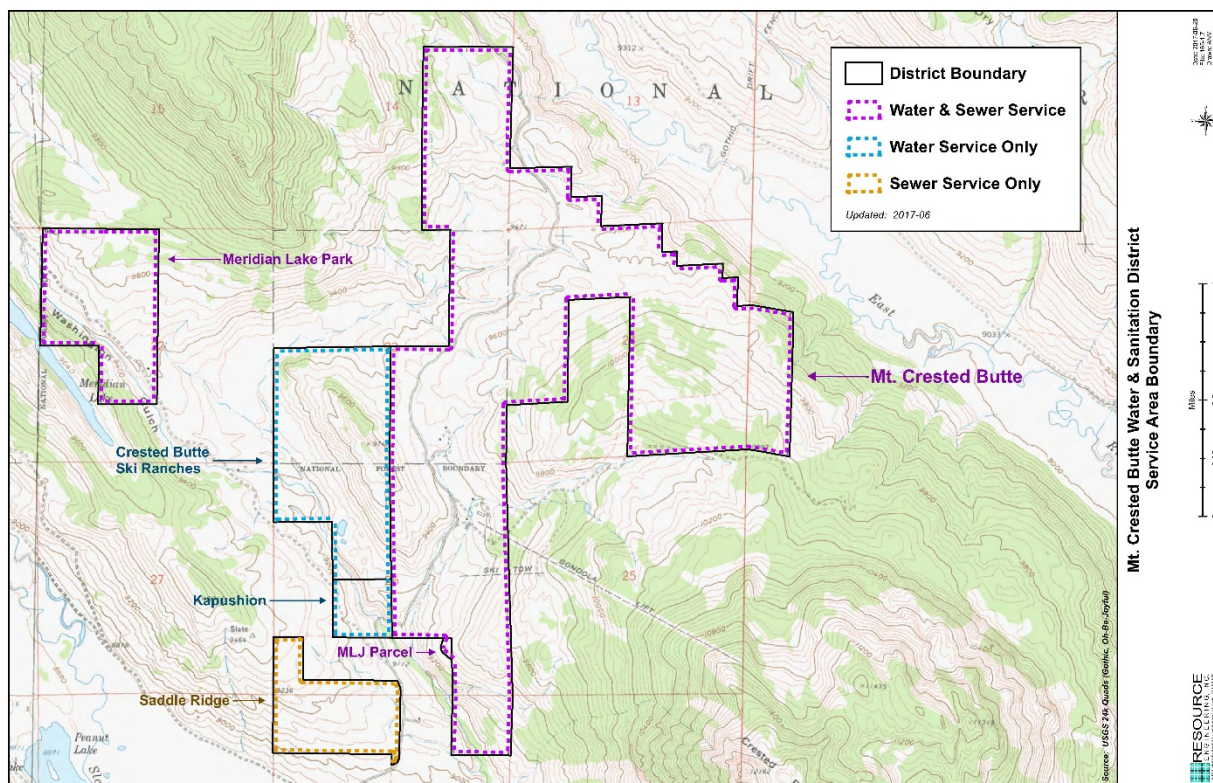


MEMO

To: Mike Fabbre, District Manager, Mt. Crested Butte Water and Sanitation District
From: Andrew Rheem, Senior Manager, Raftelis
 Brian Kirsch, Senior Consultant, Raftelis
Date: October 17, 2019
Re: Mt. Crested Butte Water and Sanitation District Meridian Lake Park Summary – Initial Findings

In 1995, the Mt. Crested Butte Water & Sanitation District (District) agreed to provide water and sewer service to a group of subdivisions collectively known as Meridian Lake Park (MLP) under terms agreed to with a Memorandum of Agreement (MOA) signed by the District and the master association for the MLP subdivisions, the Meridian Lake Park Corporation (MLPC). The agreement expanded the service area of the District to include MLP as well as the original boundaries around the Town of Mt. Crested Butte. Customers within the MLP are District customers, and the District’s service territory includes MLP, but for the purposes of this memo we will continue to differentiate the District and MLP. Figure 1 summarizes the District service area.

