

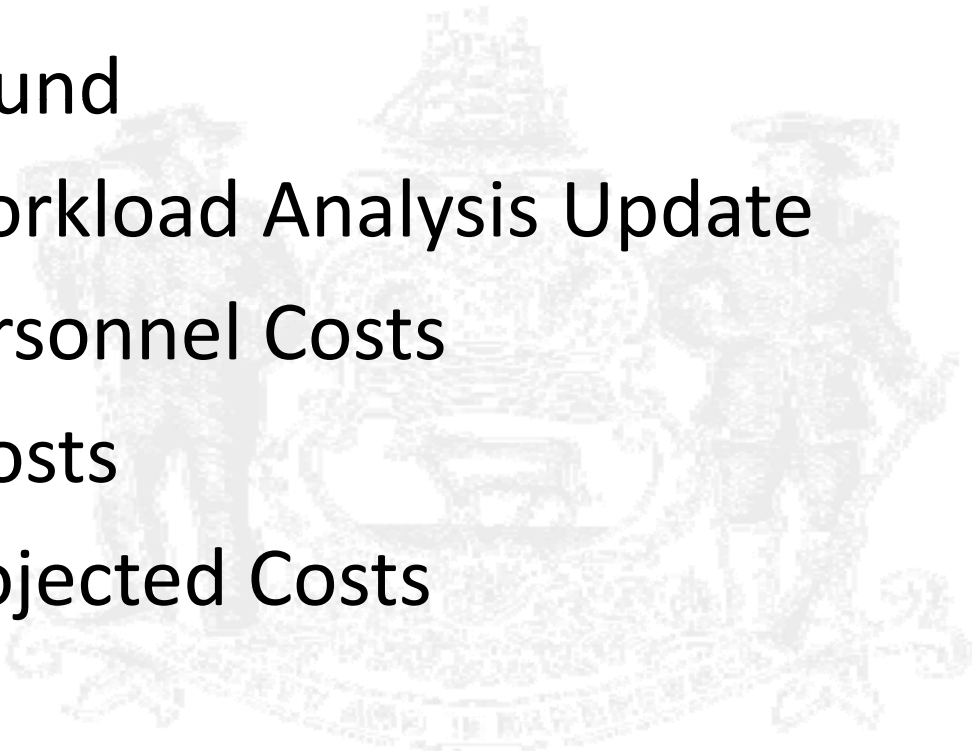


**Department of Natural Resources
and Environmental Control
Division of Air Quality**

2010 Workload Analysis Update

October 28, 2010

Overview

- Background
 - 2010 Workload Analysis Update
 - Total Personnel Costs
 - Other Costs
 - Final Projected Costs
- 

Background

- In 2007 the Air Quality Management Section presented a Workload Analysis to the Title V Fee Committee
- This Workload Analysis was used by the Title V Fee Committee to determine the revenue needed to fully support the Title V program as required by Section 502(b) of the 1990 Clean Air Act Amendments, 40 CFR 70.9(b), 7 Del. Code Chapter 60 Section 6097, and the Environmental Protection Agency guidance memoranda dated August 4, 1993 and July 21, 1994.

What Title V Fees Should Cover

- Title V fees cover all of the activities associated with administering a Title V permit including, but not limited to:
 - Title V and Synthetic Minor permit issuance, renewals, and modifications;
 - Natural Minor (Regulation No. 1102) permit issuance and modifications at Title V and Synthetic Minor sources;
 - Compliance activities at Title V and Synthetic Minor sources;
 - Enforcement activities at Title V and Synthetic Minor sources;

What Title V Fees Should Cover

- Stack testing and emissions monitoring at Title V and Synthetic Minor sources;
- Air monitoring associated with Title V and Synthetic Minor sources;
- SIP development and regulatory development associated with Title V and Synthetic Minor sources;
- Training associated with Title V and Synthetic Minor sources; and
- Overhead costs for equipment and personnel assigned to Title V and Synthetic Minor sources.

Current Title V Billing Period 2009-2011

- The results of the 2007 Workload Analysis were used to determine the Title V Fee Schedule for Calendar Years 2009-2011.
- This Fee Schedule can be found in 7 Del. Code Chapter 60 Section 6097.
- A new Fee Schedule must be developed and passed by the Delaware Legislature before June 30, 2011.

