Minimum  Maximum  Minimum  Maximum  Maximum	N/A N/A N/A N/A N/A N/A \$37,070	\$48,875 \$45,924 N/A N/A N/A N/A \$37,070	\$50,684 \$50,684 \$46,146 N/A N/A \$37,070	\$59,638 \$53,996 \$53,996 \$48,354 \$48,354 \$42,712 \$37,070	\$66,832 \$59,392 \$59,392 \$51,951 \$51,951 \$44,511 \$37,070	\$72,782 \$63,854 \$63,854 \$54,926 \$54,926 \$45,998	\$83,455 \$71,859 \$71,859 \$60,263 \$60,263 \$48,666 \$37,070	\$88,269 \$88,269 \$75,469 \$75,469 \$62,670 \$62,670 \$49,870 \$37,070	\$94,096 \$94,096 \$79,840 \$79,840 \$65,583 \$65,583 \$51,327
D2	Minimum  Maximum  Minimum  Maximum  Minimum	N/A N/A N/A N/A N/A	\$48,875 \$45,924 N/A N/A N/A	\$50,684 \$50,684 \$46,146 N/A N/A	\$59,638 \$53,996 \$53,996 \$48,354 \$48,354 \$42,712	\$66,832 \$59,392 \$59,392 \$51,951 \$51,951 \$44,511	\$72,782 \$63,854 \$63,854 \$54,926 \$54,926 \$45,998	\$83,455 \$71,859 \$71,859 \$60,263 \$60,263 \$48,666	\$88,269 \$88,269 \$75,469 \$75,469 \$62,670 \$62,670 \$49,870	\$94,096 \$94,096 \$79,840 \$79,840 \$65,583 \$65,583 \$51,327
D2	Minimum  Maximum  Minimum  Maximum  Minimum  Maximum  Maximum	N/A N/A N/A N/A N/A N/A \$37,070	\$48,875 \$45,924 N/A N/A N/A N/A \$37,070	\$50,684 \$50,684 \$46,146 N/A N/A \$37,070	\$59,638 \$53,996 \$53,996 \$48,354 \$48,354 \$42,712 \$37,070	\$66,832 \$59,392 \$59,392 \$51,951 \$51,951 \$44,511 \$37,070	\$72,782 \$63,854 \$63,854 \$54,926 \$54,926 \$45,998	\$83,455 \$71,859 \$71,859 \$60,263 \$60,263 \$48,666 \$37,070	\$88,269 \$88,269 \$75,469 \$75,469 \$62,670 \$62,670 \$49,870 \$37,070	\$94,096 \$94,096 \$79,840 \$79,840 \$65,583 \$65,583 \$51,327
D2	Minimum  Maximum  Minimum  Maximum  Minimum  Maximum  Maximum	N/A N/A N/A N/A N/A N/A \$37,070	\$48,875 \$45,924 N/A N/A N/A N/A \$37,070	\$50,684 \$50,684 \$46,146 N/A N/A \$37,070 \$37,070	\$59,638 \$53,996 \$53,996 \$48,354 \$48,354 \$42,712 \$37,070	\$66,832 \$59,392 \$59,392 \$51,951 \$51,951 \$44,511 \$37,070 \$37,070	\$72,782 \$63,854 \$63,854 \$54,926 \$54,926 \$45,998 \$37,070	\$83,455 \$71,859 \$71,859 \$60,263 \$60,263 \$48,666 \$37,070 \$37,070	\$88,269 \$88,269 \$75,469 \$75,469 \$62,670 \$62,670 \$49,870 \$37,070	\$94,096 \$94,096 \$79,840 \$79,840 \$65,583 \$65,583 \$51,327