Figure 1. Mt. Crested Butte Water & Sanitation District Service Area



The District retained Raftelis to review historical District and MLP revenues, expenditures and assets and recommend an equitable methodology for cost and revenue allocation. The methodology is applied to historical financial results from 1996 through 2018 to quantify any amounts “due to” or “due from” the District and the MLP at the end of 2018. The purpose of this memorandum is to summarize the status of our analysis to date regarding the District’s allocation and recovery of costs from customers located within the MLP as well as the application of revenues received from customers within the MLP in accordance with the MOA. Furthermore, the methodology may be used moving forward beyond 2018 depending results of the discussions with District and MLPC regarding the “path forward”.

This memorandum documents our approach, methodology and preliminary results. It is our understanding that the District and MLPC may potentially apply the methodology on a going forward basis as well as using this work to inform discussions regarding the MOA and the relationship between the District and MLPC.

Raftelis has worked with District staff to complete analysis of a variety of District and MLP financial, asset, operational and customer data to support our analysis. As part of this analysis, we have identified MLP customer historical revenues and allocation of operating and capital costs amongst the MLP and other District customers. The analysis reflects the service arrangement and for example, while the MLP water service is provided by a separate water treatment facility, sewer flows are conveyed to a District-wide wastewater treatment facility for treatment and disposal. Additionally, there are common-to-all costs associated with District-wide personnel, facilities and capital costs which benefit all District customers including those located with MLP. Additionally, MLP customers have been charged the same rates as assessed to all District customers but also are assessed a surcharge applicable only to MLP customers. Our analysis has evaluated all of these and seeks to provide practical and defensible recommendations which equitably recognize the service and financial relationship while minimizing administrative costs associated with maintaining the methodology as may be required.

Raftelis’s goal in analyzing the financial relationship between the District and MLP is to identify a methodology that is defensible and fair to both parties. We have relied upon audited financial data and results and fixed asset records are used to identify costs complimented with historical customer information. That said, results are provided here with the caveat that we are working with the best available data, and in numerous cases estimates of specific values are used given the nature of a historical analysis spanning a period of more than 20 years.

Background

MLPC and the District executed a MOA in 1995 that was amended in 2013. The MOA outlines how the District is to provide water and wastewater services to the MLP and some guidance as to how MLP is to pay for the water facilities which were initially debt funded. The goal of Raftelis’s analysis is to ascertain whether the MLP is appropriately paying for District services under the MOA.

The 1995 MOA described how the District would provide water and wastewater services to the MLP, which included these major points:

- The District would issue bonds and construct a new water treatment plant (WTP) that would only serve the MLP and remain physically separate from the District’s existing water system.
- The District would construct the necessary conveyance infrastructure to deliver MLP wastewater to the District’s existing wastewater treatment plant (WWTP).

- The MLP would be responsible for repaying the District for any capital costs incurred which are for the sole benefit of the MLP (e.g., the WTP serving only MLP customers).

Since 1996, the District has charged MLP residents surcharge fees in addition to the monthly water and sewer fees paid by all District customers in order to recover direct MLP capital costs. The 2013 MOA amendment allowed for work on a shared water storage asset and to determine a cost-sharing allocation between parties for this capital project.

Existing District Tracking Data

The District has historically tracked what MLP “owes” the District for its capital by updating an Excel spreadsheet that serves as a “balance sheet” between the District and MLP, dating back to 1996. It tracks the MLP-related revenues and expenses, calculates the annual difference between revenues and expenses, and thus calculates the cumulative debt owed by one party to the other over time. This existing spreadsheet served as the starting point for the current analysis. It is discussed here as it has been the internal process by which the financial imbalance between the District and MLP has been calculated for many years.

The revenues that are included in the existing spreadsheet are:

- User fees (both water and wastewater)
- Bond funds
- Surcharge fees
- A second surcharge fee that was temporarily charged from 2010 to 2012
- Availability of service fees
- MLP tap fees (both water and wastewater)
- Property taxes
- Interest earnings within a “MLP money market” account
- Interest earnings (CD_ from 1996 Water and Sewer Revenue Bond debt service reserve)

The expenses included in the existing spreadsheet are:

- MLP direct operating expense
- MLP direct capital expense
- Series 1996 bond and debt service payments (for the construction of the WTP)

By 2017, the existing spreadsheet indicated that MLP had accrued a debt of \$1.2 million to the District.