Workload Analysis Update

- In order to determine a Title V Fee Schedule for the 2012 – 2014 Title V Billing Period, the Division of Air Quality(DAQ) updated the 2007 Workload Analysis to reflect current needs.
- This updated Workload Analysis follows the same process as the original Workload Analysis.

Workload Analysis, Defined

- A Workload Analysis is a systematic process to evaluate an organization's current and future needs.
- DAQ focused the analysis upon organizational staffing and other infrastructure costs necessary to conduct business
- The analysis was inclusive of all DAQ activities, including Title V projects

Workload Analysis, Defined

- The Workload Analysis evaluates the time required to complete core responsibilities by DAQ Branches for Calendar Year 2010.
- The Workload Analysis then relates this time to a total cost to run the DAQ.
- The Workload Analysis was completed using the Vision-Mission-Objective model.

Vision-Mission-Objective Model

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- There are 10 steps to determining DAQ's total need in the Vision-Mission-Objective Model:
 1. Develop the Division Vision
 2. Develop Division Mission Statement Supporting the Vision
 3. Develop Branch Mission Statements Supporting the Division Mission
 4. Develop Branch Objectives to Achieve the Branch Mission

Vision-Mission-Objective-Model

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5. Assign Activities to Each Branch Objective to Accomplish Objective
6. Calculate and Assign Hours to Each Activity
7. Assign Activity and Associated Hours to a Position
8. Calculate the Cost Associated with the Activity Based Upon the Hourly Cost of the Position (Salary and OECs)
9. Calculate the Number of Full Time Employees (FTEs) and Total Cost to Complete Each Objective
10. Calculate the Number of FTEs and Total Cost to Achieve the Division Mission

Important Terms

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- **Additional Expenditures:** overhead costs including a portion of the salaries for the budget office and the criminal enforcement unit, contractual services including legal fees, and other program support costs.
- **Baseline Cost:** estimated CY 2010 total cost used to projected 2011 - 2013 annual costs
- **Full-Time Employee:** a state employee hired to occupy a full-time position equivalent to a maximum 37.5 hours per week or 1,950 hours per year.
- **Other Employee Costs (OECs):** additional state employee costs associated with pensions, health insurance, workers compensation, social security and other employee benefits.
- **Program Support Costs:** includes building rent, office supplies, fleet car rentals, computers, and other items needed to conduct daily business.

Important Terms

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- **Ancillary Costs:** projected office relocation expenses, office initial configuration costs and equipment modifications/upgrades.
- **Salary:** the cost of actual compensation paid directly to the employee.
- **Small Business Ombudsman (SBO) Costs:** billed expenses for salary, OECs, travel, and supplies to support the Small Business Ombudsman program.
- **Staffing Costs:** the sum of employee salaries and OECs.
- **Total Operating Costs:** the sum of all costs required to operate the division in a calendar year.

Things to Keep in Mind

- The total number of hours required to complete each activity were based upon a combination of staff interviews, timesheet analysis, and analysis of reports generated from the Permit Tracking System.
- Once the number of hours required to complete each activity was determined, an extensive peer review of the calculations was conducted to ensure data validity. This peer review included several meetings and an off-site retreat.

Things to Keep in Mind

- While the definition of FTEs is 1,950 hours, actual FTEs work an average of 1,650 hours per year with State Holidays Sick and Vacation Leave.
- The Workload Analysis reflects efficiency and cost saving measures such as Value Stream Mapping and Telecommuting.

