

## **6.0 CURRENT CONDITIONS FINANCIAL & INSTITUTIONAL ASSESSMENT**

**Executive Summary:** The financial disparities and complex institutional relationships between ALCOSAN as a regional conveyance and treatment authority and its 83 diverse customer municipalities provides the context for the Wet Weather Plan's affordability and the Pittsburgh region's ability to finance it. This section presents a detailed assessment of the current financial and institutional environment in which ALCOSAN developed this Wet Weather Plan (WWP). This assessment does not include costs for the implementation of ALCOSAN's Wet Weather Plan or for affiliated municipal compliance, renewal, or replacement costs. The financial and institutional impacts of implementing the WWP are addressed in Section 11 of this document. The USEPA's Combined Sewer Overflow (CSO) Control Policy<sup>6-1</sup> requires a Financial Capability Assessment to be included in the CSO Long Term Control Plan (LTCP) in order to establish the burden of compliance on both ratepayers and the permittee.

ALCOSAN's complex mix of 83 large and small customer municipalities have ALCOSAN service populations ranging from less than 100 residents to more than 300,000. Median household incomes (MHI) (2012 estimates) range from less than \$18,000 to more than \$220,000. The estimated 2012 ALCOSAN service area regional MHI is \$46,400. All of the municipalities face local wet weather compliance costs in addition to ALCOSAN's WWP, totaling hundreds of millions of dollars. Given this diversity, it is necessary to evaluate the "affordability" and the "financial capability" (ability to finance) of the WWP and its related municipal investments both at the regional (ALCOSAN service area wide) and municipal levels.

Current annual wastewater costs including ALCOSAN and the municipal collection systems for typical households vary by municipality from less than \$300 to more than \$650. Regionally, the current typical household costs are approximately \$445 annually based upon the population weighted municipal costs. Based upon the regional annual cost estimate and the regional MHI, the typical household is currently spending about 1% of its income of wastewater services. This "Residential Indicator" (RI) constitutes a current low to medium burden under USEPA guidelines. These guidelines suggest that a RI of 2% or higher constitute a high burden on the typical household. However, the regional, ALCOSAN service area-wide number does not tell the whole story. At the municipal level, the existing condition indicators range from 0.2% to 2.4%. Within the lowest income areas of the municipalities, the current RI can exceed 4% of Census block group median household income, indicating a very high economic burden.

USEPA's Financial Capability indicators are intended to evaluate the abilities of municipalities to issue general obligation bond (property tax based) debt to finance wet weather controls using criteria such as net debt as a percentage of property values. ALCOSAN, as a regional wastewater authority, finances capital improvements through revenue bonds. As such, some of the EPA evaluative criteria are not well suited for agencies such as ALCOSAN. ALCOSAN's current (2011) revenue bond ratings are "A" from Standard & Poor's and "A1" from Moody's. These ratings put ALCOSAN into the lower end of a "strong" financial capability rating under the EPA criteria. As would be expected, the financial capabilities of the 83 municipalities vary

---

<sup>6-1</sup> 59 FR 18694

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

---

widely. The aggregate, population weighted Financial Capability of the ALCOSAN service area earns a “mid-range” rating under the EPA process. The current Low/Medium Residential Indicator and mid-range financial capability indicator result in a pre-WWP current system regional financial capability rating of “medium burden”. As detailed in Section 11, the proposed ALCOSAN and municipal wet weather controls will result in a regional RI of over 2% of MHI and an overall regional financial capability rating of “high burden”.

The USEPA guidance encourages the inclusion of additional economic and demographic data that provide a more comprehensive view of the financial viability of wet weather control strategies. ALCOSAN has evaluated economic and demographic trends over the past three US Census cycles in an attempt to understand the evolution and direction of the “typical household”. Key findings include:

- An aging service population – around 57% of the population in 2010 was over 35 years old and 30% was over 55 years old;
- The total population within the geographic boundary of the ALCOSAN service area has decreased by approximately 11% between 1990 and 2010 from around 940,000 to 836,000 respectively and the service population decreased by 5% from 879,000 to 836,000;
- While the number of households has remained relatively static, household size has declined from around 3.0 persons per household to 2.3 persons per household;
- Household composition is changing – the percentage of households headed by husbands and wives has decreased by 20% and non-family households as a percentage of total households has increased by 26%; and
- Median household income growth rates have been less than inflation since 1990.

Taken together, these factors do not lead to expectations that household income and the ability to pay for the implementation of the WWP will grow in the future barring new and positive economic developments in the Pittsburgh region.

## 6.1 Introduction

This section presents a detailed assessment of the current financial and institutional environment in which ALCOSAN developed this WWP. The financial and institutional implications of implementing the WWP are detailed in Section 11 (Implementation Plan – Financial Capability Assessment) of this document. The analysis in Section 11 is presented both in terms of current dollar costs and the current financial and institutional settings and in terms of projected future costs, household income levels and related economic and demographic data, based upon the plan implementation schedule. The factors used in projecting these variables are described in Section 7.3 (Future Conditions – Economic and Demographic Projections). The assessment methodology to be used was further developed by EPA in their “Combined Sewer Overflows – Guidance for Financial Capability Assessment and Schedule Development,” (EPA Guidance Document) published February 1997<sup>6-2</sup>.

The purpose of the financial capability assessment (FCA) is twofold. First, the assessment supports the development of a workable implementation schedule for the LTCP pursuant to the CSO Control Policy.<sup>6-3</sup> Second, the FCA can support the determination of funding needs by agencies providing loans and grants for capital projects. The FCA accomplishes this by comparing the residential indicators to the financial capability indicators.

The ALCOSAN service area institutional environment provides a unique and challenging context for the affordability analysis and financial capability assessment presented in sections 6.2 through 6.6. The service area institutional nuances preclude the straightforward methods outlined in the EPA guidance and therefore drive a significant portion of the methodology presented in those sections. The institutional context within which the wet weather program will be implemented is described in Section 6.6.

**ALCOSAN Service Area:** ALCOSAN serves all or portions of the City of Pittsburgh and eighty-two other municipalities within Allegheny, Washington and Westmoreland Counties. The ALCOSAN-served portions of municipalities range in size from 8 acres (Pleasant Hills Borough) to 37,300 acres (Pittsburgh). The municipal populations served by ALCOSAN range from 95 people (Pleasant Hills) to 302,000 people (Pittsburgh). A summary of the distribution of municipal acreage and municipal population is provided in Table 6-1. Detailed information on existing municipal sewershed areas and population is available in Section 3.1 of this document.

Nearly one third of the 83 Municipalities in the ALCOSAN service are only partially served by ALCOSAN. In such areas, the municipal wastewater collection systems flow into other wastewater treatment plants or on-lot private wastewater treatment systems such as septic tanks are used. Table 6-2 shows the number of fully and partially served municipalities with their 2010 census ALCOSAN service populations and number of households.

---

<sup>6-2</sup> EPA 832-B-97-004

<sup>6-3</sup> “Schedules for implementation of the long-term CSO control plan may be phased based on the relative importance of adverse impacts upon water quality standards and designated uses, and on a permittee’s financial capability.” (59 CFR 18688)

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

---

**Table 6-1: Municipal Acreage and Population Distribution**

<b>Municipal Acreage Distribution</b>					
Acreage	<100	100 to 500	500 to 2,000	2,000 to 10,000	10,000+
Number of Municipalities	2	29	30	18	4
<b>Municipal Population Distributions</b>					
Population	<1,000	1,000 to 5,000	5,000 to 20,000	20,000 to 50,000	100,000+
Number of Municipalities	12	38	27	5	1

**Table 6-2: 2010 Service Area Municipal Population<sup>6-4</sup>**  
**(Rounded to the Nearest Thousand)**

<b>Entire municipality within ALCOSAN Service Area</b>	
Number of Municipalities	60
Population Served	658,000
Households Served (Census)	287,000
<b>Municipality partially within ALCOSAN Service Area</b>	
Number of Municipalities	23
Population Served	178,000
Households Served (Census)	64,000
<b>Total Municipalities</b>	
	<b>83</b>
Total Population Served	836,000
Total Households Served	351,000
Total Residential Accounts Served	301,000
Total Accounts	314,000

---

<sup>6-4</sup> 2010 Census Summary File 1 Pennsylvania / prepared by the U.S. Census Bureau, 2011.

