



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

2016 COST RECOVERY STUDY

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Executive Summary

The 2016 Cost Recovery Study includes the latest cost and revenue data gathered for FYE 2015 (i.e., July 1, 2014 - June 30, 2015). The results of this 2016 Cost Recovery Study will be used as a tool in the preparation of the FYE 2017 budget, and for evaluating potential amendments to the District's Regulation 3: Fees.

The completed cost recovery analysis indicates that in FYE 2015 there continues to be a revenue shortfall, as overall direct and indirect costs of regulatory programs exceeded fee revenue. For FYE 2013 to 2015, the District is recovering approximately 81 percent of its fee-related activity costs. The overall magnitude of this cost recovery gap was determined to be approximately \$8 million. This cost recovery gap was filled using General Fund revenue received by the District from the counties' property tax revenue.

The 2016 Cost Recovery Study also addressed fee-equity issues by analyzing whether there is a revenue shortfall at the individual Fee Schedule level. It was noted that of the twenty-two different Fee Schedules for which cost recovery could be analyzed, four of the component Fee Schedules had fee revenue contributions exceeding total cost (3-year average).

Background

The District is responsible for protecting public health and the environment by achieving and maintaining health-based national and state ambient air quality standards, and reducing public exposure to toxic air contaminants, in the nine-county Bay Area region. Fulfilling this task involves reducing air pollutant emissions from sources of regulated air pollutants, and maintaining these emission reductions over time. In accordance with State law, the District's primary regulatory focus is on stationary sources of air pollution.

The District's air quality programs are primarily funded by revenue from regulatory fees, government grants and subventions, and county property taxes. Between 1955 and 1970, the District was funded entirely through property taxes. In 1970, the California Air Resources Board (CARB) and U.S. Environmental Protection Agency began providing grant funding to the District. After the passage of Proposition 13, the District qualified as a "special district" and became eligible for AB-8 funds, which currently make up the county revenue portion of the budget.

State law authorizes the District to impose a schedule of fees to generate revenue to recover the costs of activities related to implementing and enforcing air quality programs. On a regular basis, the District has considered whether these fees result in the collection of a sufficient and appropriate amount of revenue in comparison to the cost of related program activities.

In 1999, a comprehensive review of the District's fee structure and revenue was completed by the firm KPMG Peat Marwick LLP (*Bay Area Air Quality Management District Cost Recovery Study, Final Report: Phase One – Evaluation of Fee Revenues and Activity Costs; February 16, 1999*). The Study recommended an activity-based costing model, which has been implemented. Also, as a result of that Study, the District implemented a time-keeping system. These changes improved the District's ability to track costs by programs and activities. The 1999 Cost Recovery Study indicated that fee revenue did not nearly offset the full costs of program activities associated with sources subject to fees as authorized by State law. Property tax revenue (and in some years, fund balances) had consistently been used to close this cost recovery gap.

In 2004, the District's Board of Directors approved funding for an updated Cost Recovery Study that was conducted by the accounting/consulting firm Stonefield Josephson, Inc. (*Bay Area Air Quality Management District Cost Recovery Study, Final Report; March 30, 2005*). This Cost Recovery Study analyzed data collected during the three-year period FYE 2002 through FYE 2004. It compared the District's costs of program activities to the associated fee revenues, and analyzed how these costs are apportioned amongst the fee-payers. The Study indicated that a significant cost recovery gap existed. The results of this 2005 report and subsequent internal cost recovery studies have been used by the District in its budgeting process, and to set various fee schedules.

The latest study conducted by an outside consultant was completed in March, 2011 by Matrix Consulting Group (*Cost Recovery and Containment Study, Bay Area Air Quality Management District, Final Report; March 9, 2011*). The purpose of this Cost Recovery and Containment Study was to provide the District with guidance and opportunities for improvement regarding its organization, operation, and cost recovery/allocation practices. A Cost Allocation Plan was developed and implemented utilizing FYE 2010 expenditures. This study indicated that overall, the District continued to under-recover the costs associated with its fee-related services. In order to reduce the cost recovery gap, further fee increases were recommended to be adopted over a period of time in accordance with a Cost Recovery Policy to be adopted by the District's Board of Directors. Also, Matrix Consulting Group recommended that the District continue to design and implement the new Production System in order to facilitating cost containment through increased efficiency and effectiveness.