D2	Minimum  Maximum  Minimum  Maximum  Minimum  Maximum  Maximum	N/A N/A N/A N/A N/A N/A \$37,070	\$48,875 \$45,924 N/A N/A N/A N/A \$37,070	\$50,684 \$50,684 \$46,146 N/A N/A \$37,070 \$37,070	\$59,638 \$53,996 \$53,996 \$48,354 \$48,354 \$42,712 \$37,070	\$66,832 \$59,392 \$59,392 \$51,951 \$51,951 \$44,511 \$37,070	\$72,782 \$63,854 \$63,854 \$54,926 \$54,926 \$45,998 \$37,070	\$83,455 \$71,859 \$71,859 \$60,263 \$60,263 \$48,666 \$37,070 \$37,070	\$88,269 \$88,269 \$75,469 \$75,469 \$62,670 \$62,670 \$49,870 \$37,070	\$94,096 \$94,096 \$79,840 \$79,840 \$65,583 \$65,583 \$51,327
D2	Minimum  Maximum  Minimum  Maximum  Minimum  Minimum  Minimum  Minimum  Minimum  Minimum	N/A N/A N/A N/A N/A N/A \$37,070	\$48,875 \$45,924 N/A N/A N/A N/A \$37,070 \$37,070	\$50,684 \$50,684 \$46,146 N/A N/A \$37,070 \$37,070	\$59,638 \$53,996 \$53,996 \$48,354 \$42,712 \$37,070 \$37,070	\$66,832 \$59,392 \$59,392 \$51,951 \$44,511 \$37,070 \$37,070	\$72,782 \$63,854 \$63,854 \$54,926 \$54,926 \$45,998 \$37,070 \$37,070	\$83,455 \$71,859 \$71,859 \$60,263 \$60,263 \$48,666 \$37,070 \$37,070	\$88,269 \$88,269 \$75,469 \$75,469 \$62,670 \$62,670 \$49,870 \$37,070 \$37,070	\$94,096 \$94,096 \$79,840 \$79,840 \$65,583 \$65,583 \$51,327 \$37,070 \$37,070
D2 D1 AG	Minimum  Maximum  Minimum  Maximum  Minimum  Maximum  Minimum	N/A N/A N/A N/A N/A N/A S37,070 \$37,070	\$48,875 \$45,924 N/A N/A N/A N/A \$37,070	\$50,684 \$50,684 \$46,146 N/A N/A \$37,070 \$37,070	\$59,638 \$53,996 \$53,996 \$48,354 \$42,712 \$37,070 \$37,070	\$66,832 \$59,392 \$59,392 \$51,951 \$44,511 \$37,070 \$37,070	\$72,782 \$63,854 \$63,854 \$54,926 \$54,926 \$45,998 \$37,070 \$37,070	\$83,455 \$71,859 \$71,859 \$60,263 \$60,263 \$48,666 \$37,070 \$37,070	\$88,269 \$88,269 \$75,469 \$75,469 \$62,670 \$62,670 \$49,870 \$37,070	\$94,096 \$79,840 \$79,840 \$65,583 \$65,583 \$51,327 \$37,070 \$37,070
D2	Minimum  Maximum  Minimum  Maximum  Minimum  Minimum  Minimum  Minimum  Minimum  Minimum	N/A N/A N/A N/A N/A N/A \$37,070	\$48,875 \$45,924 N/A N/A N/A N/A \$37,070 \$37,070	\$50,684 \$50,684 \$46,146 N/A N/A \$37,070 \$37,070	\$59,638 \$53,996 \$53,996 \$48,354 \$42,712 \$37,070 \$37,070	\$66,832 \$59,392 \$59,392 \$51,951 \$44,511 \$37,070 \$37,070	\$72,782 \$63,854 \$63,854 \$54,926 \$54,926 \$45,998 \$37,070 \$37,070	\$83,455 \$71,859 \$71,859 \$60,263 \$60,263 \$48,666 \$37,070 \$37,070	\$88,269 \$88,269 \$75,469 \$75,469 \$62,670 \$62,670 \$49,870 \$37,070 \$37,070	\$94,096 \$94,096 \$79,840 \$79,840 \$65,583 \$65,583 \$51,327 \$37,070 \$37,070
