



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

2019 COST RECOVERY STUDY

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Executive Summary

The 2019 Cost Recovery Study includes the latest fee-related cost and revenue data gathered for FYE 2018 (i.e., July 1, 2017 - June 30, 2018). The results of this 2019 Cost Recovery Study will be used as a tool in the preparation of the FYE 2020 budget, and for evaluating potential amendments to the Air District's Regulation 3: Fees.

The completed cost recovery analysis indicates that in FYE 2018 there continued to be a revenue shortfall, as overall direct and indirect costs of regulatory programs exceeded fee revenue (see Figure 2). For FYE 2016 to 2018, the Air District is recovering approximately 83 percent of its fee-related activity costs (see Figure 3). 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 Air District from the counties' property tax revenue.

The 2019 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-three Fee Schedules for which cost recovery could be analyzed, seven of the component Fee Schedules had fee revenue contributions exceeding total cost.

Background

The Air 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 Air District's primary regulatory focus is on stationary sources of air pollution.

The Air 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 Air 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 Air District. After the passage of Proposition 13, the Air 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 Air 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 Air 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 Air 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 Air District implemented a time-keeping system. These changes improved the Air District's ability to track costs by programs and activities. The 1999 Cost Recovery Study indicated that fee revenue did not 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) have been used to close this gap.

In 2004, the Air 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 Air 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 Air District in its budgeting process, and to set various fee schedules.

In March 2011, another study was completed by the 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 Air 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 Air 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 Air District's Board of Directors. Also, Matrix Consulting Group reviewed and discussed the design and implementation of the new Production System which the Air District is developing in order to facilitate cost containment through increased efficiency and effectiveness.

Air 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 Air District's Board of Directors on March 7, 2012. This policy specifies that the Air District should amend its fee regulation, in conjunction with the adoption of budgets for Fiscal Year Ending (FYE) 2014 through FYE 2018, 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.

In February 2018, the Matrix Consulting Group completed an update of the 2011 cost recovery and containment study for the fiscal year that ended June 30, 2017. The primary purpose of this study was to evaluate the indirect overhead costs associated with the Air District and the cost recovery associated with the fees charges by the Air District. The project team evaluated the Air District's current programs to classify them as direct or indirect costs, as well as the time tracking data associated with each of the

different fee schedules. The study provided specific recommendations related to direct and indirect cost recovery for the Air District, as well as potential cost efficiencies.

This 2018 Cost Recovery Study incorporated the accounting methodologies developed by KPMG in 1999, Stonefield Josephson, Inc. in 2005 and Matrix Consulting Group in 2011. The study included the latest cost and revenue data gathered for FYE 2017 (i.e., July 1, 2016 - June 30, 2017). The results of the 2018 Cost Recovery Study were used as a tool in the preparation of the budgets for FYE 2019 and FYE 2020, and for evaluating potential amendments to the Air 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 Air District programs and activities related to stationary sources is given in Section 42311 of the Health and Safety Code (HSC), under which the Air 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. 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 on a facility in any calendar year.

Study Methodology

The methodology for determining regulatory program revenue and costs is summarized as follows:

Revenue

Revenue from all permit renewals and applications during the FYE 2018 was assigned to the appropriate Permit Fee Schedules. This is a continued improvement over prior years' process due to the more detailed data available in the New Production System.

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 include wages and benefits, operating expenses, and capital expenditures used in direct support of those particular activities of the Air District (e.g. permit-related activities, grant distribution, etc).

Indirect costs are those necessary for the general operation of the Air District as a whole. Often referred to as “overhead”, these costs include accounting, finance, human resources, facility costs, information technology, executive management, etc. Indirect costs are allocated to other indirect programs, using the reciprocal (double-step down) method, before being allocated to direct programs.

The Air 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 Air District has also defined revenue source categories (known as “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 timekeeping 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 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, operating and capital 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, operating and capital 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 2018. Figure 2 shows the details of program costs and revenue on a fee schedule basis for FYE 2018 by schedule. Figure 3 shows the details of average program costs and revenue for the three-year period FYE 2016 through FYE 2018 by schedule.

Discussion of Results

Figure 1 indicates that in FYE 2018 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 \$8.4 million for FYE 2018. This cost recovery gap was filled by General Fund revenue received by the Air District from the counties.