## 6.2 Current Residential Indicator (RI) – Phase 1

The Residential Indicator is an approximation of households' abilities to pay their total wastewater costs and is derived by dividing the total annual wastewater costs for the typical household within the permittee's (ALCOSAN) service area by the median household income within the service area. The Residential Indicator is compared to EPA-defined criteria to determine whether total annual wastewater costs impose a low, mid-range, or high impact on residential users. Table 6-3 shows U.S. EPA's Residential Indicator criteria, which define a "low" impact as a cost per household (CPH) less than 1.0% median household income (MHI), a "mid-range" impact between 1.0 and 2.0%, and "high" impact as greater than 2.0% of MHI.

**Table 6-3: EPA Residential Indicator**

Residential Indicator	Cost per Household
Low	Less than 1.0 percent of MHI
Mid-Range	1.0-2.0 percent of MHI
High	Greater than 2.0 percent of MHI

### 6.2.1 Current (2012) Wastewater Cost Per Household

Service area wastewater costs have two primary components, the uniform ALCOSAN rates implemented across the service area and the additional charges assessed by municipalities to fund their collection systems.

The 2012 ALCOSAN residential charges consist of a \$9.07 quarterly service charge and a commodity charge of \$4.32 per 1000 gallons of water discharged to the sewerage system. Based on an analysis of historical ALCOSAN billing data, the average single family residential account within the ALCOSAN service area uses approximately 13 thousand-gallon units (T-gallons) of water per quarter. This results in the average ALCOSAN annual residential bill for 2012 being approximately \$262.

There is considerable variation in the municipal user charges for the local collection sewer systems, ranging in 2012 from less than \$30 to more than \$420 for a typical household. Four municipalities have no direct collection system user charge and recover the costs of their local systems through property taxes and their general funds. Current typical household wastewater costs by municipality are provided in Table 6-6, later in the report.

The current population-weighted average municipal cost per typical household is \$183 annually. The total weighted average sewer charges for households in the service area are \$445 per year.

**6.2.2 Median Household Incomes**

There are a wide range of household incomes between the 83 municipalities served by ALCOSAN. At the municipal level, median household incomes range from less than \$18,000 to more than \$220,000 (2005-2009 American Community Survey Estimates, adjusted to 2012). There are also wide intra-municipal income variations. For example, the median household incomes of Census block groups within the City of Pittsburgh range from approximately \$7,000 per year to over \$157,000 annually (2005-2009 American Community Survey Estimates, inflated to 2012).

To account for this diversity, median household incomes were evaluated at the Census block level, using Census Block Group income data.<sup>6-5</sup> Census Blocks that have households served by and contributing to ALCOSAN is sorted by Median Household Income from lowest to highest. Then a running sum of the number of households in each Census Block is calculated so that the “middle” household (total number of households in the service area divided by two) can be found. The Census Block which contains the middle household in the running sum is determined to be the median Census Block and the MHI that corresponds to that Census Block is the median income. Using this methodology, an ALCOSAN service area median household income for 2012 of \$46,400 was derived.

The Census block and block group delineations were integrated with the ALCOSAN sewershed polygons to isolate portions of municipalities that are partially within the ALCOSAN service area. The distribution of incomes by block group for the service area is shown on Figure 6-1. Dark red indicates Census block groups with the lowest MHIs and dark green indicates Census block groups with the highest MHIs. Table 6-4 shows some summary information of the service area median household income distribution.

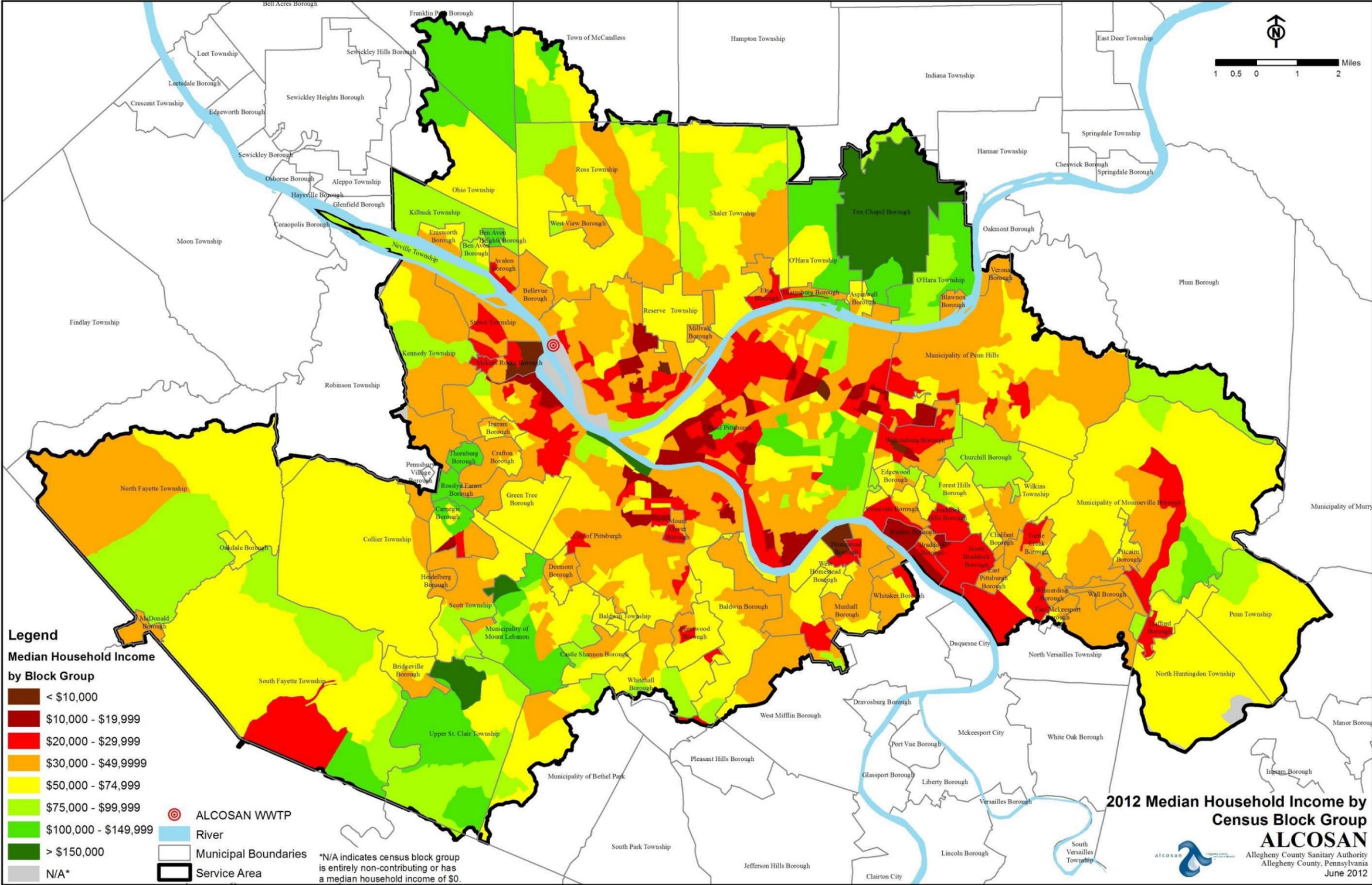
**Table 6-4: Service Area Median Household Income Profile**

2012 MHIs (ACS 2005-2009 Estimates, Inflated)	
Service Area MHI <sup>6-6</sup>	\$46,400
Lowest Burden Quintile Average MHI	\$96,000
Highest Burden Quintile Average MHI	\$24,400
Lowest Municipal MHI – Rankin Borough	\$17,600
Highest Municipal MHI – Fox Chapel Borough	\$224,000

<sup>6-5</sup> A Census block groups are the smallest unit for which median household income is estimated. The Census ascribes block group income to all blocks within the block group. The average census block in the service area has a population of around 50 people, whereas the average block group has a population of 1,100. Thirteen municipalities have only one census block group (or one partial block group) served by ALCOSAN.