District staff initiated a process to develop a Cost Recovery Policy in May 2011, and a Stakeholder Advisory Group was convened to provide input in this regard. A Cost Recovery Policy was adopted by the District's Board of Directors on March 7, 2012. This policy specifies that the District should amend its fee regulation, in conjunction with the adoption of budgets for Fiscal Year Ending (FYE) 2013 through FYE 2016, in a manner sufficient to increase overall recovery of regulatory program activity costs to 85 percent. The policy also indicates that amendments to specific fee schedules should continue to be made in consideration of cost recovery analyses conducted at the fee schedule-level, with larger increases being adopted for the schedules that have the larger cost recovery gaps.

This 2016 Cost Recovery Study incorporates the accounting methodologies developed by Stonefield Josephson, Inc. and Matrix Consulting Group. The study includes the latest cost and revenue data gathered for FYE 2015 (i.e., July 1, 2014 - June 30, 2015). The results of the 2016 Cost Recovery Study will be used as a tool in the preparation of the FYE 2017 budget, and for evaluating potential amendments to the District's Regulation 3: Fees.

Legal Authority

In the post-Prop 13 era, the State Legislature determined that the cost of programs to address air pollution should be borne by the individuals and businesses that cause air pollution through regulatory and service fees. The primary authority for recovering the cost of District programs and activities related to stationary sources is given in Section 42311 of the Health and Safety Code (HSC), under which the District is authorized to:

- Recover the costs of programs related to permitted stationary sources
- Recover the costs of programs related to area-wide and indirect sources of emissions which are regulated, but for which permits are not issued
- Recover the costs of certain hearing board proceedings
- Recover the costs related to programs that regulate toxic air contaminants

The measure of the revenue that may be recovered through stationary source fees is the full cost of all programs related to these sources, including all direct program costs and a commensurate share of indirect program costs, unless otherwise funded. Such fees are valid so long as they do not exceed the reasonable cost of the service or regulatory program for which the fee is charged, and are apportioned amongst fee payers such that the costs allocated to each fee-payer bears a fair or reasonable relationship to its burden on, and benefits from, the regulatory system.

Air districts have restrictions in terms of the rate at which permit fees may be increased. Under HSC Section 41512.7, permit fees may not be increased by more than 15 percent in any calendar year.

Study Methodology

The 2016 Cost Recovery Study is based on the methodology established by Stonefield Josephson, Inc. and enhanced by Matrix Consulting Group. The methodology for determining regulatory program revenue and costs is summarized as follows:

Revenue

Revenue data is taken directly from the District's audited financial records. These records establish fee revenue in several categories, including Operating and New and Modified Permit Fees, Title V Permit Fees, Toxic Inventory Fees (AB2588), Asbestos Fees, Open Burning Fees and Hearing Board Fees. Revenue totals were then allocated to the appropriate District Fee Schedules. Revenue from a category

comprised of more than one Fee Schedule was allocated to the appropriate schedules based on detailed invoice data.

Certain fee schedules, and other types of fees, cannot by their nature be directly analyzed in terms of cost recovery because the fees cannot be related to specific activity data tracked on employee timesheets. The fees in this category are Schedule M emissions-based fees, Section 3-312 fees for alternative compliance plans, Section 3-311 fees for withdrawing banking emissions, and Section 3-327 fees for permit renewal processing. In order to provide for more meaningful comparisons of costs and revenue for facilities that pay these fees, these revenues were allocated on a percentage basis to other source category-based permit fee schedules for which cost recovery can be analyzed.

Schedule M revenue was allocated to the permit fee schedules based on a source-level analysis of the emission rates of pollutants contributing to fees under Schedule M (i.e. organic compounds, sulfur oxides, nitrogen oxides, and PM₁₀). The predominant source categories that pay Schedule M fees are combustion sources (Schedule B) and large miscellaneous industrial sources (Schedule G4). Section 3-312 revenue was allocated based on a source-level analysis of the sources within an alternative compliance plan that contribute to fees under Section 3-312. The predominant source categories that pay Section 3-312 fees are combustion sources (Schedule B), storage tanks (Schedule C), and miscellaneous industrial sources (Schedule G1). Section 3-311 fee revenue for withdrawing banking emissions was similarly allocated based on available data regarding the source categories associated with the banked emissions. Finally, Section 3-327 permit renewal processing fee revenue was allocated based on a facility-level analysis of permit renewal fees.