Figure 2 shows that in FYE 2018 there were revenue shortfalls for most of the twenty-three fee schedules for which cost recovery can be analyzed. For FYE 2018, the Air District is recovering approximately 84 percent of its fee-related activity costs. The revenue collected exceeded program costs for seven fee schedules. These are Schedule C (Stationary Containers for the Storage of Organic Liquids), Schedule F (Miscellaneous Sources), Schedule G-5 (Miscellaneous Sources), Schedule L (Asbestos Operations), Schedule N (Toxic Inventory Fees), Schedule R (Equipment Registration Fees), and Schedule X (Community Air Monitoring). The revenue collected was less than program costs for 16 fee schedules. These are Schedule A (Hearing Board), Schedule B (Combustion of Fuel), Schedule D (Gasoline Transfer at Gasoline Dispensing Facilities, Bulk Plants and Terminals), Schedule E (Solvent Evaporating Sources), Schedule G-1 (Miscellaneous Sources), Schedule G-2 (Miscellaneous Sources), Schedule G-3 (Miscellaneous Sources), Schedule G-4 (Miscellaneous Sources), Schedule H (Semiconductor and Related Operations), Schedule I (Dry Cleaners), Schedule K (Solid Waste Disposal Sites), Schedule P (Major Facility Review Fees), Schedule S (Naturally Occurring Asbestos Operations), Schedule T (Greenhouse Gas Fees), Schedule V (Open Burning), and Schedule W (Refinery Emissions Tracking),.

Figure 3 shows that over a three-year period (FYE 2016 through FYE 2018) the revenue collected exceeded program costs for five fee schedules. These are Schedule B (Combustion of Fuel), Schedule C (Stationary Containers for the Storage of Organic Liquids), Schedule F (Miscellaneous Sources), Schedule G-5 (Miscellaneous Sources), and Schedule X (Community Air Monitoring). The revenue collected was less than program costs for 18 fee schedules. These are Schedule A (Hearing Board), Schedule D (Gasoline Transfer at Gasoline Dispensing Facilities, Bulk Plants and Terminals), Schedule E (Solvent Evaporating Sources), Schedule G-1 (Miscellaneous Sources), Schedule G-2 (Miscellaneous Sources), G-3 (Miscellaneous Sources), G-4 (Miscellaneous Sources), Schedule H (Semiconductor and Related Operations), Schedule I (Dry Cleaners), Schedule K (Solid Waste Disposal Sites), Schedule N (Toxic Inventory Fees), Schedule P (Major Facility Review Fees), Schedule R (Equipment Registration Fees), Schedule S (Naturally Occurring Asbestos Operations), Schedule T (Greenhouse Gas Fees), Schedule V (Open Burning), and Schedule W (Refinery Emissions Tracking).

The Air 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

Air District staff has updated the analysis of cost recovery of its regulatory programs based on the methodology established by the accounting firms KPMG in 1999 and Stonefield Josephson, Inc. in 2005 and updated by Matrix Consulting Group in 2011 and in 2018. The analysis shows that fee revenue continues to fall short of recovering program activity costs. For FYE 2016 to 2018, the Air District is recovering approximately 83 percent of its fee-related activity costs. The overall magnitude of this cost recovery gap was determined to be \$8.6 million.

To reduce or stabilize expenditures, the Air District has implemented various types of cost containment strategies including developing an on-line permitting system for high-volume source categories, maintaining unfilled positions when feasible, and reducing service and supply budgets. 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 Air District's Board of Directors.