DAQ Vision and Mission

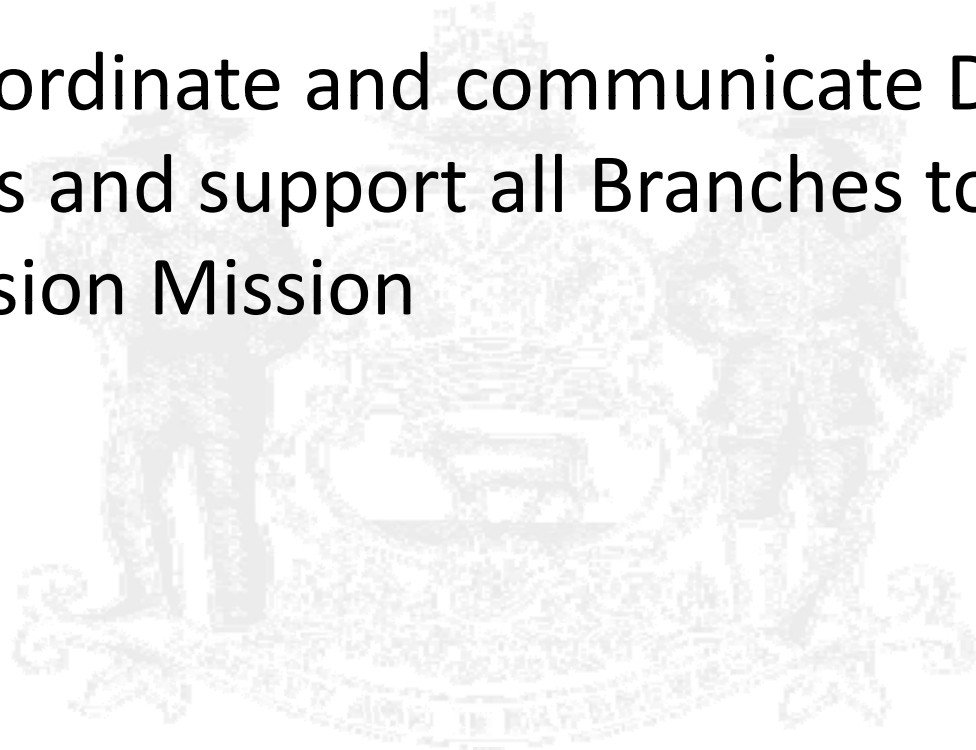
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- DAQ Vision:
 - Blue Skies Delaware; Clean Air for Life
- DAQ Mission
 - To continuously optimize Delaware's air quality by working with citizens and businesses to protect public health, welfare, and the environment.

Director's Office Mission

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- Plan, coordinate and communicate Division activities and support all Branches to achieve the Division Mission



Director's Office Objectives

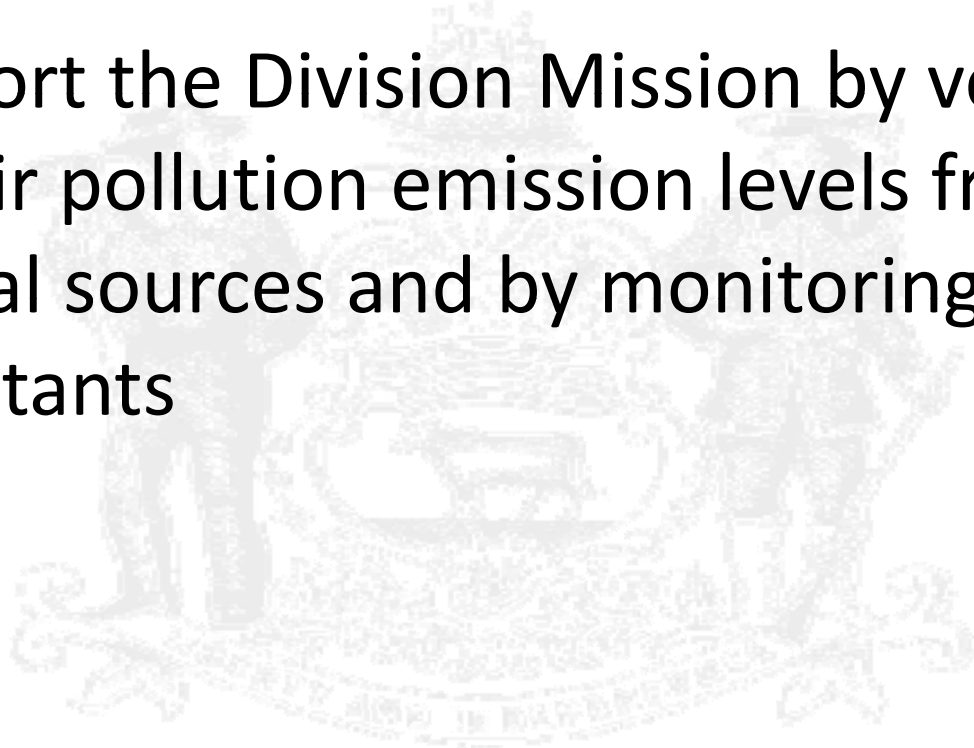
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1. Division coordination, communication and Branch support.
2. Provide financial oversight, grant, and budget management.
3. Coordinate with EPA, regional organizations, and other states.
4. Support Division education and outreach.
5. Provide modeling and analytical support.
6. Coordinate with the Legislature, the Department, and other state agencies.
7. Develop new initiatives and lead special projects for the Division.
8. Administer, facilitate, and support continuous improvement projects within the Division.
9. Develop and analyze policies.
10. Perform administrative functions.