Costs

Costs are expenditures that can be characterized as being either direct or indirect. Direct costs can be identified specifically with a particular program or activity. Direct costs generally include wages and benefits, operating expenses, and capital expenditures that are used in direct support of those particular activities of the District (e.g. permit-related activities, grant distribution, etc).

Indirect costs are those necessary for the general operation of the District as a whole. Often referred to as “overhead”, these costs generally include accounting, finance, human resources, facility costs, information technology, executive management, etc.

Cost Allocation Model

The District has defined units (known as “Programs”) to encompass activities which are either dedicated to mission-critical functions such as permitting, rule-making, compliance assurance, sampling and testing, grant distribution, etc., or are primarily dedicated to support and administrative functions. The District has also defined revenue source categories (Billing Codes) for the permit fee schedules, grant revenue sources, and general support activities.

Employee work time is tracked by hour, or fraction thereof, using both Program and Billing Code detail. This time keeping system allows all costs allocatable to a revenue source to be captured on a level-of-effort basis.

Employee work time is allocated to activities within programs by billing codes (BC1-BC99), only two of which indicate general support. One of these two general support codes is specifically identified with permitting activities of a general nature, not specifically related with a particular Fee Schedule.

Operating and capital expenses are charged through the year to each Program, as incurred. In cost recovery, these expenses, through the Program's Billing Code profile, are allocated on a pro-rata basis to each Program's revenue-related activity. For example, employees working in grant programs (i.e., Smoking Vehicle, Mobile Source Incentive Fund, etc.) use specific billing codes (i.e., BC3, BC17, etc.), and all operating/capital expense charges are allocated pro-rata to those grant activities. Employees working in Permit programs (i.e., Air Toxics, Compliance Assurance, etc.) also use specific billing codes (i.e., BC8, BC21, BC29, etc.) and all operating/capital expense charges incurred by those programs are allocated pro-rata to those program's profiles of permit activities.

Direct costs for permit activities include personnel costs based on employee work time allocated to direct permit-related activities, and to general permit-related support and administrative activities (allocated on pro-rata basis). Indirect costs for permit activities include that portion of general support personnel costs and other "overhead" costs allocated pro-rata to permit fee revenue-related programs.

Study Results

Figure 1 shows a summary of overall regulatory program costs and revenue for FYE 2015. Figures 2 shows the details of program costs and revenue on a fee schedule basis for FYE 2015. Figure 3 shows the details of average program costs and revenue for the three-year period FYE 2013 through FYE 2015.

Discussion of Results

Figure 1 indicates that in FYE 2015 there continued to be a revenue shortfall, as the direct and indirect costs of regulatory programs exceeded fee revenue. The overall magnitude of the cost recovery gap was determined to be \$7.5 million for FYE 2015. This cost recovery gap was filled by using General Fund revenue received by the District from the counties.

Figure 2 shows that in FYE 2015 there were revenue shortfalls for most of the twenty-two unique Fee Schedules for which cost recovery can be analyzed. The revenue collected exceeded program costs for six fee schedules. These are Schedule B (Combustion of Fuel), Schedule C (Stationary Containers for the Storage of Organic Liquids), Schedule G-5 (Miscellaneous Sources), Schedule L (Asbestos Operations), Schedule N (Toxic Inventory Fees), and Schedule S (Naturally Occurring Asbestos).

Figure 3 shows that over a three-year period (FYE2013 through FYE2015) the revenue collected exceeded program costs for four fee schedules. These are Schedule C (Stationary Containers for the Storage of Organic Liquids), Schedule G-5 (Miscellaneous Sources), Schedule L (Asbestos Operations), and Schedule N (Toxic Inventory Fees).

The District has used the three-year averages shown in Figure 3 in evaluating proposed amendments to Regulation 3, Fees at the fee schedule level because longer averaging periods are less sensitive to year-to-year variations in activity levels that occur due to regulatory program changes affecting various source categories.

Conclusions

District staff has updated the analysis of cost recovery of its regulatory programs based on the methodology established by the accounting firm Stonefield Josephson, Inc. in 2005 and updated by Matrix Consulting Group in 2011. The analysis shows that fee revenue continues to fall short of recovering program activity costs. For FYE 2013 to 2015, the District is recovering approximately 81 percent of its fee-related activity costs. The overall magnitude of this cost recovery gap was determined to be \$8 million.