In our opinion, the primary methodological flaw of the existing spreadsheet is that it applies every dollar paid by MLP residents to pay down the debt for MLP direct operating and capital expenses. The vast majority of the MLP’s direct capital expenses are for water assets. Within the “original” spreadsheet, all MLP revenues are used to pay for the direct capital expenses, including wastewater rate revenues and wastewater tap fees. District wastewater facilities are much more integrated to the District than water facilities, as all wastewater is conveyed to the single WWTP, treated and disposed of at a common facility.

Analytical Framework

Despite the apparent simplicity of MLP paying for its direct capital expenses, it is difficult to isolate direct capital expenses from the shared expenses that MLP customers must also participate in. For example, it is equitable for MLP customers to participate in General & Administrative operating costs, like all other District customers. It is also equitable that MLP customers participate in shared capital

costs, just as other District customers do (e.g., shared capital expenses include things such as District pickup trucks, offices, and wastewater treatment facilities). Rather than attempt to only consider direct MLP capital expenses and the specific revenues used to pay for such expenses (i.e., the MLP surcharge), we propose to consider all MLP revenues, all direct MLP expenses, and the proportion of District-wide costs in which MLP customers may be reasonably expected to participate.

District water and wastewater utility costs can most broadly be divided into capital costs and operating costs. Capital costs can be further subdivided into:

- District-only capital costs which do not directly benefit MLP customers. These costs include such things as the District's WTP and wastewater conveyance infrastructure that only serves non-MLP customers.
- MLP-only capital costs. These costs include such things as the MLP WTP and wastewater conveyance assets that only serve MLP.
- Shared capital costs. These costs include such things as administrative assets, WWTP assets, and shared wastewater conveyance assets.

The assignment of capital costs into these three categories can be achieved using the fixed asset records. Each capital asset's original cost, date in service, and description are contained in these records. Given this information, each asset can be sorted into one of the above categories. It is equitable that MLP customers have been excluded from participation in capital expenses not directly related to MLP, as they have received no direct benefit from those assets and have been surcharged for similar facilities which benefit only MLP customers. It is likewise equitable for non-MLP customers within the District be excluded from participation in MLP-only capital costs. Finally, it is equitable for all parties to share in the responsibility for shared capital costs. The method to apportion costs between MLP and non-MLP customers has been a focus of our analysis that balances administrative costs and burden, is practical to administer and maintain and that results in a fair and sustainable approach moving forward.

For operating costs, audited financial statements are the best source for recurring operating costs over the approximate 22-year period. For most of the audits in the study period, operating costs are categorized as General & Administrative, Water Operating, and Wastewater Operating. In some of the audited financial statements, MLP costs are identified within these categories, though when this happens these costs typically are relatively small, i.e., they appear to represent minor MLP-specific costs identified by the auditor.

We have identified three potential options for determining this proportion. Table 1 presents the various cost categories and the apportionment methods recommended for each cost category. Some of these apportionment methods are more appropriate for certain types of costs than others.

Table 1. Recommended Allocation Methods for Cost Categories

Cost Category	Recommended Allocation Methods
Operating Costs	
General & Admin	Accounts, SFEs
Water Operating	SFEs, Flow
Wastewater Operating	SFEs, Flow
Capital Costs	
MLP-only	N/A
Shared	SFEs, Flow
District-only	N/A

The first option is to use the percentage of District **accounts** which are MLP accounts. The advantage to this metric is that it may serve as a rough proxy for some types of costs and accounts are readily available within the historical 1996 through 2018 periods. For instance, each account is sent a bill each month, each account has a meter to be read and maintained, etc. The disadvantage to this method is that may overstate the MLP’s cost allocation. MLP customers tend to be single family residential homes. While non-MLP customers are also predominantly single-family homes, they also include large users such as hotels and restaurants, and the use of accounts to apportion costs lacks that distinction.