<sup>6-6</sup> Based on household weighted median of census blocks.

Figure 6-1: 2012 Median Household Income by Census Block Group



angellja Q:\MapsandImages\Maps\MapArchivesByTask\Reports\2012 LTCP\Section6\PDF\_for\_Report\MedianHHInc\_BlockGroup.mxd 6/28/2012

This page was intentionally left blank to facilitate double sided printing

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

**6.2.3 Current Residential Indicators**

**Regional Residential Analysis:** To calculate the Residential Indicator, the current regional (ALCOSAN plus municipal) typical cost per household \$445 may be divided by the median household income of the service area (\$46,400), resulting in a current conditions Residential Indicator of approximately 1.0%.

**Municipal Level Analysis:** Residential Indicators were calculated at the municipal level for the 83 municipalities served by ALCOSAN by dividing the municipality-specific total annual wastewater charges by the municipal median household incomes for those portions of the municipalities within the ALCOSAN service area. The municipal residential indicators range from a burden of 0.2% for Fox Chapel Borough to a burden of 2.4% for North Versailles. The results of this analysis are summarized on Table 6-5. Individual data for the 83 municipalities are provided in Table 6-6.

**Table 6-5: Summary of Current Residential Indicator Results**

EPA Residential Indicator	Municipalities		Census Block Households		Census Block Population	
	Count	Percentage	Count	Percentage	Count	Percentage
Low (<0.5% to 1.0%)	50	60%	195,000	56%	472,000	57%
Mid-Range (1.0% to 2.0%)	30	36%	131,000	37%	302,000	36%
High (> 2.0%)	3	4%	25,000	7%	62,000	7%
<b>Total Service Area</b>	<b>83</b>	<b>100.0%</b>	<b>351,000</b>	<b>100.0%</b>	<b>836,000</b>	<b>100.0%</b>

**Table 6-6: Household Wastewater Costs by Municipality**

Municipality	Annual Typical Household Cost				Residential Indicator	EPA Score	
	2012 Inflated MHI	ALCOSAN	Municipal	Total			
1	Aspinwall Borough	\$56,800	\$262	\$94	\$356	0.63%	Low
2	Avalon Borough	\$36,900	\$262	\$155	\$417	1.13%	Mid-Range
3	Baldwin Borough	\$59,100	\$262	\$270	\$532	0.90%	Low
4	Baldwin Township	\$68,000	\$262	\$243	\$505	0.74%	Low
5	Bellevue Borough	\$39,000	\$262	\$122	\$384	0.98%	Low
6	Ben Avon Borough	\$74,600	\$262	\$0	\$262	0.35%	Low
7	Ben Avon Heights Borough	\$106,700	\$262	\$0	\$262	0.25%	Low
8	Bethel Park, Municipality of	\$64,600	\$262	\$155	\$417	0.65%	Low
9	Blawnox Borough	\$39,600	\$262	\$140	\$402	1.02%	Mid-Range
10	Braddock Borough	\$22,900	\$262	\$81	\$343	1.50%	Mid-Range
11	Braddock Hills Borough	\$31,600	\$262	\$87	\$349	1.11%	Mid-Range
12	Brentwood Borough	\$47,200	\$262	\$266	\$528	1.12%	Mid-Range
13	Bridgeville Borough	\$40,200	\$262	\$135	\$397	0.99%	Low

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

**Table 6-6: Household Wastewater Costs by Municipality**

	Municipality	Annual Typical Household Cost				Residential Indicator	EPA Score
		2012 Inflated MHI	ALCOSAN	Municipal	Total		
14	Carnegie Borough	\$45,700	\$262	\$392	\$654	1.43%	Mid-Range
15	Castle Shannon Borough	\$49,900	\$262	\$260	\$522	1.05%	Mid-Range
16	Chalfant Borough	\$50,200	\$262	\$250	\$512	1.02%	Mid-Range
17	Churchill Borough	\$86,900	\$262	\$168	\$430	0.50%	Low
18	Collier Township	\$59,800	\$262	\$238	\$500	0.84%	Low
19	Crafton Borough	\$46,200	\$262	\$376	\$638	1.38%	Mid-Range
20	Dormont Borough	\$49,000	\$262	\$243	\$505	1.03%	Mid-Range
21	East McKeesport Borough	\$42,400	\$262	\$134	\$396	0.93%	Low
22	East Pittsburgh Borough	\$24,700	\$262	\$136	\$398	1.61%	Mid-Range
23	Edgewood Borough	\$61,000	\$262	\$200	\$462	0.76%	Low
24	Emsworth Borough	\$55,700	\$262	\$244	\$506	0.91%	Low
25	Etna Borough	\$35,900	\$262	\$139	\$401	1.12%	Mid-Range
26	Forest Hills Borough	\$56,900	\$262	\$195	\$457	0.80%	Low
27	Fox Chapel Borough	\$223,900	\$262	\$189	\$451	0.20%	Low
28	Franklin Park Borough	\$134,800	\$262	\$394	\$656	0.49%	Low
29	Green Tree Borough	\$71,000	\$262	\$162	\$424	0.60%	Low
30	Heidelberg Borough	\$36,900	\$262	\$301	\$563	1.52%	Mid-Range
31	Homestead Borough	\$25,200	\$262	\$221	\$483	1.92%	Mid-Range
32	Indiana Township	\$90,500	\$262	\$361	\$623	0.69%	Low
33	Ingram Borough	\$47,500	\$262	\$203	\$465	0.98%	Low
34	Kennedy Township	\$60,100	\$262	\$53	\$315	0.52%	Low
35	Kilbuck Township	\$90,400	\$262	\$244	\$506	0.56%	Low
36	McCandless Township	\$74,900	\$262	\$115	\$377	0.50%	Low
37	McDonald Borough	\$45,400	\$262	\$320	\$582	1.28%	Mid-Range
38	McKees Rocks Borough	\$23,100	\$262	\$122	\$384	1.66%	Mid-Range
39	Millvale Borough	\$36,000	\$262	\$135	\$397	1.10%	Mid-Range
40	Monroeville, Municipality of	\$63,500	\$262	\$197	\$459	0.72%	Low
41	Mount Lebanon, Municipality	\$79,700	\$262	\$219	\$481	0.60%	Low
42	Mount Oliver Borough	\$32,400	\$262	\$425	\$687	2.12%	High
43	Munhall Borough	\$45,700	\$262	\$175	\$437	0.96%	Low
44	Neville Township	\$43,200	\$262	\$317	\$579	1.34%	Mid-Range
45	North Braddock Borough	\$24,900	\$262	\$250	\$512	2.05%	High
46	North Fayette Township	\$69,300	\$262	\$26	\$288	0.42%	Low
47	North Huntingdon Township	\$52,900	\$262	\$259	\$521	0.98%	Low
48	North Versailles Township	\$22,900	\$262	\$275	\$537	2.34%	High
49	Oakdale Borough	\$59,900	\$262	\$189	\$451	0.75%	Low