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FIGURES

Figure 1: Total Permit Fee Revenue, Costs and Gap for FYE 2018

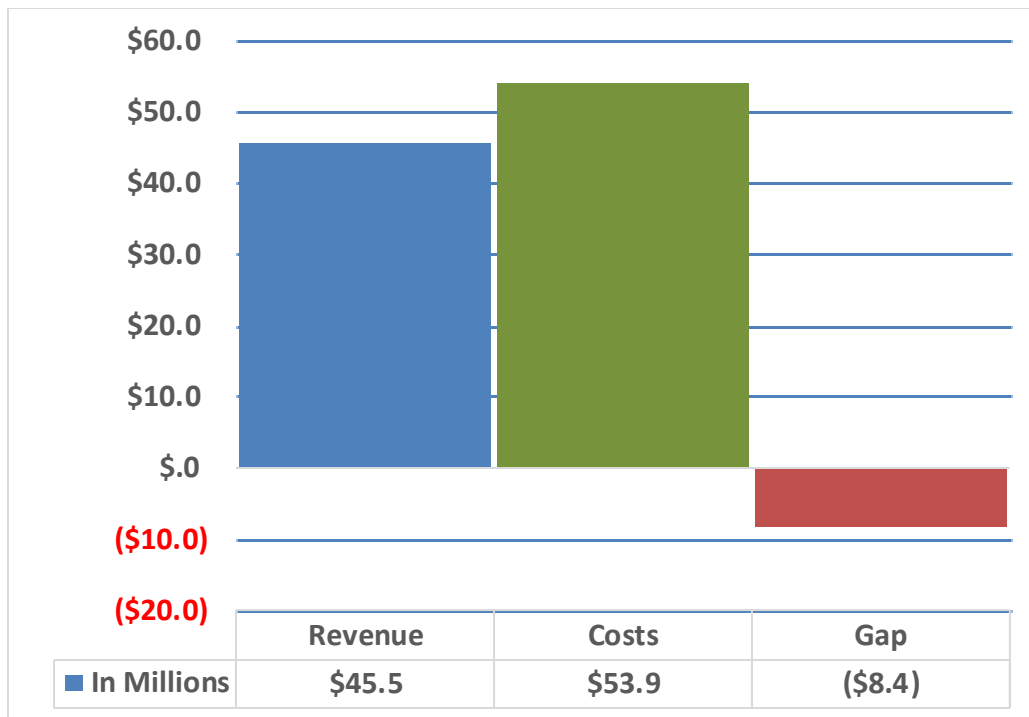


Figure 2: Fee Revenue and Program Costs by Fee Schedule, FYE 2018

	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)	R-Registration	S - Naturally Occurring Asbestos	T - GreenHouse Gas	V - Open Burning	W - Refinery Emissions Tracking	X - Community Air Monitoring	Total	
Revenues	15,420	8,160,216	2,219,282	5,738,487	2,740,259	2,037,248	2,433,789	633,490	602,022	1,149,535	860,846	204,965	4,417	150,343	3,996,162	327,051	5,466,189	262,633	70,632	2,746,114	169,643	139,950	1,050,716	41,179,410	
Schedule M	-	155,888	352,818	16,166	41,740	1,609,168	56,864	24,399	4,106	18,265	14,188	-	-	122,093	-	-	-	3,731	-	-	-	-	-	-	2,419,426
Reg 3- 312 - Bubble	-	375,583	73,553	3,369	18,817	29,744	39,865	17,702	10,876	170,069	16,171	604	13,612	-	-	-	-	128	-	-	-	-	-	-	770,092
Reg 3- 327 - Renewal Processing	-	393,418	34,697	219,556	208,855	137,041	47,692	8,576	1,870	1,667	1,689	4,430	2,233	3,475	-	-	-	12,614	-	-	-	-	-	-	1,077,812
Reg 3- 311 - Banking	-	5,688	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5,688
Total Revenue	15,420	9,090,793	2,680,351	5,977,578	3,009,671	3,813,201	2,578,210	684,166	618,874	1,339,536	892,893	210,000	20,261	275,911	3,996,162	327,051	5,466,189	279,106	70,632	2,746,114	169,643	139,950	1,050,716	45,452,429	
Direct Costs																									
Direct Labor	128,369	5,151,919	327,949	3,907,968	2,330,502	1,768,470	2,980,630	601,679	418,649	1,639,036	184,265	157,219	73,965	1,288,493	1,484,833	157,270	3,759,692	111,295	384,606	2,113,724	239,911	464,721	181,652	181,652	29,856,817
Services and Supplies	2,149	353,127	18,428	321,149	145,904	115,842	220,021	45,449	29,217	210,518	10,230	9,255	4,704	87,561	73,356	5,935	301,146	3,630	29,305	345,868	17,777	32,937	30,652	30,652	2,414,159
Capital Outlay	0	544,671	34,425	420,737	244,976	186,943	326,268	63,111	45,923	179,520	19,709	16,317	7,859	136,217	50,493	16,283	398,955	163	42,619	202,670	2,378	53,477	31,717	31,717	3,025,428
Indirect Costs	67,366	3,180,159	202,651	2,452,384	1,467,372	1,076,671	1,844,308	371,369	272,953	1,033,095	119,759	96,998	47,874	826,046	1,003,821	92,514	2,286,113	79,088	249,666	1,271,419	159,943	280,333	119,665	119,665	18,601,565
Total Costs	197,884	9,229,876	583,453	7,102,237	4,188,754	3,147,926	5,371,226	1,081,607	766,741	3,062,168	333,964	279,790	134,401	2,338,317	2,612,502	272,002	6,745,906	194,176	706,196	3,933,682	420,009	831,467	363,686	53,897,970	
Net Surplus/(Deficit)	(182,464)	(139,083)	2,096,898	(1,124,659)	(1,179,082)	665,275	(2,793,016)	(397,441)	(147,867)	(1,722,632)	558,929	(69,790)	(114,140)	(2,062,406)	1,383,660	55,049	(1,279,717)	84,929	(635,564)	(1,187,568)	(250,366)	(691,517)	687,030	(8,445,541)	
Cost Recovery	7.8%	98.5%	459.4%	84.2%	71.9%	121.1%	48.0%	63.3%	80.7%	43.7%	267.4%	75.1%	15.1%	11.8%	153.0%	120.2%	81.0%	143.7%	10.0%	69.8%	40.4%	16.8%	288.9%	84.33%	