To reduce or stabilize expenditures, the District has implemented various types of cost containment strategies including establishing an on-line permitting system for high-volume source categories, maintaining unfilled positions, reducing of service and supply budgets, increasing employee contributions to retirement accounts, and others. In order to reduce the cost recovery gap, further fee increases will need to be evaluated in accordance with the Cost Recovery Policy adopted by the District's Board of Directors.



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2016 Cost Recovery Study

FIGURES

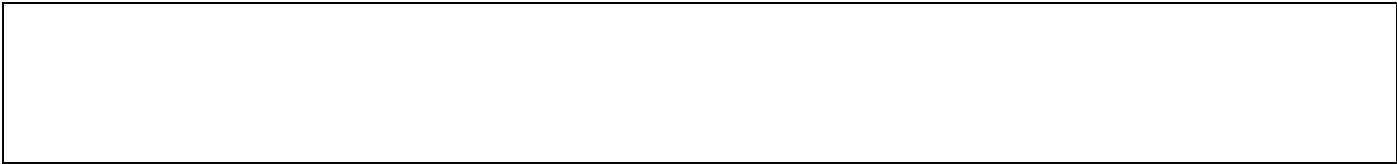
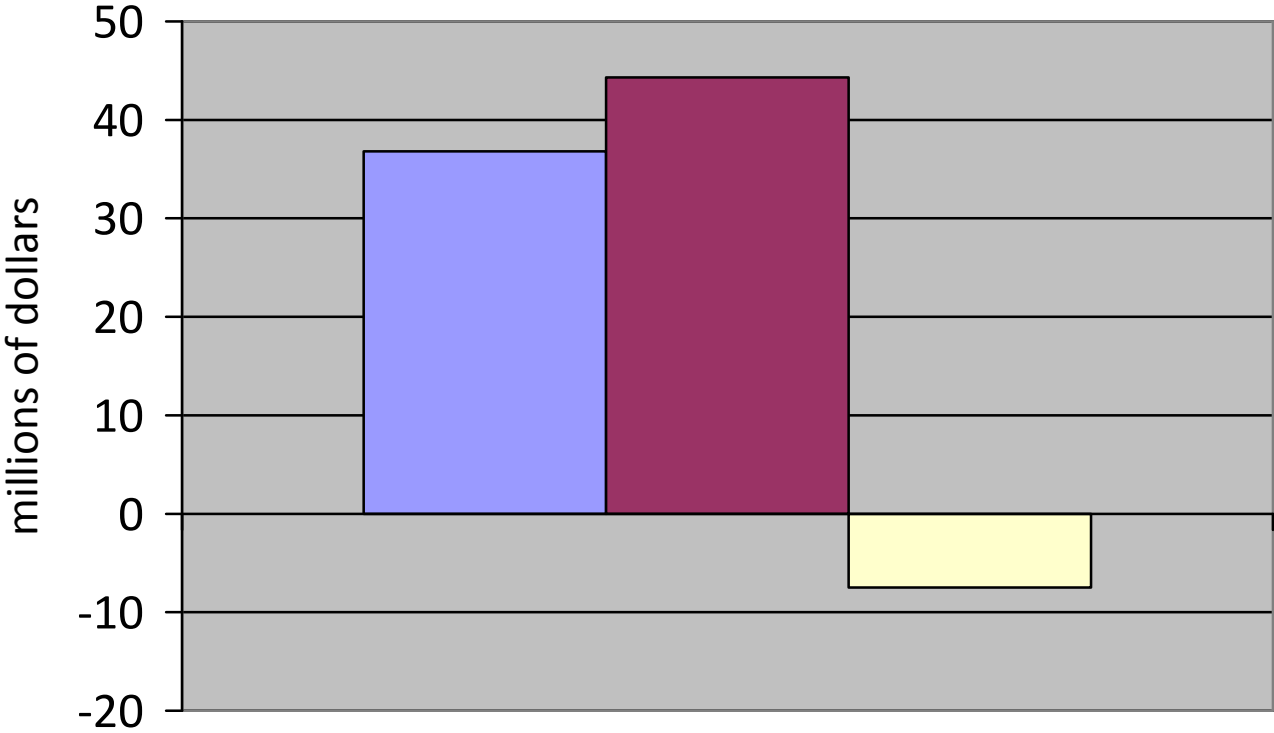