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

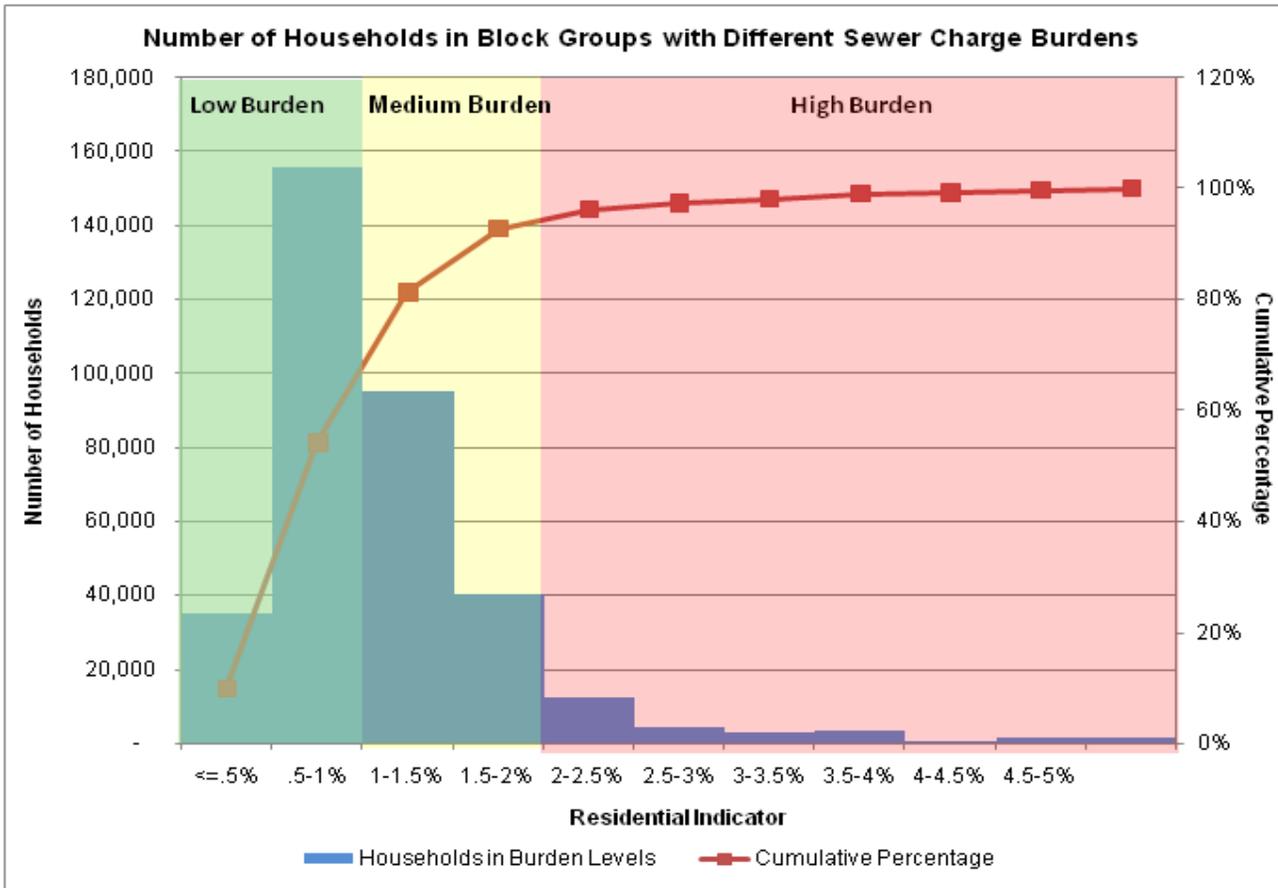
**Table 6-6: Household Wastewater Costs by Municipality**

	Municipality	Annual Typical Household Cost				Residential Indicator	EPA Score
		2012 Inflated MHI	ALCOSAN	Municipal	Total		
50	O'Hara Township	\$87,300	\$262	\$81	\$343	0.39%	Low
51	Ohio Township	\$95,400	\$262	\$154	\$416	0.44%	Low
52	Penn Hills, Municipality of	\$44,900	\$262	\$403	\$665	1.48%	Mid-Range
53	Penn Township	\$67,800	\$262	\$212	\$474	0.70%	Low
54	Peters Township	\$79,400	\$262	\$131	\$393	0.49%	Low
55	Pitcairn Borough	\$40,800	\$262	\$87	\$349	0.86%	Low
56	Pittsburgh City	\$38,500	\$262	\$156	\$418	1.09%	Mid-Range
57	Pleasant Hills Borough	\$80,500	\$262	\$147	\$409	0.51%	Low
58	Plum Borough	\$77,700	\$262	\$179	\$441	0.57%	Low
59	Rankin Borough	\$17,600	\$262	\$68	\$330	1.87%	Mid-Range
60	Reserve Township	\$59,400	\$262	\$101	\$363	0.61%	Low
61	Robinson Township	\$37,100	\$262	\$195	\$457	1.23%	Mid-Range
62	Ross Township	\$60,600	\$262	\$122	\$384	0.63%	Low
63	Roslyn Farms Borough	\$128,200	\$262	\$324	\$586	0.46%	Low
64	Scott Township	\$55,300	\$262	\$81	\$343	0.62%	Low
65	Shaler Township	\$64,100	\$262	\$138	\$400	0.62%	Low
66	Sharpsburg Borough	\$34,000	\$262	\$75	\$337	0.99%	Low
67	South Fayette Township	\$70,600	\$262	\$204	\$466	0.66%	Low
68	Stowe Township	\$34,300	\$262	\$243	\$505	1.47%	Mid-Range
69	Swissvale Borough	\$41,500	\$262	\$114	\$376	0.91%	Low
70	Thornburg Borough	\$122,500	\$262	\$0	\$262	0.21%	Low
71	Trafford Borough	\$40,600	\$262	\$257	\$519	1.28%	Mid-Range
72	Turtle Creek Borough	\$38,800	\$262	\$101	\$363	0.94%	Low
73	Upper St. Clair Township	\$96,600	\$262	\$302	\$564	0.58%	Low
74	Verona Borough	\$45,900	\$262	\$0	\$262	0.57%	Low
75	Wall Borough	\$34,800	\$262	\$166	\$428	1.23%	Mid-Range
76	West Homestead Borough	\$52,200	\$262	\$138	\$400	0.77%	Low
77	West Mifflin Borough	\$47,100	\$262	\$298	\$560	1.19%	Mid-Range
78	West View Borough	\$52,400	\$262	\$380	\$642	1.22%	Mid-Range
79	Whitaker Borough	\$39,600	\$262	\$150	\$412	1.04%	Mid-Range
80	Whitehall Borough	\$66,300	\$262	\$284	\$546	0.82%	Low
81	Wilkins Township	\$48,300	\$262	\$141	\$403	0.84%	Low
82	Wilkesburg Borough	\$30,500	\$262	\$71	\$333	1.09%	Mid-Range
83	Wilmerding Borough	\$24,400	\$262	\$141	\$403	1.65%	Mid-Range
	<b>Service Area</b>	<b>\$46,400</b>	<b>\$262</b>	<b>\$183</b>	<b>\$445</b>	<b>0.96%</b>	<b>Low</b>