Air Surveillance Branch Mission

(Page 9)

- To support the Division Mission by verifying actual air pollution emission levels from industrial sources and by monitoring outdoor air pollutants



Air Surveillance Branch Objectives

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1. Conduct engineering reviews of the plans and methods used for stack testing.
2. Review the plans for the installation and subsequent RATAs of CEMS.
3. Provide analytical/technical support for other Department/Division programs.
4. Measure ambient concentrations of selected air pollutants and selected meteorological parameters.
5. Ensure data quality through a comprehensive quality assurance and assessment program.
6. Report ambient concentrations of selected air pollutants and meteorological parameters.
7. Perform emission Assurance Monitoring.
8. Perform administrative functions.

Engineering & Compliance Branch

Mission (Page 9)

- To support the Division Mission by conducting a permitting, compliance and inspection program that protects the environment, public health and welfare, by promoting compliance flexibility, while responding effectively to the needs and concerns of the public, businesses, and other agencies.

Engineering & Compliance Branch

Objectives (Page 9)

1. Implement the State of Delaware Air Quality Regulations and the Clean Air Act (CAA), as amended.
2. Assist other Air Quality staff in the attainment and maintenance of Ambient Air Quality Standards.
3. Protect Delaware's citizens from the potential impact of hazardous air pollutants.
4. Reduce emissions that contribute to acid rain.
5. Assist other Divisions, and Agencies to protect public health, welfare, and the environment.
6. Aid communities and businesses: provide information, address air quality concerns, work towards and implement solutions.
7. Influence national and regional air quality policy.
8. Perform administrative functions.

Planning Branch Mission

(Page 10)

- To identify, develop and implement strategies to control air emissions in a way that continuously improves the ambient air quality of the state and protects public health, safety, welfare and the environment

Planning Branch Objectives

(Page 10)

1. Attain and maintain the ozone National Ambient Air Quality Standards (NAAQS).
2. Attain and maintain the fine particulate matter NAAQS.
3. Meet federal Class area visibility goals.
4. Identify and mitigate unacceptable risk from air toxics.
5. Identify and mitigate green house gas emissions that result in unacceptable impacts.
6. Maintain compliance with NAAQS for all attainment pollutants.
7. Identify and mitigate air emission impacts on other media.
8. Perform administrative functions.

Division of Air Quality

Blue Skies Delaware;
Clean Air for Life

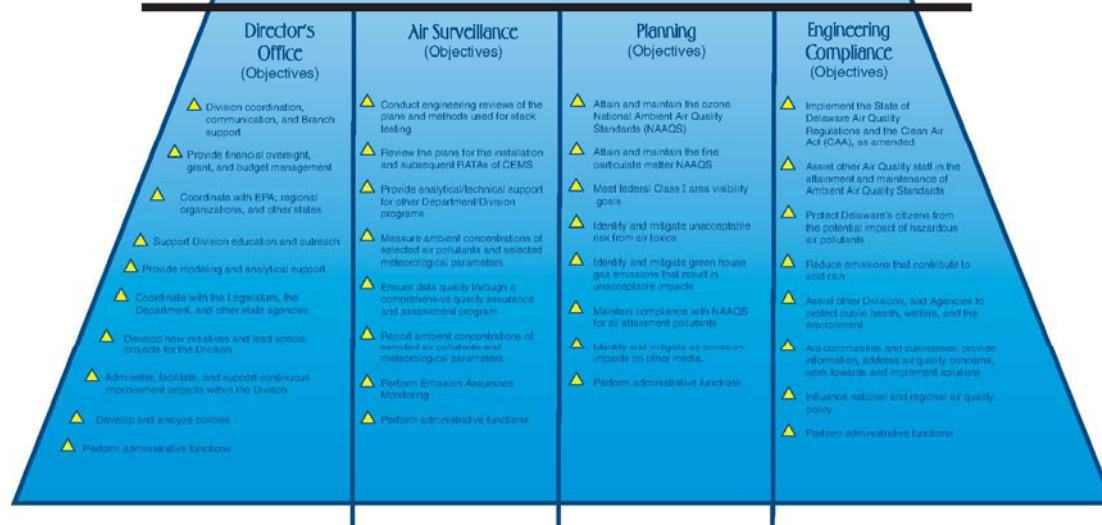
Our Mission: To continuously optimize Delaware's air quality by working with citizens and businesses to protect public health, welfare, and the environment