Figure 3: Fee Revenue and Program Costs by Fee Schedule, FYE 2016-2018, 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)	R-Registration	S - Naturally Occurring Asbestos	T - GreenHouse Gas	V - Open Burning	W - Refinery Emissions Tracking	X - Community Air Monitoring	Total	
Revenues	11,207	7,832,230	2,155,158	5,188,776	2,513,951	1,844,921	2,394,396	578,639	691,777	1,089,817	713,703	155,815	5,649	141,990	3,970,394	263,686	5,229,622	218,414	78,560	2,503,751	161,046	231,975	1,090,943	39,066,423	
Schedule M	0	749,022	221,654	50,042	38,579	800,223	144,663	8,164	2,341	8,342	211,160	0	0	96,651	0	0	0	1,244	0	0	0	0	0	0	2,332,086
Reg 3- 312 - Bubble	0	504,531	134,793	30,815	6,272	9,915	13,288	5,901	3,625	56,690	5,390	201	4,537	0	0	0	0	43	0	0	0	0	0	0	776,001
Reg 3- 327 - Renewal Processing	0	195,103	43,422	212,608	215,114	147,648	47,274	7,277	623	898	862	6,386	1,694	4,131	0	0	0	4,205	0	0	0	0	0	0	887,245
Reg 3- 311 - Banking	0	5,562	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,562
Total Revenue	11,207	9,286,449	2,555,027	5,482,242	2,773,916	2,802,707	2,599,621	599,980	698,367	1,155,747	931,116	162,403	11,880	242,772	3,970,394	263,686	5,229,622	223,905	78,560	2,503,751	161,046	231,975	1,090,943	43,067,317	
Direct Costs	119,482	6,017,006	406,419	4,343,885	2,386,369	1,835,007	3,511,167	803,467	468,844	2,317,981	208,326	202,451	106,983	1,199,324	1,576,560	198,980	4,154,839	167,277	192,150	2,098,781	361,816	314,420	293,929		
Direct Labor	105,556	5,178,898	363,458	3,707,774	2,105,799	1,580,051	2,955,115	686,449	406,979	1,870,033	186,689	181,808	94,439	1,028,923	1,237,290	175,971	3,530,852	146,651	163,931	1,706,964	302,851	250,345	239,701		28,206,527
Services and Supplies	6,099	365,230	17,219	301,751	116,552	126,068	212,565	54,809	25,945	220,312	9,192	7,848	5,712	64,378	122,912	11,947	309,447	10,058	11,693	199,355	35,301	22,142	25,315		2,281,850
Capital Outlay	7,827	472,878	25,742	334,360	164,018	128,888	343,486	62,210	35,920	227,636	12,445	12,795	6,833	106,023	216,358	11,062	314,540	10,569	16,526	192,462	23,664	41,933	28,914		2,797,087
Indirect Costs	172,090	3,240,218	236,891	2,347,386	1,368,220	946,710	1,855,635	427,828	272,560	1,174,651	118,473	117,093	61,672	677,594	1,196,859	107,254	2,181,622	164,048	106,998	1,040,869	313,281	146,794	145,778		18,420,522
Total Costs	291,572	9,257,225	643,311	6,691,270	3,754,589	2,781,717	5,366,802	1,231,295	741,403	3,492,632	326,799	319,544	18,655	1,876,918	2,773,419	306,234	6,336,460	331,326	299,148	3,139,650	675,097	461,214	439,707	51,705,986	
Total Surplus/(Deficit)	(280,365)	29,224	1,911,716	(1,209,029)	(980,673)	20,990	(2,767,181)	(631,315)	(43,036)	(2,336,884)	604,318	(157,141)	(6,775)	(1,634,146)	1,196,976	(42,548)	(1,106,838)	(107,421)	(220,587)	(635,899)	(514,051)	(229,239)	651,235	(8,638,669)	
Cost Recovery	4%	100%	397%	82%	74%	101%	48%	49%	94%	33%	285%	51%	64%	13%	143%	86%	83%	68%	26%	80%	24%	50%	248%	83.29%	