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

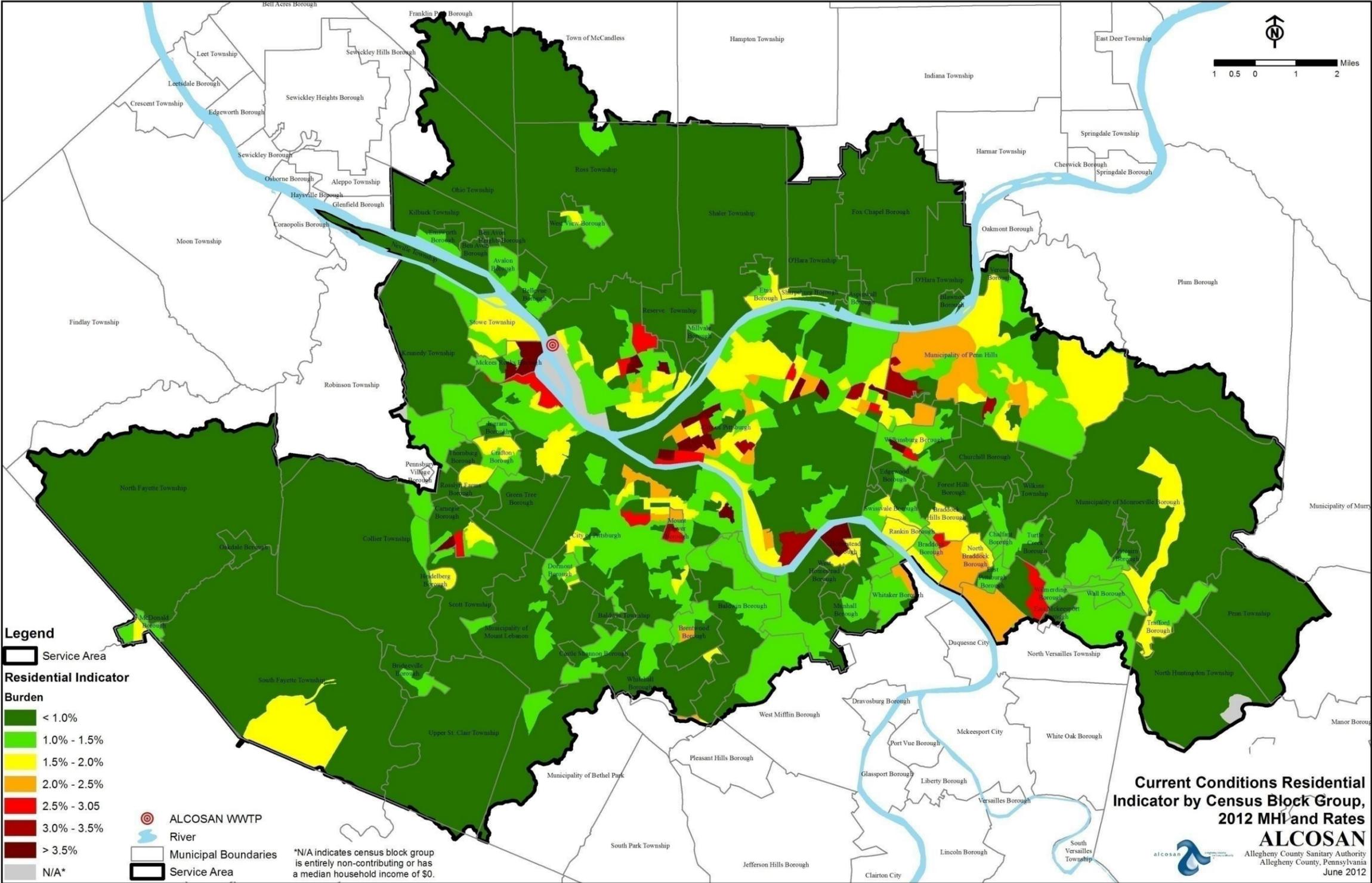
In general, current wastewater costs within the ALCOSAN service area impose a low to mid-range burden upon the residential users. Approximately 90% of the population and households within the ALCOSAN service area have current annual wastewater costs that would be considered low to mid-range under the EPA criteria. A cumulative distribution frequency curve showing the distribution of wastewater costs amongst the 847 Census income block groups is provided as Figure 6-2 below. The geographic distribution of Census block group residential indicators is shown on Figure 6-3.

**Figure 6-2: Current Household Burden Distribution**



At the aggregated municipal level, current wastewater costs impose a similarly low to mid-range burden, with no municipalities currently crossing the high burden threshold of 2% of median household income.

Figure 6-3: Current Conditions Residential Indicator by Census Block Group



angellja Q:\MapsandImages\Maps\MapArchivesByTask\Reports\2012 LTCP\Section6\PDF\_for\_Report\Figure6-3Resind\_BlockGroup.mxd 6/28/2012

This page was intentionally left blank to facilitate double sided printing

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

---

**High Burden Analysis:** The current municipal and ALCOSAN annual costs result in a current residential indicator of over 2% household income for approximately 25,000 households with a combined population of approximately 62,000. Cost burdens exceeding 2% are primarily the result of low household incomes, and may be exacerbated by relatively high municipal wastewater costs. Around 9,300 households with a combined population of 21,600 have current wastewater costs exceeding 3% of their household income. To put these populations into context, the 62,000 residents who currently exceed the 2% criteria would comprise the sixth largest municipality within Pennsylvania, exceeding cities such as the cities of Lancaster, Harrisburg and Bethlehem. The 21,200 residents currently paying more than 3% of their household incomes for wastewater would comprise a municipality within the top 97<sup>th</sup> percentile by size within Pennsylvania.

### **6.3 Financial Capability Indicator (FCI) – Phase 2**

The FCI complements the residential indicator analysis of household affordability by providing an assessment of ALCOSAN’s ability to finance the implementation of the WWP. It also provides analysis of the underlying abilities of the 83 municipalities within the service area to finance the implementation of their respective Municipal Feasibility Studies. The FCI compares ALCOSAN and the 83 municipalities it serves to six EPA-defined benchmarks in the areas of debt burden, socioeconomic conditions, and financial operations:

- Bond Ratings
- Debt Burden
- Unemployment Rate
- Median Household Income
- Property Tax Burden
- Property Tax Collection Rate

Debt Indicators provide a review of most recent bond ratings and total overall net debt as a percent of full market property value, the Socioeconomic Indicators compare Median Household Income (MHI) and local unemployment rates to national averages, and the Financial Management Indicators compare property taxes levied to total property value and property taxes collected to total property taxes levied.

The EPA guidance was intended to be applied to a single municipality or small number of municipalities and the guidance is difficult to apply to ALCOSAN and the 83 independent municipalities in its service area. EPA’s debt and financial indicators are based on the use of property tax revenues to finance wastewater system improvements through general obligation bonds. As a municipal authority, ALCOSAN finances major capital improvements through revenue bonds. The municipalities may also utilize revenue bonds through their own municipal authorities and/or recover general obligation debt through dedicated enterprise fund user fees.

The state financial dataset, collected from NewPA<sup>6-7</sup>, is the most complete for the purposes of the financial capability analysis and provides the bulk of municipal data used to calculate financial capability indicators. Bond ratings were collected from the 3 Rivers Wet Weather Municipal Data Support website<sup>6-8</sup> (MDS) database and official statements found online<sup>6-9</sup>. To derive scores at the service area level, the individual municipal scores are weighted by the number of households in the municipality.

#### **6.3.1 Debt Indicators**

The EPA intends debt indicators to “assess the current debt burden conditions and the ability [of the permittee] to issue new debt.” The two debt indicators outlined in the guidance are most recent bond rating and overall net debt as a percent of full market value.

---

<sup>6-7</sup> <http://munstatspa.dced.state.pa.us/Reports.aspx>

<sup>6-8</sup> <http://mds.3riverswetweather.org/>

<sup>6-9</sup> <http://pennsylvania.municipalbonds.com>

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

---

**Bond Ratings:** Bond ratings typically incorporate analysis of political and economic risk and evaluate the capability and willingness of a government to make debt payments. Long term economic growth, demographic trends, and current political conditions contribute to the credit rating. A description of the EPA Guidance criteria for bond ratings is shown in Table 6-7. For the purposes of this analysis, ratings are given for general obligation bonds *and* revenue bonds. When there are several different bond ratings, the most recent bond rating is used.

**Table 6-7: 2010 Bond Ratings Indicator Criteria**

FCI Categorization	Moody's	Standard & Poor's
Strong	Aaa, Aa, A	AAA, AA, A
Mid-Range	Baa	BBB
Weak	Ba, B, Caa, Ca, C	BB, B, CCC, CC, C, Ci, R

ALCOSAN Revenue Bonds: As of October 14, 2011, ALCOSAN has a rating of 'A' long-term (with a stable outlook) from Standard & Poor's Rating Services and A1 from Moody's for its series 2011 sewer revenue refunding bonds<sup>6-10</sup>. Standard & Poor's also affirmed its 'A' rating on ALCOSAN's outstanding debt. The ratings agency noted that ALCOSAN faced large capital expenditures due to the Wet Weather Plan:

"Tempering credit factors include the authority's large regulatory-driven capital improvement program (CIP), which continues to be debt-funded;..."

Standard & Poor's also noted that their stable outlook was premised upon:

"...[their] expectation that the authority will continue to proactively manage its regulatory-driven capital improvement program as well as continue to implement timely and sufficient rate increases to maintain adequate financial operations."

ALCOSAN's 'A' rating for its revenue bond rating is the lowest that qualifies for a "strong" rating under the EPA criteria.