D2 D1 AG	Minimum  Maximum  Minimum  Maximum  Minimum  Minimum  Minimum  Minimum  Minimum  Minimum	N/A N/A N/A N/A N/A N/A \$37,070 \$37,070	\$48,875 \$45,924 N/A N/A N/A N/A \$37,070 \$37,070	\$50,684 \$50,684 \$46,146 N/A N/A \$37,070 \$37,070 2012 Pay Ba 6 \$81,618	\$59,638 \$53,996 \$53,996 \$48,354 \$48,354 \$42,712 \$37,070 \$37,070	\$66,832 \$59,392 \$59,392 \$51,951 \$51,951 \$44,511 \$37,070 \$37,070	\$72,782 \$63,854 \$63,854 \$54,926 \$54,926 \$45,998 \$37,070 \$37,070 Pay) - Per 20	\$83,455 \$71,859 \$71,859 \$60,263 \$60,263 \$48,666 \$37,070 \$37,070	\$88,269 \$88,269 \$75,469 \$75,469 \$62,670 \$62,670 \$49,870 \$37,070 \$37,070	\$94,096 \$94,096 \$79,840 \$79,840 \$65,583 \$65,583 \$51,327 \$37,070 \$37,070
D2 D1 AG CPC	Minimum  Maximum  Minimum  Maximum  Minimum  Minimum  Minimum  Minimum  Minimum  Minimum	N/A N/A N/A N/A N/A N/A N/A \$37,070 \$37,070 4 \$65,077 \$48,205	\$48,875 \$45,924 N/A N/A N/A N/A \$37,070 \$37,070	\$50,684 \$50,684 \$46,146 N/A N/A \$37,070 \$37,070 2012 Pay Ba 6 \$81,618	\$59,638 \$53,996 \$53,996 \$48,354 \$48,354 \$42,712 \$37,070 \$37,070	\$66,832 \$59,392 \$59,392 \$51,951 \$51,951 \$44,511 \$37,070 \$37,070	\$72,782 \$63,854 \$63,854 \$54,926 \$54,926 \$45,998 \$37,070 \$37,070 Pay) - Per 20	\$83,455 \$71,859 \$71,859 \$60,263 \$60,263 \$48,666 \$37,070 \$37,070	\$88,269 \$88,269 \$75,469 \$75,469 \$62,670 \$62,670 \$49,870 \$37,070 \$37,070	\$94,096 \$94,096 \$79,840 \$79,840 \$65,583 \$65,583 \$51,327 \$37,070 \$37,070
D2 D1 AG	Minimum  Maximum Minimum  Maximum Minimum  Maximum Minimum  Maximum Minimum  Minimum	N/A N/A N/A N/A N/A N/A N/A N/A \$37,070 \$37,070 \$4 \$65,077 \$48,205	\$48,875 \$45,924 N/A N/A N/A N/A \$37,070 \$37,070 \$54,712	\$50,684 \$50,684 \$46,146 N/A N/A \$37,070 \$37,070 2012 Pay Ba 6 \$81,618 \$60,458	\$59,638 \$53,996 \$48,354 \$48,354 \$42,712 \$37,070 \$37,070 \$37,070	\$66,832 \$59,392 \$59,392 \$51,951 \$44,511 \$37,070 \$37,070 \$100 Locality 8 \$99,660 \$73,822	\$72,782 \$63,854 \$63,854 \$54,926 \$54,926 \$45,998 \$37,070 \$37,070 Pay) - Per 20 9 \$110,122 \$81,572	\$83,455 \$71,859 \$71,859 \$60,263 \$60,263 \$48,666 \$37,070 \$37,070	\$88,269 \$75,469 \$75,469 \$62,670 \$62,670 \$49,870 \$37,070 \$11 \$133,287 \$98,731	\$94,096 \$79,840 \$79,840 \$65,583 \$65,583 \$51,327 \$37,070 \$37,070