The second option is to use the percentage of the District’s Single-Family Equivalents (**SFEs**)¹ that are within MLP. SFEs are used as a standardized estimate for the demand a user will place on the system (e.g., a large hotel has a greater number of SFEs than a single-family home). Moreover, the District’s SFE methodology distinguishes between large single-family homes and small single-family homes. The advantage to using SFEs is that it represents a greater level of precision in estimating the amount of demand that users will place on the utility system. The District uses the number of SFEs of a new home or remodel/addition as the basis of charging tap fees, so there exists a comprehensive record not just of when new users join but also when existing users increase their expected demand. A disadvantage to using SFEs is that they represent the expected demand for water and wastewater services and not actual demand, so it is not the best proxy for all cost categories.

The third option is to use actual **water production (flow)** at the MLP plant and the District water treatment plant. The advantage to the use of water production is that it shows the actual water demands that the two groups place on the system. One disadvantage is an incomplete historical record that has usage data for only six years. A second disadvantage is that water usage does not necessarily equate to wastewater usage. Finally, many of the District’s operating costs are fixed and are dependent on being able to serve expected demand (e.g., if the two WTPs were to cut their annual production by 10%, water operating costs would decrease by substantially less than 10%).

Table 2 shows the average MLP percentage of use according to the three apportionment methods from 1996 to 2018. Each apportionment method produces reasonably consistent results over time. In part due to the consistent results for each method, and in part due to the missing water production data, the apportionment of costs is made using the average MLP percentage of the total for each metric with the balance percent allocated to non-MLP District customers.

¹ One SFE is equal to up to 2,000 square feet of residential space including up to one kitchen, three bedrooms, and two baths.

Table 2. MLP Average Percentage of Amounts (1996 – 2018)

	Accounts	SFEs	Flow
MLP	13.0%	7.0%	5.2%

Table 3 presents the apportioned operating costs, including any specific MLP-related operating costs within the financial statements². For the sake of brevity, Table 3 shows only the apportionment using SFEs. If operating costs were apportioned using accounts, MLP allocated operating costs would be nearly twice as large. If operating costs were apportioned using flow, operating costs would be about one-fourth less.

Table 3. MLP Operating Costs Apportioned Using SFEs

Year	General & Admin	Water	Wastewater	Total
1996	\$27,921	\$13,003	\$20,038	\$60,963
1997	19,046	17,021	16,885	52,952
1998	18,522	15,469	20,277	54,268
1999	20,014	17,192	22,997	60,203
2000	21,682	15,345	21,772	58,799
2001 (1)	0	34,842	41,653	76,495
2002	33,721	22,488	28,039	84,248
2003	35,030	35,187	25,000	95,217
2004	46,561	4,700	26,609	77,871
2005	46,605	33,790	43,039	123,434
2006	56,870	37,216	76,444	170,531
2007	59,071	62,924	42,337	164,332
2008	48,125	82,206	63,527	193,858
2009	44,703	96,969	68,367	210,039
2010	52,874	69,678	47,253	169,805
2011	53,576	76,079	48,202	177,857
2012	55,601	58,793	42,676	157,071
2013	66,053	71,672	37,354	175,080
2014	58,995	58,072	46,174	163,241
2015	63,959	83,236	45,987	193,182
2016 (1)	0	97,163	75,899	173,062
2017 (1)	0	93,965	99,733	193,698
2018	71,143	58,719	65,956	195,818

(1) Auditors in 2001, 2016, and 2017 included General & Admin costs within water and wastewater operating costs, and did not separately report costs as General & Admin. In 2018, a new auditor reverted to the practice of identifying General & Admin costs separate from water and wastewater operating costs.

Table 4 presents the identified capital costs for MLP, including the direct MLP capital costs as well as the shared capital costs that are apportioned using SFEs.

² Since 1996, the District has hired several different auditors, and the formats and information contained within the financial statements change over time. This likely accounts for some of the variability observed in the relative costs over time.