Municipal Bond Ratings: Due to their size and limited capital investments, most of the municipalities in the ALCOSAN service area do not carry rated debt. Of the 83 service area municipalities, 18 have received bond ratings within the past five years. Table 6-8 shows recent bond ratings for the municipalities within the ALCOSAN service area. The largest municipality in the service area with a bond rating is the City of Pittsburgh, for which Moody's has issued an underlying rating of Baa1 for general obligation debt, which would be considered Mid-Range using the EPA criteria. Of the remaining 17 municipalities with ratings, 16 have strong indicators.

---

<sup>6-10</sup> Summary of Ratings, BNY Mellon Capital Markets, LLC, October 14, 2011.

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

A population weighted average municipal bond rating score may be calculated by assigning a numeric score of 3 for “strong”, 2 for “mid-range”, and 1 for “weak” and weight averaging the municipal scores based upon service population. The weighted average municipal score for bond ratings using this approach is 2.49 or the uppermost “Mid-Range” value. ALCOSAN’s most recent bond rating is not included in the calculation of the population weighted average. The ALCOSAN service area wide score for this criterion is “Mid-Range”.

**Table 6-8: General Obligation Bond Credit Ratings**

Municipality	Most Recent Bond Rating (G.O.)	Rating Agency	Date	G.O. Bond Insurance (Y/N)	Categorization
Avalon Borough	AAA	S&P	2006	Yes	Strong (3)
Bethel Park Municipality	Aaa	Moody's	1999	Underlying	Strong (3)
Carnegie Borough	Aaa	Moody's	2006	Yes	Strong (3)
Collier Township	Aa3	Moody's	2003	Yes (AAA)	Strong (3)
Kennedy Township	Aa3	Moody's	2009	Yes (AAA)	Strong (3)
McKees Rocks Borough	BBB	S&P	2010	No	Mid-Range (2)
Millvale Borough	Aa3	Moody's	2008	Yes	Strong (3)
Monroeville, Municipality	Aa2	Moody's	2010	Underlying	Strong (3)
Mount Lebanon, Municipality	Aa1	Moody's	2010	Underlying	Strong (3)
North Fayette Township	AA-	S&P	2009	No	Strong (3)
O'Hara Township	Aa3	Moody's	2009	No	Strong (3)
Ohio Township	AAA	S&P	2009	Yes	Strong (3)
Penn Hills, Municipality of	AAA	S&P	2009	Yes	Strong (3)
Peters Township	AA+	S&P	2010	No	Strong (3)
Pittsburgh City	Baa1	Moody's	2010	Underlying	Mid-Range (2)
Ross Township	AAA	S&P	2009	Yes	Strong (3)
Scott Township	A	S&P	2007	Yes (AAA)	Strong (3)
South Fayette Township	A	S&P	2009	No	Strong (3)
Upper St. Clair Township	AA+	S&P	2010	Underlying	Strong (3)

**Debt Burden:** Debt Burden is measured by overall net debt as a percent of full market property value, which evaluates the ability of local government to issue additional debt. Overall Net Debt is defined as current total liability to be repaid by property taxes divided by the municipalities’ full market property value. Table 6-9 shows the percentages of debt that indicate Strong, Mid-Range, and Weak burdens.

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

---

**Table 6-9: Overall Net Debt Indicator Criteria**

	Debt/Full Market Property Value		
FCI Categorization	Low	to	High
Strong	0.00%	to	2.00%
Mid-Range	2.00%	to	5.00%
Weak	>5.00%		

Overall Net Debt has two components: the general obligation debt issued directly by the municipality and a municipality’s share of the debt of its overlapping entities such as the school districts and Allegheny County. To calculate the indicator, the total general obligation debt for the municipality is added to the municipal portion of school district debt and the municipal portion of county debt and divided by full market property value of municipal real estate. Contributions from municipalities in Washington and Westmoreland Counties are excluded from this analysis<sup>6-11</sup>.

The overall net debt of municipalities with available information in the service area is \$3.4 billion. Of this amount, \$1 billion is direct municipal debt. Of the total service area debt, 39% (\$1.3 billion) is attributable to the City of Pittsburgh.

Full Market Property Value was determined using 2009 NewPA Municipal Financial Data and the 2009 CAFR for Pittsburgh. The NewPA dataset includes assessed value of real estate and full market value of real estate. For 2009 Allegheny County had a published ratio of full market value to assessed value of 86%<sup>6-12</sup>. The total assessed value of municipalities served by ALCOSAN is \$46.4 billion. Using the County assessment ratio, a Full Market Value of \$53.8 billion would be anticipated, but the combination of NewPA data and the Pittsburgh CAFR sums to \$51.6 billion in Full Market Value. This is attributed to Pittsburgh claiming that its properties are assessed at 100% of market value, rather than using the common level ratio<sup>6-13</sup>. Without Pittsburgh in the dataset, the assessed value of real estate times the common level ratio equals the sum of the full market value for the NewPA dataset. Of the total service area property value, 28% (\$13.3 billion) is attributable to the City of Pittsburgh. Dividing the overall net debt of the service area of \$3.4 billion by the calculated full market value of property of \$52 billion yields an indicator value of 6.55%, 1.55% above the 5% threshold for a Weak rating under the EPA guidance.

Overall Net Debt as a percent of full market value was also calculated for each municipality. EPA suggests a population weighted average of each municipal score be used to calculate the service area indicator, which is 6.44% and also a Weak rating. A table of municipal scores for this indicator is shown on Table 6-10.

---

<sup>6-11</sup> ALCOSAN’s service is limited within Washington and Westmoreland Counties. ALCOSAN-served populations in the two counties make up only 1% of the population of the service area.

<sup>6-12</sup> <http://www.steb.state.pa.us/Commonmain.asp?OptionCounty=ALLEGHENY&OptionYear>

<sup>6-13</sup> Pittsburgh Comprehensive Annual Financial Report, Pg. 50

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

**Table 6-10: Overall Net Debt as a Percent of Property Value (2009)**  
**(Allegheny County Municipalities)**

Municipality Name	Direct Net Debt	Overall Net Debt	Market Value of Real Estate	% Debt/Property Value	Benchmark
Aspinwall	\$1,168,654	\$5,396,815	\$178,794,519	3%	Mid-Range (2)
Avalon	\$5,381,065	\$10,047,692	\$157,057,739	6%	Weak (1)
Baldwin	\$1,335,000	\$49,861,498	\$765,818,017	7%	Weak (1)
Baldwin	\$55,963	\$5,987,071	\$88,209,397	7%	Weak (1)
Bellevue	\$6,445,000	\$14,403,320	\$266,774,176	5%	Weak (1)
Ben Avon	\$230,454	\$4,019,879	\$105,954,002	4%	Mid-Range (2)
Ben Avon Heights	\$0	\$1,318,138	\$36,572,274	4%	Mid-Range (2)
Bethel Park	\$5,784,782	\$125,882,540	\$2,101,192,897	6%	Weak (1)
Blawnox	\$571,321	\$2,211,063	\$70,019,258	3%	Mid-Range (2)
Braddock	\$41,340	\$2,116,519	\$48,396,396	4%	Mid-Range (2)
Braddock Hills	\$0	\$2,937,904	\$69,580,139	4%	Mid-Range (2)
Brentwood	\$3,726,661	\$27,144,108	\$346,141,137	8%	Weak (1)
Bridgeville	\$0	\$6,684,491	\$204,889,408	3%	Mid-Range (2)
Carnegie	\$5,572,467	\$10,354,765	\$317,073,847	3%	Mid-Range (2)
Castle Shannon	\$7,195,000	\$25,709,798	\$317,679,696	8%	Weak (1)
Chalfant	\$0	\$993,500	\$23,103,097	4%	Mid-Range (2)
Churchill	\$0	\$10,859,900	\$257,284,553	4%	Mid-Range (2)
Collier	\$1,055,000	\$21,401,403	\$709,421,521	3%	Mid-Range (2)
Crafton	\$1,098,602	\$4,605,845	\$228,731,709	2%	Mid-Range (2)
Dormont	\$4,738,439	\$20,965,643	\$274,441,241	8%	Weak (1)
East McKeesport	\$0	\$5,168,551	\$59,098,759	9%	Weak (1)
East Pittsburgh	\$0	\$1,775,655	\$41,303,399	4%	Mid-Range (2)
Edgewood	\$247,253	\$8,992,563	\$203,365,661	4%	Mid-Range (2)
Emsworth	\$451,672	\$3,776,244	\$93,078,735	4%	Mid-Range (2)
Etna	\$1,005,819	\$8,168,184	\$105,097,631	8%	Weak (1)
Forest Hills	\$4,660,000	\$18,371,823	\$318,858,213	6%	Weak (1)
Fox Chapel	\$0	\$25,615,100	\$1,099,799,478	2%	Mid-Range (2)
Franklin Park	\$4,110,000	\$49,771,526	\$1,202,908,075	4%	Mid-Range (2)
Green Tree	\$5,075,000	\$35,117,939	\$510,016,304	7%	Weak (1)
Heidelberg	\$370,421	\$1,981,171	\$49,252,788	4%	Mid-Range (2)
Homestead	\$83,435	\$8,274,636	\$190,870,514	4%	Mid-Range (2)
Indiana	\$6,638,573	\$13,250,902	\$521,937,557	3%	Mid-Range (2)
Ingram	\$36,131	\$5,672,879	\$100,756,874	6%	Weak (1)