Figure 1: Total Fee Revenue and Program Costs, FYE 2015



Revenue	36.8
Costs	44.3
Gap	-7.5

Figure 2: Fee Revenue and Program Costs by Fee Schedule, FYE 2015

	A-Hearing Board	B - Combustion of Fuel	C - Storage Organic Liquid	D - Gasoline Dispensing / Bulk Terminals	E - Solvent Evaporation	F - Miscellaneous	G1 - Miscellaneous	G2 - Miscellaneous	G3 - Miscellaneous	G4 - Miscellaneous	G6 - Miscellaneous	H - Semiconductor	I - Drycleaners	K - Waste Disposal	L - Asbestos	N - Toxic Inventory (AB2588)	P - Major Facility Review (Title V)	Q - Soil Aeration	R-Registration	S - Naturally Occurring Asbestos	T - GreenHouse Gas	V - Open Burning	Total	
Revenues	31,765	7,162,760	2,049,862	4,290,618	2,253,031	1,522,675	1,968,615	499,573	595,923	794,264	666,450	172,453	18,837	127,830	3,164,950	544,244	4,365,356	-	238,331	82,453	1,971,136	160,726	32,681,851	
Allocation of Schedule M	-	1,497,142	95,507	3,053	25,525	161,074	58,411	66,604	12,302	345,397	24,524	-	-	120,093	-	-	-	-	-	-	-	-	-	2,409,631
Allocation of Reg 3- 312	-	491,023	31,324	1,001	8,372	52,828	19,157	21,844	4,035	113,281	8,043	-	-	39,387	-	-	-	-	-	-	-	-	-	790,295
Allocation of Reg 3- 327	-	306,212	76,017	198,001	139,515	177,207	51,193	10,019	2,143	1,396	1,246	4,337	2,601	3,290	-	-	-	-	-	-	-	-	-	973,177
Allocation of Reg 3- 311 (memo)	-	4,839	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,839
Total Revenue	31,765	9,457,137	2,252,711	4,492,673	2,426,442	1,913,784	2,097,376	598,040	614,403	1,254,337	700,263	176,790	21,438	290,601	3,164,950	544,244	4,365,356	-	238,331	82,453	1,971,136	160,726	36,854,954	
Direct Costs																								
Direct Labor	269,484	4,632,825	424,462	3,433,286	2,155,145	1,265,005	1,988,017	539,228	449,769	1,671,707	167,539	124,434	114,132	904,367	1,504,048	112,289	2,970,676	1,188	337,737	38,902	1,240,857	432,184	24,777,281	
Services and Supplies	31,915	348,906	23,475	244,426	125,407	67,773	140,963	41,078	30,344	153,545	9,980	6,422	7,618	57,918	114,388	8,551	198,547	84	18,132	2,631	95,124	30,299	1,757,527	
Capital Outlay	33,155	613,509	52,402	443,702	265,399	157,913	247,514	70,404	55,135	230,368	20,585	15,378	14,005	112,212	184,526	13,943	384,635	145	38,745	4,779	155,691	53,217	3,167,363	
Indirect Costs	282,105	2,698,956	249,854	2,004,136	1,253,281	701,883	1,148,365	323,938	277,490	1,036,321	88,192	70,384	69,584	564,807	942,129	62,372	1,720,146	792	189,679	24,897	698,025	262,061	14,669,397	
Total Costs	616,658	8,294,196	750,193	6,125,549	3,799,232	2,192,574	3,524,859	974,648	812,739	3,091,941	286,296	216,619	205,339	1,639,304	2,745,092	197,156	5,274,003	2,209	584,293	71,209	2,189,697	777,762	44,371,568	
Net Surplus/(Deficit)	(584,894)	1,162,941	1,502,518	(1,632,876)	(1,372,790)	(278,790)	(1,427,483)	(376,608)	(198,336)	(1,837,604)	413,967	(39,829)	(183,901)	(1,348,703)	419,858	347,088	(908,647)	(2,209)	(345,963)	11,243	(218,561)	(617,036)	(7,516,614)	
Cost Recovery	5.2%	114.0%	300.3%	73.3%	63.9%	87.3%	59.5%	61.4%	75.6%	40.6%	244.6%	81.6%	10.4%	17.7%	115.3%	276.0%	82.8%	0.0%	40.8%	115.8%	90.0%	20.7%	83.06%	