Director's Office: Mission Statement: Plan, coordinate and communicate Division activities and support all Branches to achieve the Division mission

Air Surveillance: Mission Statement: To support the Division mission by verifying actual air pollution emission levels from industrial sources And by monitoring outdoor air pollutants

Planning: Mission Statement: To identify, develop and implement strategies to control air emissions in a way that continuously improves the ambient air quality of the State and protects public health, safety, welfare and the environment

Engineering & Compliance: Mission Statement: To support the Division mission by conducting a permitting, compliance and inspection program that protects the environment, public health and welfare, by promoting compliance flexibility, while responding effectively to the needs and concerns of the public, businesses, and other agencies



Cost Estimation Period

(Page 12)

- The 2007 Workload Analysis was based upon a State Fiscal Year.
- In order to align this Workload Analysis Update with the Title V Billing Cycle, it has been based upon a calendar year.

Transition to Calendar Year

(Page 12)

- State FY 2010 salaries (valid July 1, 2009 - June 30, 2010) were increased 2.57% to account for the state FY 2011 pay reinstatement.
- Additionally, state FY 2010 Other Employee Costs (OECs) were increased 1.2% for the actual 2010 Consumer Price Index (CPI).

Transition to Calendar Year

(Page 12)

- These corrections established a salary and OEC baseline consistent with the actual employee costs on January 1, 2011.
- Using this baseline, employee costs for 2011 - 2013 were estimated based on a projected annual salary increase of 2.5% and a OECs adjustment equal to the average CPI (2.56%) over the past five years.

Transition to Calendar Year

(Page 12)

- To account for different pay and benefits rates during the six-month period between the state fiscal years and calendar years, projected salaries were actually increased 1.25% per year to reflect one-half of the annual salary increase and projected OECs were increased 1.28% per year to reflect one-half of the annual CPI (5-year average) adjustment.

Director's Office Needs

(Page 13)

- The Director's Office has been allocated 8.5 FTEs and currently reflects a 100% staffing level. One staff member is assigned duties, evenly divided, on the Director's staff and the Engineering and Compliance Branch.
- The Director's Office has identified **19,056.0** hours or **11.5** FTE's to complete all 10 objectives. The associated staffing costs are **\$844,544.50**.

Air Surveillance Branch Needs

(Page 15)

- The Air Surveillance branch is allocated 13 FTEs and has 1 vacancy. This reflects a 92% staffing level.
- The Air Surveillance Branch has identified **22,796.2** hours or **13.8** FTE's to complete all 8 objectives. The associated staffing costs are **\$961,598.42**.

Engineering & Compliance Branch Needs (Page 17)

- The Engineering and Compliance branch is allocated 24.5 FTEs and has 5 vacancies. This reflects a 79% staffing level. One staff member is assigned duties, evenly split, on the Director's staff and the Engineering and Compliance Branch.
- The Engineering & Compliance Branch has identified **45,588.8** hours **or 27.6** FTE's to complete all 8 objectives. The associated staffing costs are **\$2,093,109.34**.

Planning Branch Needs

(Page 19)

- The Planning Branch is allocated 23 FTEs and has 3 vacancies. This reflects an 87% staffing level.
- The Planning Branch has identified **42,914.0** hours or **26.0** FTE's to complete all 8 objectives. The associated staffing costs are **\$1,918,292.35**.

Needs Assessment Summary

(Page 21)

Branch /Unit	Allocated Positions	Needed Positions	Increase Above Allocation	Current Vacancies	Filled Positions	Net Increase Required
Director's Office	8.5	11.5	3.0	0	8.5	+3.0
Air Surveillance Branch	13.0	13.8	0.8	1.0	12.0	+1.8
Engineering and Compliance Branch	24.5	27.6	3.1	4.0	20.5	+7.1
Planning Branch	23.0	26.0	3.0	3.0	20.0	+6.0
Totals	69	78.9	9.9	8.0	61.0	+17.9

Needs Assessment Summary

(Page 21)

Division Office or Branch	Staffing Costs
Director's Office	\$844,544.50
Air Surveillance Branch	\$961,598.42
Engineering & Compliance Branch	\$2,093,109.34
Planning Branch	\$1,918,292.35
Total	\$5,817,544.60



Program Support Costs

(Page 21)

- To determine total operating costs, DAQ must project program support costs.
- Program support costs include building rent, office supplies, fleet car rentals, computers, and other items needed to conduct daily business.
- For CY 2008 and CY 2009 DAQ's program support costs were **\$1,268,729.65** and **\$1,008,730.20** respectively.
- To project future program support costs, the average program support cost for CY2008 and CY2009 was increased by the average (most recent 5 years of data were used) consumer price index adjustment.