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

**Table 6-10: Overall Net Debt as a Percent of Property Value (2009)**  
**(Allegheny County Municipalities)**

<b>Municipality Name</b>	<b>Direct Net Debt</b>	<b>Overall Net Debt</b>	<b>Market Value of Real Estate</b>	<b>% Debt/Property Value</b>	<b>Benchmark</b>
Kennedy	\$7,328,328	\$33,686,460	\$498,886,787	7%	Weak (1)
Kilbuck	\$1,217,534	\$2,654,400	\$49,539,310	5%	Weak (1)
McCandless	\$869,008	\$77,816,073	\$2,090,541,753	4%	Mid-Range (2)
McKees Rocks	\$1,451,317	\$12,608,033	\$147,980,696	9%	Weak (1)
Millvale	\$1,760,000	\$7,226,959	\$80,761,125	9%	Weak (1)
Monroeville	\$25,910,000	\$108,257,544	\$2,316,320,343	5%	Mid-Range (2)
Mount Oliver	\$477,596	\$4,000,361	\$72,877,778	5%	Weak (1)
Mt. Lebanon	\$25,115,000	\$127,829,800	\$2,361,972,495	5%	Weak (1)
Munhall	\$0	\$15,340,461	\$358,390,394	4%	Mid-Range (2)
Neville	\$1,228,400	\$6,621,060	\$119,399,124	6%	Weak (1)
North Braddock	\$406,857	\$3,740,979	\$77,539,524	5%	Mid-Range (2)
North Fayette	\$11,955,738	\$72,642,914	\$1,012,023,292	7%	Weak (1)
North Versailles	\$1,323,618	\$33,692,615	\$409,252,521	8%	Weak (1)
Oakdale	\$0	\$3,816,012	\$55,233,898	7%	Weak (1)
O'Hara	\$3,812,134	\$25,541,551	\$1,009,772,049	3%	Mid-Range (2)
Ohio	\$9,665,000	\$23,059,074	\$454,204,990	5%	Weak (1)
Penn Hills	\$50,811,920	\$81,209,339	\$1,565,978,577	5%	Weak (1)
Pitcairn	\$324,354	\$2,749,024	\$66,486,564	4%	Mid-Range (2)
Pittsburgh	\$680,400,000	\$1,317,001,946	\$13,348,820,505	10%	Weak (1)
Pleasant Hills	\$1,525,722	\$21,446,581	\$509,300,217	4%	Mid-Range (2)
Plum	\$2,313,863	\$78,956,168	\$1,273,400,742	6%	Weak (1)
Rankin	\$0	\$539,773	\$12,607,251	4%	Mid-Range (2)
Reserve	\$0	\$8,265,713	\$126,687,319	7%	Weak (1)
Robinson	\$6,520,000	\$75,513,241	\$1,569,634,358	5%	Mid-Range (2)
Ross	\$4,565,000	\$100,505,912	\$2,126,326,140	5%	Mid-Range (2)
Rosslyn Farms	\$0	\$600,880	\$50,724,710	1%	Strong (3)
Scott	\$10,023,677	\$37,145,038	\$831,903,759	4%	Mid-Range (2)
Shaler	\$7,202,625	\$102,389,786	\$1,402,760,384	7%	Weak (1)
Sharpsburg	\$1,395,000	\$3,653,147	\$96,068,863	4%	Mid-Range (2)
South Fayette	\$8,040,000	\$67,498,103	\$941,406,538	7%	Weak (1)
Stowe	\$3,735,000	\$16,862,932	\$175,252,660	10%	Weak (1)
Swissvale	\$654,848	\$11,490,990	\$253,126,146	5%	Mid-Range (2)
Thornburg	\$0	\$2,809,629	\$53,398,840	5%	Weak (1)

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

**Table 6-10: Overall Net Debt as a Percent of Property Value (2009)**  
**(Allegheny County Municipalities)**

Municipality Name	Direct Net Debt	Overall Net Debt	Market Value of Real Estate	% Debt/Property Value	Benchmark
Turtle Creek	\$0	\$4,269,891	\$99,544,722	4%	Mid-Range (2)
Upper St. Clair	\$59,001,862	\$146,354,647	\$1,835,776,811	8%	Weak (1)
Verona	\$456,861	\$4,681,554	\$94,309,321	5%	Mid-Range (2)
Wall	\$0	\$938,716	\$10,976,057	9%	Weak (1)
West Homestead	\$0	\$5,499,387	\$129,009,125	4%	Mid-Range (2)
West Mifflin	\$9,362,297	\$92,514,834	\$1,107,170,121	8%	Weak (1)
West View	\$7,540,000	\$20,133,773	\$271,521,225	7%	Weak (1)
Whitaker	\$0	\$2,223,261	\$26,416,867	8%	Weak (1)
Whitehall	\$0	\$46,758,004	\$684,018,312	7%	Weak (1)
Wilkins	\$365,000	\$16,333,696	\$376,098,172	4%	Mid-Range (2)
Wilkesburg	\$3,365,000	\$13,919,054	\$380,461,566	4%	Mid-Range (2)
Wilmerding	\$0	\$3,967,715	\$44,993,543	9%	Weak (1)

### 6.3.2 Socioeconomic Indicators

Per EPA Guidance, “socioeconomic indicators are used to assess the general economic well-being of residential users in the permittee’s service area.” To assess the economic well being of the permittees, the EPA guidance uses permittee unemployment rate and median household income compared to national averages.

**Unemployment Rate:** The unemployment rate is used as an assessment of the economic well-being of residential users in the service area. The U.S. EPA Guidance criteria for unemployment are described in Table 6-11, Unemployment Indicator Criteria.

**Table 6-11: Unemployment Indicator Criteria**

FCI Categorization	Local Unemployment Rate
Strong	More than 1 percentage point below National Average
Mid-Range	(+/-) 1 percentage point of the National Average
Weak	More than 1 percentage point above National Average

The dataset for the municipal unemployment rates is taken from the American Community Survey 2005-2009 estimates. The American Community Survey was chosen instead of the Bureau of Labor Statistics (BLS) as the data source for municipal unemployment figures since

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

---

the BLS does not publish unemployment rates for many of the municipalities in the region. Additionally, the BLS numbers provide a snapshot in time, whereas the American Community Survey gathers data over a 5-year period. The prevailing unemployment rate provided by the ACS for that timeframe more closely represents the actual strength of the economy in a municipality.

However, large margins of errors associated with the smaller municipalities (as high as 8%) is a drawback of using the American Community Survey data. The 2005 to 2009 unemployment rates for the ALCOSAN municipalities are provided on Table 6-12.