D2 D1 AG CPC	Minimum  Maximum  Minimum  Maximum  Minimum  Maximum  Minimum  Minimum  Minimum  Minimum  Minimum  Minimum  Maximum  Maximum  Maximum  Maximum  Maximum	N/A N/A N/A N/A N/A N/A N/A \$37,070 \$37,070 4 \$65,077 \$48,205	\$48,875 \$45,924 N/A N/A N/A N/A \$37,070 \$37,070 \$37,070 \$54,712	\$50,684 \$50,684 \$46,146 N/A N/A N/A \$37,070 \$37,070 2012 Pay Ba 6 \$81,618 \$60,458	\$59,638 \$53,996 \$48,354 \$48,354 \$42,712 \$37,070 \$37,070 ands (Excluded To See 199,189 \$66,807	\$66,832 \$59,392 \$59,392 \$51,951 \$51,951 \$44,511 \$37,070 \$37,070 \$100 Locality 8 \$99,660 \$73,822	\$72,782 \$63,854 \$63,854 \$54,926 \$54,926 \$45,998 \$37,070 \$37,070 Pay) - Per 20 9 \$110,122 \$81,572	\$83,455 \$71,859 \$71,859 \$60,263 \$60,263 \$48,666 \$37,070 \$37,070 \$126,641 \$93,808	\$88,269 \$88,269 \$75,469 \$75,469 \$62,670 \$49,870 \$37,070 \$37,070 \$11 \$133,287 \$98,731	\$94,096 \$94,096 \$79,840 \$65,583 \$65,583 \$51,327 \$37,070 \$37,070
D2 D1 AG CPC D3	Minimum  Maximum  Minimum  Maximum  Minimum  Maximum  Minimum  Minimum  Minimum  Minimum  Minimum  Minimum  Maximum  Maximum  Maximum  Maximum  Maximum	N/A N/A N/A N/A N/A N/A N/A N/A \$37,070 \$37,070 \$4 \$65,077 \$48,205 N/A N/A	\$48,875 \$45,924 N/A N/A N/A N/A \$37,070 \$37,070 \$37,070 \$54,712 \$54,712 \$54,712	\$50,684 \$50,684 \$46,146 N/A N/A N/A \$37,070 \$37,070 \$37,070 2012 Pay Ba 6 \$81,618 \$60,458 \$60,458 \$54,611	\$59,638 \$53,996 \$48,354 \$48,354 \$42,712 \$37,070 \$37,070 \$37,070 \$37,070 \$66,807 \$66,807 \$59,373	\$66,832 \$59,392 \$59,392 \$51,951 \$51,951 \$44,511 \$37,070 \$37,070 \$100 Locality 8 \$99,660 \$73,822 \$64,634	\$72,782 \$63,854 \$63,854 \$54,926 \$54,926 \$45,998 \$37,070 \$37,070 Pay) - Per 20 9 \$110,122 \$81,572 \$81,572	\$83,455 \$71,859 \$71,859 \$60,263 \$60,263 \$48,666 \$37,070 \$37,070 \$09 Contract 10 \$126,641 \$93,808 \$79,624	\$88,269 \$88,269 \$75,469 \$75,469 \$62,670 \$49,870 \$37,070 \$37,070 \$11 \$133,287 \$98,731 \$83,316	\$94,096 \$94,096 \$79,840 \$79,840 \$65,583 \$65,583 \$51,327 \$37,070 \$37,070 \$139,953 \$103,669 \$103,669 \$87,019
D2 D1 AG CPC	Minimum  Maximum  Minimum  Maximum  Minimum  Maximum  Minimum  Minimum  Minimum  Minimum  Minimum  Minimum	N/A N/A N/A N/A N/A N/A N/A S37,070 \$37,070 4 \$65,077 \$48,205 N/A N/A	\$48,875 \$45,924 N/A N/A N/A N/A \$37,070 \$37,070 \$37,070 \$54,712 \$54,712	\$50,684 \$50,684 \$46,146 N/A N/A N/A \$37,070 \$37,070 2012 Pay Ba 6 \$81,618 \$60,458 \$60,458	\$59,638 \$53,996 \$48,354 \$48,354 \$42,712 \$37,070 \$37,070 \$37,070 \$37,070 \$37,070 \$37,070 \$37,070	\$66,832 \$59,392 \$59,392 \$51,951 \$51,951 \$44,511 \$37,070 \$37,070 \$100 Locality 8 \$99,660 \$73,822 \$64,634	\$72,782 \$63,854 \$63,854 \$54,926 \$54,926 \$45,998 \$37,070 \$37,070 Pay) - Per 20 9 \$110,122 \$81,572 \$81,572	\$83,455 \$71,859 \$71,859 \$60,263 \$60,263 \$48,666 \$37,070 \$37,070 \$126,641 \$93,808 \$93,808	\$88,269 \$88,269 \$75,469 \$75,469 \$62,670 \$62,670 \$49,870 \$37,070 \$37,070 \$11 \$133,287 \$98,731 \$98,731	\$94,096 \$94,096 \$79,840 \$79,840 \$65,583 \$65,583 \$51,327 \$37,070 \$37,070 \$12 \$139,953 \$103,669 \$87,019