Figure 3: Fee Revenue and Program Costs by Fee Schedule, FYE 2013-2015, 3-Year Average

	A-Hearing Board	B - Combustion of Fuel	C - Storage Organic Liquid	D - Gasoline Dispensing / Bulk Terminals	E - Solvent Evaporation	F - Miscellaneous	G1 - Miscellaneous	G2 - Miscellaneous	G3 - Miscellaneous	G4 - Miscellaneous	G5 - Miscellaneous	H - Semiconductor	I - Drycleaners	K - Waste Disposal	L - Asbestos	N - Toxic Inventory (AB2588)	P - Major Facility Review (Title V)	Q - Soil Aeration	R-Registration	S - Naturally Occurring Asbestos	T - GreenHouse Gas	V - Open Burning	Total	
Revenues	21,096	6,596,487	1,974,630	4,067,778	1,986,655	1,384,967	1,836,988	442,003	550,891	759,425	615,743	163,734	26,297	105,349	2,774,385	567,835	3,900,162	-	202,921	58,580	1,541,545	104,667	29,682,137	
Allocation of Schedule M	-	1,400,445	89,339	2,855	23,876	150,671	54,638	62,302	11,507	323,088	22,940	-	-	112,337	-	-	-	-	-	-	-	-	-	2,253,999
Allocation of Reg 3- 312	-	441,232	70,730	3,235	10,600	40,722	39,571	19,337	10,373	76,046	16,851	546	-	25,542	-	-	-	-	-	-	-	-	-	754,785
Allocation of Reg 3- 327	-	277,159	71,584	191,504	150,873	164,865	47,520	9,114	1,973	1,294	1,156	3,978	3,093	3,125	-	-	-	-	-	-	-	-	-	927,237
Allocation of Reg 3- 311 (memo)	-	62,984	202	-	4,104	579	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	67,869
Total Revenue	21,096	8,778,306	2,206,486	4,265,372	2,176,108	1,741,804	1,978,717	532,755	574,744	1,159,854	656,689	167,712	29,935	246,353	2,774,385	567,835	3,900,162	-	202,921	58,580	1,541,545	104,667	33,581,359	
Direct Costs																								
Direct Labor	203,657	5,319,241	511,814	3,485,887	1,868,654	1,281,414	1,906,607	582,397	408,843	1,455,709	181,689	143,391	169,007	550,137	1,523,182	213,234	2,884,794	1,476	463,960	51,514	972,735	223,871	24,403,213	
Services and Supplies	20,875	491,097	38,743	309,347	136,963	94,766	165,846	53,428	33,489	174,639	14,066	10,675	14,266	43,131	144,506	21,761	248,438	127	31,535	4,422	113,378	16,395	2,181,893	
Capital Outlay	19,416	495,136	46,154	320,779	178,960	119,128	175,930	48,080	37,318	153,834	15,725	12,906	13,110	56,913	134,287	18,063	275,382	125	40,934	4,748	96,614	18,107	2,281,651	
Indirect Costs	178,110	2,709,172	264,143	1,781,648	997,309	626,021	979,565	300,727	227,449	802,252	86,162	73,804	90,212	313,867	866,750	98,460	1,435,971	844	239,217	30,146	489,710	134,560	12,726,096	
Total Costs	422,058	9,014,647	860,854	5,897,661	3,181,886	2,121,329	3,227,948	984,632	707,099	2,586,434	297,643	240,776	286,595	964,048	2,668,725	351,518	4,844,585	2,572	775,645	90,829	1,672,437	392,933	41,592,853	
Total Surplus/(Deficit)	(400,962)	(236,340)	1,345,632	(1,632,288)	(1,005,778)	(379,526)	(1,249,230)	(451,877)	(132,355)	(1,426,580)	359,046	(73,064)	(256,660)	(717,695)	105,660	216,317	(944,423)	(2,572)	(572,724)	(32,250)	(130,892)	(288,266)	(8,011,494)	
Cost Recovery	5.0%	97.4%	256.3%	72.3%	68.4%	82.1%	61.3%	54.1%	81.3%	44.8%	220.6%	69.7%	10.4%	25.6%	104.0%	161.5%	80.5%	0.0%	26.2%	64.5%	92.2%	26.6%	80.74%	