Table 4. MLP Capital Costs Apportioned Using SFEs

Year	MLP-only Capital	Shared Capital	Total
1996	\$974,196	\$36,163	\$1,010,359
1997	337,962	57,271	395,233
1998	14,829	17,888	32,717
1999	0	20,914	20,914
2000	24,490	16,200	45,690
2001	0	89,470	89,470
2002	0	3,926	3,926
2003 (1)	0	526,158	526,158
2004	0	4,549	4,549
2005	0	7,793	7,793
2006	0	7,868	7,868
2007	0	13,975	13,975
2008	1,819,952	7,788	1,827,740
2009	16,593	1,561	18,153
2010	0	37,428	37,428
2011	0	30,711	30,711
2012	0	13,359	13,359
2013	47,310	6,881	54,191
2014	15,914	4,028	19,942
2015	0	37,351	37,351
2016	6,690	17,388	24,078
2017	1,898,501	90,195	1,988,696
2018	0	89,867	89,867
Total	\$5,161,437	\$1,138,734	\$6,300,171

(1) This amount represents the allocated capital cost of the WWTP expansion project for which the Series 2001 Sewer GO Bond was issued.

Conclusions and Recommendations

Table 5 shows MLP’s cumulative “debt” as of 2018 based upon whether operating and capital costs are apportioned using accounts, SFEs, or water usage. The full balance sheets for each of the three apportionment methods are attached as Appendices 1 and 2.

Table 5. Cumulative (1996 – 2018) Cost Ranges for Recommended Allocation Methods

Cost Category	Low Allocation Method	High Allocation Method	Low		High
Operating Costs					
General & Admin	SFEs	Accounts	\$900,073	to	\$1,647,167
Water Operating	Flow	SFEs	1,085,613	to	1,169,175
Wastewater Operating	Flow	SFEs	804,615	to	1,029,174
Capital Costs					
MLP-only	N/A	N/A	5,161,437		5,161,437
Shared	Flow	SFEs	847,283	to	1,138,734
District-only	N/A	N/A	0		0
Total Bond Payments (1)	Flow	SFEs	2,706,051	to	2,824,295
Total Costs / Balances					
Total MLP Revenues (1996 – 2018) (2)			8,503,531	to	8,596,007
Total Allocated MLP Costs (1996 – 2018)			<u>11,505,072</u>	to	<u>12,969,982</u>
MLP Balance Range at the end of 2018			(\$3,001,541)	to	(\$4,373,975)

- (1) Series 1996 Water and Sewer Revenue Bonds for inclusion of MLP and Series 2001 Sewer GO Bond for WWTP expansion anticipated to be retired in 2021.
- (2) MLP revenues include revenues from the Series 2001 Sewer GO Bond issuance. The amount attributed to MLP depends on the allocation method, and whether it is allocated by Flow (low estimate) or SFEs (high estimate).

It should be stressed again that the goal in this study was to determine a methodology that is fair and impartial to both sides in order to quantify the financial relationship between the District and MLP from 1996 through 2018. Attempts to remedy this imbalance in the short term will be burdensome for MLP customers although non-MLP District customers have greatly extended themselves financially to provide what are essentially loans to MLP customers at 0% interest. We will discuss potential solutions moving forward as this study continues. The District recognizes that a one-time payment may be too onerous for MLP customers. At the same time, there has been an impact to all District rate-payers and the District WTP is facing a capital reinvestment cycle and debt is being evaluated to fund a portion of those capital improvements.

Next Steps

1. Discuss preliminary findings during a joint meeting with the District Board, the MLPC Board, and the public at a date to be determined.
2. Pause for 30 to 60 days to allow for MLP representatives to review study findings and results and evaluate options for a path forward.
3. Determine an equitable, fair and balanced approach to address the financial discrepancy reflected during the 1996 through 2018 period so that non-MLP and MLP District customers can move forward.