D2 D1 AG CPC D3	Minimum  Maximum  Minimum  Maximum  Minimum  Maximum  Minimum  Minimum  Minimum  Minimum  Maximum  Minimum  Maximum  Minimum	N/A N/A N/A N/A N/A N/A N/A N/A \$37,070 \$37,070 \$4 \$65,077 \$48,205 N/A N/A	\$48,875 \$45,924 N/A N/A N/A N/A \$37,070 \$37,070 \$37,070 \$54,712 \$54,712 \$54,712	\$50,684 \$50,684 \$46,146 N/A N/A N/A \$37,070 \$37,070 \$37,070 2012 Pay Ba 6 \$81,618 \$60,458 \$60,458 \$54,611	\$59,638 \$53,996 \$48,354 \$48,354 \$42,712 \$37,070 \$37,070 \$37,070 \$37,070 \$66,807 \$66,807 \$59,373	\$66,832 \$59,392 \$59,392 \$51,951 \$51,951 \$44,511 \$37,070 \$37,070 \$100 Locality 8 \$99,660 \$73,822 \$64,634	\$72,782 \$63,854 \$63,854 \$54,926 \$54,926 \$45,998 \$37,070 \$37,070 Pay) - Per 20 9 \$110,122 \$81,572 \$81,572	\$83,455 \$71,859 \$71,859 \$60,263 \$60,263 \$48,666 \$37,070 \$37,070 \$09 Contract 10 \$126,641 \$93,808 \$79,624	\$88,269 \$88,269 \$75,469 \$75,469 \$62,670 \$49,870 \$37,070 \$37,070 \$11 \$133,287 \$98,731 \$83,316	\$94,096 \$94,096 \$79,840 \$79,840 \$65,583 \$65,583 \$51,327 \$37,070 \$37,070 \$139,953 \$103,669 \$103,669 \$87,019
D2 D1 AG CPC D3 D2	Minimum  Maximum  Minimum  Maximum  Minimum  Maximum  Minimum  Minimum  Minimum  Minimum  Maximum  Minimum  Maximum  Minimum	N/A N/A N/A N/A N/A N/A N/A N/A \$37,070 \$37,070 \$4 \$65,077 \$48,205 N/A N/A	\$48,875 \$45,924 N/A N/A N/A N/A \$37,070 \$37,070 \$37,070 \$54,712 \$54,712 \$54,712	\$50,684 \$50,684 \$46,146 N/A N/A N/A \$37,070 \$37,070 \$37,070 2012 Pay Ba 6 \$81,618 \$60,458 \$60,458 \$54,611	\$59,638 \$53,996 \$48,354 \$48,354 \$42,712 \$37,070 \$37,070 \$37,070 \$37,070 \$66,807 \$66,807 \$59,373	\$66,832 \$59,392 \$59,392 \$51,951 \$51,951 \$44,511 \$37,070 \$37,070 \$100 Locality 8 \$99,660 \$73,822 \$64,634	\$72,782 \$63,854 \$63,854 \$54,926 \$54,926 \$45,998 \$37,070 \$37,070 Pay) - Per 20 9 \$110,122 \$81,572 \$81,572	\$83,455 \$71,859 \$71,859 \$60,263 \$60,263 \$48,666 \$37,070 \$37,070 \$09 Contract 10 \$126,641 \$93,808 \$79,624	\$88,269 \$88,269 \$75,469 \$75,469 \$62,670 \$49,870 \$37,070 \$37,070 \$11 \$133,287 \$98,731 \$83,316	\$94,096 \$94,096 \$79,840 \$79,840 \$65,583 \$65,583 \$51,327 \$37,070 \$37,070 \$139,953 \$103,669 \$103,669 \$87,019