Program Support Costs

(Page 22)

- The adjusted average program support costs reflect the cost to support 65.25 FTE's (average number of employees assigned during the 2008-2009 period).
- A **\$40,950** correction was added to the estimated baseline costs to reflect the additional costs for the additional **13.65** FTE's identified in the needs assessment. These costs are estimated at approximately \$3,000 per employee, per year.

Program Support Costs

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Actual 2008 Program Support Costs:	\$1,268,729.65
Actual 2009 Program Support Costs:	\$1,008,730.20
Average Program Support Costs CY 2008 and 2009:	\$1,138,729.93
Estimated Baseline Program Support Costs:	\$1,208,831.42



Other Support Costs

(Page 22)

- The 2007 Workload Analysis included additional expenditures:
 - Annual charge to AQMS from the Division of Air and Waste Management (DAWM) Director's Office.
 - Annual charge to AQMS from the Department of Natural Resources and Environmental Control (DNREC) Secretary's Office to support the Small Business Ombudsman program.
- Although DAQ is now a Division, the required support functions formerly accomplished by DAWM remain essential services and must be accounted for as additional support expenditures.
- These overhead costs vary on an annual basis and are difficult to predict.

Other Support Costs

(Page 22)

- In order to be conservative, we maintained the 2008 annual flat rate of **\$400,000**. This figure represented the maximum payment made over a six-year period (2002-2008).
- These costs include a portion of the salaries for the budget office and the criminal enforcement unit, contractual services including legal fees, energy costs for state owned facilities and other program support costs.
- The DNREC Secretary's Office costs were calculated by using the actual cost billed to DAQ in FY2010. These costs, **\$95,216.69** are used to directly support the Small Business Ombudsman (SBO) program. Additional funding above employee costs (travel, supplies, and other support) is included in the overall program support costs.

Ancillary Costs

(Page 23)

- Not considered in past reports, cost projections for 2011 - 2013 will include predicted expenses related to the DAQ relocation and needed upgrades.
- These costs (annual and one-time) are expected to occur over the 2011 – 2013 period.

Ancillary Costs

(Page 23)

Relocation & Transition Expenditures	Annual Costs	Total Cost (2011- 2013)
Dover Office Relocation	\$4,816.66	\$14,450.00
New Office Initial Set-Up Costs	\$41,666.66	\$125,000.00
Surveillance Equipment Upgrade	\$12,000.00	\$36,000.00
Total:	\$58,483.32	\$175,449.96



Projected Baseline Costs

(Page 24)

Year	Total Staffing Costs	Program Support Costs	Additional Support Services	SBO Support Services	Ancillary Costs	Total DAQ Costs
Baseline	\$5,817,544.60	\$1,208,831.42	\$400,000.00	\$95,216.69	0	\$7,521,592.71



Projected 2011-2013 Costs

(Page 24)

Year	Total Employee Costs	Program Support Costs	Additional Support Services	SBO Support Services	Ancillary Costs	Total DAQ Staffed Costs
Base	\$5,817,544.60	\$1,208,831.42	\$400,000.00	\$95,216.69	0	\$7,521,592.71
2011	\$5,890,472.16	\$1,239,777.50	\$400,000.00	\$96,406.90	\$58,483.32	\$7,685,139.88
2012	\$5,964,313.97	\$1,271,515.80	\$400,000.00	\$97,611.99	\$58,483.33	\$7,791,925.09
2013	\$6,030,134.16	\$1,303,303.70	\$400,000.00	\$98,832.14	\$58,483.33	\$7,890,753.33

Summary

- DAQ updated the 2007 Workload Analysis to reflect the total need for 2011-2013
- This analysis used the Vision-Mission-Objective Model to determine the total staffing cost
- Past expenditures and planned future expenses were also considered
- A total base year need of **\$7,521,592.71** was calculated and projected out to 2011-2013