MLP Revenues and Expenses
Apportionment Resulting in Low Estimate of MLP Balance

Year	Bond Funds	User Fees	Surcharge Fees	Surcharge \$25 Fee	A/S Fees	MLP Tap Fees	Property Taxes	MLP MM Interest	CD Reserve Interest	MLP Operating Expenses	MLP Bond P&I	Shared Debt P&I	MLP Direct Capital	MLP Allocated Capital	Variance	Cumulative Variance
1996	\$1,207,600	\$0	\$63,036	\$0	\$15,624	\$1,891	\$39,710	\$0	\$0	\$52,506	\$46,379	\$0	\$974,196	\$26,907	\$227,872	\$227,872
1997	0	11,913	97,842	0	21,243	30,671	41,993	0	10,506	44,274	124,508	0	337,962	42,613	(335,188)	(107,316)
1998	0	13,521	87,929	0	27,593	67,895	42,511	0	7,823	45,119	122,573	0	14,829	13,310	51,441	(55,875)
1999	0	15,052	69,799	0	26,084	77,377	45,249	0	7,571	49,917	120,525	0	0	15,561	55,129	(745)
2000	0	18,879	70,471	0	32,377	270,608	42,582	0	7,503	49,299	123,388	0	29,490	12,054	228,190	227,444
2001	268,841	4,847	67,335	0	30,756	81,603	50,633	0	16,653	56,917	120,938	955	0	66,571	275,290	502,734
2002	0	15,123	78,058	0	28,675	31,004	56,920	0	3,537	71,316	123,438	17,622	0	2,922	(1,980)	500,755
2003	0	21,756	78,017	0	29,967	112,676	70,448	0	3,167	88,818	120,605	20,349	0	391,492	(305,233)	195,522
2004	0	39,570	77,727	0	29,362	146,354	65,348	3,742	2,243	72,263	122,690	20,428	0	3,384	145,581	341,103
2005	0	62,291	77,436	0	28,480	26,205	74,696	5,599	3,110	114,342	124,450	20,402	0	5,798	12,824	353,927
2006	0	69,053	78,234	0	28,905	102,726	72,074	9,293	5,214	161,670	125,875	20,368	0	5,854	51,732	405,659
2007	0	74,463	77,688	0	28,882	53,996	97,438	8,932	6,582	154,971	121,675	20,327	0	10,398	40,611	446,269
2008	0	78,873	78,198	0	29,182	9,206	112,885	3,984	3,984	181,605	122,775	20,383	1,819,952	5,795	(1,834,199)	(1,387,929)
2009	0	80,663	77,654	0	28,100	27,907	91,491	3,962	2,988	198,367	122,975	20,407	16,593	1,161	(46,738)	(1,434,667)
2010	0	80,663	77,872	53,675	28,163	0	86,381	1,950	1,694	159,770	122,875	20,285	0	27,849	(381)	(1,435,048)
2011	0	87,602	77,799	53,675	27,970	21,489	95,858	263	1,600	168,308	123,375	20,434	0	22,851	31,288	(1,403,761)
2012	0	91,301	77,364	53,675	27,201	7,356	77,652	1,097	1,347	148,142	127,705	20,314	0	9,940	30,892	(1,372,868)
2013	0	93,517	77,311	0	27,821	5,694	78,904	1,624	524	167,888	345,553	20,216	47,310	5,120	(300,691)	(1,673,560)
2014	0	94,157	77,365	0	27,721	0	79,187	1,331	0	153,384	0	20,389	15,914	2,997	87,077	(1,586,483)
2015	0	95,532	77,582	0	27,920	42,450	79,799	1,813	0	183,140	0	20,165	0	27,791	93,998	(1,492,484)
2016	0	101,717	77,328	0	27,589	32,452	77,094	2,427	0	128,768	0	20,213	6,690	12,937	149,999	(1,342,486)
2017	0	106,662	77,364	0	27,857	64,545	81,533	1,864	0	144,122	0	20,242	1,898,501	67,110	(1,770,150)	(3,112,636)
2018	0	115,028	77,255	0	28,805	82,813	87,259	2,447	0	195,395	0	20,251	0	66,866	111,095	(3,001,541)

MLP Revenues and Expenses
Apportionment Resulting in High Estimate of MLP Balance