D2 D1 AG CPC D3	Minimum  Maximum Minimum  Maximum Minimum  Maximum Minimum  Minimum  Minimum  Minimum  Maximum Minimum  Maximum Minimum  Maximum Minimum	N/A N/A N/A N/A N/A N/A N/A N/A \$37,070 \$37,070  4 \$65,077 \$48,205 N/A N/A N/A	\$48,875 \$45,924 N/A N/A N/A N/A \$37,070 \$37,070 \$37,070 \$54,712 \$54,712 \$50,302 N/A N/A	\$50,684 \$50,684 \$46,146 N/A N/A N/A \$37,070 \$37,070 2012 Pay Ba 6 \$81,618 \$60,458 \$60,458 \$54,611 \$48,764	\$59,638 \$53,996 \$48,354 \$48,354 \$42,712 \$37,070 \$37,070 \$37,070 \$37,070 \$37,070 \$37,070 \$37,070 \$37,070 \$37,070 \$37,070 \$37,070	\$66,832 \$59,392 \$59,392 \$51,951 \$44,511 \$37,070 \$37,070 \$1	\$72,782 \$63,854 \$63,854 \$54,926 \$54,926 \$45,998 \$37,070 \$37,070 Pay) - Per 20 9 \$110,122 \$81,572 \$70,447 \$70,447	\$83,455 \$71,859 \$71,859 \$60,263 \$60,263 \$48,666 \$37,070 \$37,070 \$126,641 \$93,808 \$79,624 \$79,624	\$88,269 \$88,269 \$75,469 \$75,469 \$62,670 \$62,670 \$37,070 \$37,070 \$11 \$1133,287 \$98,731 \$98,731 \$83,316 \$67,901	\$94,096 \$94,096 \$79,840 \$79,840 \$65,583 \$65,583 \$51,327 \$37,070 \$37,070 \$139,953 \$103,669 \$87,019 \$87,019
D2 D1 AG CPC D3 D2	Minimum  Maximum Minimum  Maximum Minimum  Maximum Minimum  Minimum  Minimum  Maximum Minimum  Maximum Minimum  Maximum Minimum  Maximum Minimum  Maximum Minimum	N/A N/A N/A N/A N/A N/A N/A N/A S37,070 \$37,070 \$4 \$65,077 \$48,205 N/A N/A N/A N/A N/A N/A	\$48,875 \$45,924 N/A N/A N/A N/A \$37,070 \$37,070 \$37,070 \$54,712 \$54,712 \$54,712 \$54,712 \$54,712	\$50,684 \$50,684 \$46,146 N/A N/A \$37,070 \$37,070 2012 Pay Ba 6 \$81,618 \$60,458 \$54,611 \$48,764	\$59,638 \$53,996 \$48,354 \$48,354 \$48,354 \$42,712 \$37,070 \$37	\$66,832 \$59,392 \$59,392 \$51,951 \$44,511 \$37,070 \$37,070 \$100 \$100 \$100 \$100 \$100 \$100 \$100 \$	\$72,782 \$63,854 \$63,854 \$54,926 \$54,926 \$45,998 \$37,070 \$37,070 Pay) - Per 20 9 \$110,122 \$81,572 \$70,447 \$70,447 \$59,321 \$48,196	\$83,455 \$71,859 \$60,263 \$60,263 \$48,666 \$37,070 \$37,070 \$126,641 \$93,808 \$79,624 \$79,624 \$65,439	\$88,269 \$88,269 \$75,469 \$75,469 \$62,670 \$62,670 \$49,870 \$37,070 \$37,070 \$37,070 \$11 \$133,287 \$98,731 \$98,731 \$83,316 \$67,901 \$67,901	\$94,096 \$94,096 \$79,840 \$79,840 \$65,583 \$65,583 \$51,327 \$37,070 \$37,070 \$12 \$139,953 \$103,669 \$87,019 \$87,019 \$70,370
D2  D1  AG  CPC  D3  D2  D1	Minimum  Maximum Minimum  Maximum Minimum  Maximum Minimum  Minimum  Minimum  Maximum Minimum  Maximum Minimum  Maximum Minimum  Maximum Minimum  Maximum Minimum	N/A N/A N/A N/A N/A N/A N/A N/A N/A \$37,070 \$37,070 \$44,205 N/A N/A N/A N/A N/A N/A N/A S37,070	\$48,875 \$45,924 N/A N/A N/A N/A \$37,070 \$37,070 \$37,070 \$5,73,861 \$54,712 \$50,302 N/A N/A	\$50,684 \$50,684 \$46,146 N/A N/A \$37,070 \$37,070 2012 Pay Ba 6 \$81,618 \$60,458 \$54,611 \$48,764	\$59,638 \$53,996 \$48,354 \$48,354 \$48,354 \$42,712 \$37,070 \$37,070 \$37,070 \$37,070 \$37,070 \$390,189 \$66,807 \$59,373 \$59,373 \$51,939 \$44,504	\$66,832 \$59,392 \$59,392 \$51,951 \$51,951 \$44,511 \$37,070 \$37,070 \$100 \$100 \$100 \$100 \$100 \$100 \$100 \$	\$72,782 \$63,854 \$63,854 \$54,926 \$54,926 \$45,998 \$37,070 \$37,070 Pay) - Per 20 9 \$110,122 \$81,572 \$70,447 \$70,447 \$59,321	\$83,455 \$71,859 \$60,263 \$60,263 \$48,666 \$37,070 \$37,070 \$126,641 \$93,808 \$79,624 \$79,624 \$65,439	\$88,269 \$88,269 \$75,469 \$75,469 \$62,670 \$62,670 \$49,870 \$37,070 \$37,070 \$11 \$133,287 \$98,731 \$98,731 \$83,316 \$67,901	\$94,096 \$94,096 \$79,840 \$79,840 \$65,583 \$65,583 \$51,327 \$37,070 \$37,070 \$12 \$139,953 \$103,669 \$87,019 \$87,019 \$70,370
D2  D1  AG  CPC  D3	Minimum  Maximum  Minimum  Maximum  Minimum  Maximum  Minimum  Minimum  Minimum  Maximum  Minimum  Maximum  Minimum  Maximum  Minimum  Maximum  Minimum  Maximum  Minimum  Maximum  Minimum	N/A N/A N/A N/A N/A N/A N/A N/A S37,070 \$37,070 \$4 \$65,077 \$48,205 N/A N/A N/A N/A N/A N/A	\$48,875 \$45,924 N/A N/A N/A N/A \$37,070 \$37,070 \$37,070 \$54,712 \$54,712 \$54,712 \$54,712 \$54,712	\$50,684 \$50,684 \$46,146 N/A N/A \$37,070 \$37,070 2012 Pay Ba 6 \$81,618 \$60,458 \$60,458 \$54,611 \$48,764 N/A	\$59,638 \$53,996 \$48,354 \$48,354 \$48,354 \$42,712 \$37,070 \$37	\$66,832 \$59,392 \$59,392 \$51,951 \$44,511 \$37,070 \$37,070 \$100 \$100 \$100 \$100 \$100 \$100 \$100 \$	\$72,782 \$63,854 \$63,854 \$54,926 \$54,926 \$45,998 \$37,070 \$37,070 Pay) - Per 20 9 \$110,122 \$81,572 \$70,447 \$70,447 \$59,321 \$48,196	\$83,455 \$71,859 \$71,859 \$60,263 \$60,263 \$48,666 \$37,070 \$37,070 \$09 Contract 10 \$126,641 \$93,808 \$79,624 \$79,624 \$65,439 \$51,255	\$88,269 \$88,269 \$75,469 \$75,469 \$62,670 \$62,670 \$49,870 \$37,070 \$37,070 \$37,070 \$11 \$133,287 \$98,731 \$98,731 \$83,316 \$67,901 \$67,901	\$94,096 \$94,096 \$79,840 \$79,840 \$65,583 \$65,583 \$51,327 \$37,070 \$37,070 \$12 \$139,953 \$103,669 \$70,370 \$70,370 \$70,370