Year	Bond Funds	User Fees	Surcharge Fees	Surcharge \$25 Fee	A/S Fees	MLP Tap Fees	Property Taxes	MLP MM Interest	CD Reserve Interest	MLP Operating Expenses	MLP Bond P&I	Shared Debt P&I	MLP Direct Capital	MLP Allocated Capital	Variance	Cumulative Variance
1996	\$1,207,600	\$0	\$63,036	\$0	\$15,624	\$1,891	\$39,710	\$0	\$0	\$76,109	\$46,379	\$0	\$974,196	\$36,163	\$195,014	\$195,014
1997	0	11,913	97,842	0	21,243	30,671	41,993	0	10,506	68,303	124,508	0	337,962	57,271	(373,876)	(178,862)
1998	0	13,521	87,929	0	27,593	67,895	42,511	0	7,823	70,036	122,573	0	14,829	17,888	21,946	(156,917)
1999	0	15,052	69,799	0	26,084	77,377	45,249	0	7,571	77,074	120,525	0	0	20,914	22,619	(134,297)
2000	0	18,879	70,471	0	32,377	270,608	42,582	0	7,503	77,090	123,388	0	29,490	16,200	196,252	61,955
2001	361,318	4,847	67,335	0	30,756	81,603	50,633	0	16,653	76,495	120,938	1,283	0	89,470	324,961	386,915
2002	0	15,123	78,058	0	28,675	31,004	56,920	0	3,537	112,581	123,438	23,684	0	3,926	(50,312)	336,603
2003	0	21,756	78,017	0	29,967	112,676	70,448	0	3,167	123,362	120,605	27,349	0	526,158	(481,443)	(144,839)
2004	0	39,570	77,727	0	29,362	146,354	65,348	3,742	2,243	117,510	122,690	27,455	0	4,549	92,144	(52,695)
2005	0	62,291	77,436	0	28,480	26,205	74,696	5,599	3,110	160,009	124,450	27,420	0	7,793	(41,856)	(94,551)
2006	0	69,053	78,234	0	28,905	102,726	72,074	9,293	5,214	216,869	125,875	27,375	0	7,868	(12,488)	(107,039)
2007	0	74,463	77,688	0	28,882	53,996	97,438	8,932	6,582	212,658	121,675	27,318	0	13,975	(27,645)	(134,684)
2008	0	78,873	78,198	0	29,182	9,206	112,885	3,984	3,984	234,742	122,775	27,395	1,819,952	7,788	(1,896,341)	(2,031,025)
2009	0	80,663	77,654	0	28,100	27,907	91,491	3,962	2,988	248,097	122,975	27,427	16,593	1,561	(103,887)	(2,134,912)
2010	0	80,663	77,872	53,675	28,163	0	86,381	1,950	1,694	214,819	122,875	27,263	0	37,428	(71,987)	(2,206,898)
2011	0	87,602	77,799	53,675	27,970	21,489	95,858	263	1,600	223,467	123,375	27,464	0	30,711	(38,761)	(2,245,659)
2012	0	91,301	77,364	53,675	27,201	7,356	77,652	1,097	1,347	204,405	127,705	27,302	0	13,359	(35,778)	(2,281,438)
2013	0	93,517	77,311	0	27,821	5,694	78,904	1,624	524	231,312	345,553	27,170	47,310	6,881	(372,831)	(2,654,269)
2014	0	94,157	77,365	0	27,721	0	79,187	1,331	0	213,464	0	27,402	15,914	4,028	18,952	(2,635,316)
2015	0	95,532	77,582	0	27,920	42,450	79,799	1,813	0	247,568	0	27,102	0	37,351	13,075	(2,622,241)
2016	0	101,717	77,328	0	27,589	32,452	77,094	2,427	0	173,062	0	27,166	6,690	17,388	94,301	(2,527,940)
2017	0	106,662	77,364	0	27,857	64,545	81,533	1,864	0	193,698	0	27,204	1,898,501	90,195	(1,849,773)	(4,377,713)
2018	0	115,028	77,255	0	28,805	82,813	87,259	2,447	0	272,785	0	27,216	0	89,867	3,739	(4,373,975)