The population weighted average for this indicator is -0.8% below the national average, which is Mid-Range. It should be noted that of the 18 municipalities with weak indicators, 11 municipalities with populations totaling 45,000 people have unemployment rates 2.5% or more higher than the national average, or 2.5x the threshold for a “weak” rating; 3 municipalities with a total population of 10,000 have unemployment rates 5% higher than the average.

**Table 6-12: Unemployment Indicator**  
**(Comparable National Unemployment Rate = 7.2%)**

Municipality Name	2005-2009 5 Year % Unemployment Estimates	Local Unemployment Rate minus National Rate	Categorization
Aspinwall Borough	5.3%	-1.9%	Strong (3)
Avalon Borough	6.3%	-0.9%	Mid-Range (2)
Baldwin Borough	6.3%	-0.9%	Mid-Range (2)
Baldwin Township	5.6%	-1.6%	Strong (3)
Bellevue Borough	9.0%	1.8%	Weak (1)
Ben Avon Borough	1.0%	-6.2%	Strong (3)
Ben Avon Heights Borough	6.7%	-0.5%	Mid-Range (2)
Bethel Park, Municipality of	3.8%	-3.4%	Strong (3)
Blawnox Borough	4.3%	-2.9%	Strong (3)
Braddock Borough	10.7%	3.5%	Weak (1)
Braddock Hills Borough	6.2%	-1.0%	Strong (3)
Brentwood Borough	6.1%	-1.1%	Strong (3)
Bridgeville Borough	7.0%	-0.2%	Mid-Range (2)
Carnegie Borough	7.2%	0.0%	Mid-Range (2)
Castle Shannon Borough	4.5%	-2.7%	Strong (3)
Chalfant Borough	3.1%	-4.1%	Strong (3)
Churchill Borough	6.7%	-0.5%	Mid-Range (2)
Collier Township	4.0%	-3.2%	Strong (3)
Crafton Borough	4.3%	-2.9%	Strong (3)

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

**Table 6-12: Unemployment Indicator**  
**(Comparable National Unemployment Rate = 7.2%)**

<b>Municipality Name</b>	<b>2005-2009 5 Year % Unemployment Estimates</b>	<b>Local Unemployment Rate minus National Rate</b>	<b>Categorization</b>
Dormont Borough	8.8%	1.6%	Weak (1)
East McKeesport Borough	10.7%	3.5%	Weak (1)
East Pittsburgh Borough	10.2%	3.0%	Weak (1)
Edgewood Borough	5.7%	-1.5%	Strong (3)
Emsworth Borough	3.2%	-4.0%	Strong (3)
Etna Borough	9.9%	2.7%	Weak (1)
Forest Hills Borough	4.0%	-3.2%	Strong (3)
Fox Chapel Borough	0.8%	-6.4%	Strong (3)
Franklin Park Borough	4.0%	-3.2%	Strong (3)
Green Tree Borough	3.8%	-3.4%	Strong (3)
Heidelberg Borough	7.9%	0.7%	Mid-Range (2)
Homestead Borough	14.3%	7.1%	Weak (1)
Indiana Township	5.8%	-1.4%	Strong (3)
Ingram Borough	4.3%	-2.9%	Strong (3)
Kennedy Township	5.4%	-1.8%	Strong (3)
Kilbuck Township	6.2%	-1.0%	Mid-Range (2)
McCandless Township	4.4%	-2.8%	Strong (3)
McDonald Borough	4.6%	-2.6%	Strong (3)
McKees Rocks Borough	10.7%	3.5%	Weak (1)
Millvale Borough	10.1%	2.9%	Weak (1)
Monroeville, Municipality of	5.3%	-1.9%	Strong (3)
Mount Lebanon, Municipality of	4.3%	-2.9%	Strong (3)
Mount Oliver Borough	9.4%	2.2%	Weak (1)
Munhall Borough	4.7%	-2.5%	Strong (3)
Neville Township	6.0%	-1.2%	Strong (3)
North Braddock Borough	14.2%	7.0%	Weak (1)
North Fayette Township	5.3%	-1.9%	Strong (3)
North Huntingdon Township	4.6%	-2.6%	Strong (3)
North Versailles Township	5.8%	-1.4%	Strong (3)
Oakdale Borough	6.8%	-0.4%	Mid-Range (2)
O'Hara Township	3.9%	-3.3%	Strong (3)

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

**Table 6-12: Unemployment Indicator**  
**(Comparable National Unemployment Rate = 7.2%)**

<b>Municipality Name</b>	<b>2005-2009 5 Year % Unemployment Estimates</b>	<b>Local Unemployment Rate minus National Rate</b>	<b>Categorization</b>
Ohio Township	3.1%	-4.1%	Strong (3)
Penn Hills, Municipality of	7.8%	0.6%	Mid-Range (2)
Penn Township	3.6%	-3.6%	Strong (3)
Peters Township	4.4%	-2.8%	Strong (3)
Pitcairn Borough	9.2%	2.0%	Weak (1)
Pittsburgh City	8.1%	0.9%	Mid-Range (2)
Pleasant Hills Borough	4.1%	-3.1%	Strong (3)
Plum Borough	5.3%	-1.9%	Strong (3)
Rankin Borough	16.4%	9.2%	Weak (1)
Reserve Township	3.6%	-3.6%	Strong (3)
Robinson Township	3.6%	-3.6%	Strong (3)
Ross Township	4.5%	-2.7%	Strong (3)
Rossllyn Farms Borough	1.5%	-5.7%	Strong (3)
Scott Township	6.7%	-0.5%	Mid-Range (2)
Shaler Township	4.9%	-2.3%	Strong (3)
Sharpsburg Borough	7.6%	0.4%	Mid-Range (2)
South Fayette Township	4.7%	-2.5%	Strong (3)
Stowe Township	9.4%	2.2%	Weak (1)
Swissvale Borough	8.0%	0.8%	Mid-Range (2)
Thornburg Borough	6.0%	-1.2%	Strong (3)
Trafford Borough	3.7%	-3.5%	Strong (3)
Turtle Creek Borough	6.8%	-0.4%	Mid-Range (2)
Upper St. Clair Township	4.3%	-2.9%	Strong (3)
Verona Borough	5.8%	-1.4%	Strong (3)
Wall Borough	8.2%	1.0%	Weak (1)
West Homestead Borough	11.8%	4.6%	Weak (1)
West Mifflin Borough	6.3%	-0.9%	Mid-Range (2)
West View Borough	5.6%	-1.6%	Strong (3)
Whitaker Borough	8.5%	1.3%	Weak (1)
Whitehall Borough	4.2%	-3.0%	Strong (3)
Wilkins Township	6.6%	-0.6%	Mid-Range (2)
Wilkesburg Borough	10.5%	3.3%	Weak (1)
Wilmerding Borough	6.0%	-1.2%	Strong (3)

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

**Median Household Income (2009):** Median Household Income (MHI) divides the relevant incomes of a population into two parts so that half of the incomes are below the median and half of the incomes are above the median. Unlike average income, median income is not skewed by extremely high or extremely low incomes in the dataset. The U.S. EPA Guidance criteria for the MHI Indicator are described in Table 6-13.

**Table 6-13: Median Household Income Indicator Criteria**

Categorization	Local MHI
Strong	More than 25% above Adjusted National MHI
Mid-Range	(+/-) 25% of the Adjusted National MHI
Weak	More than 25% below Adjusted National MHI

Based on 2009 American Community Survey data, the 2009 adjusted national median household income was \$51,425<sup>6-14</sup>. The 2009 ALCOSAN service area MHI was \$43,900 or 85% of the national average. Based upon the EPA criterion, the ALCOSAN regional MHI is 15% below the national average, yielding a mid-range rating. The Census block group derived The EPA Financial Capability criteria also include the weighted average MHI of the municipalities. The average of the municipalities, weighted by service population was \$47,674. This municipal average was 7.3% below the national MHI, resulting in Mid-Range rating. The scores for the individual municipalities are shown on Table 6-14, below.

**Table 6-14: Median Household Income by Municipalities (2009)**

Municipality Name		Municipality Median Household Income (ACS 2005-2009 Estimate)	Difference in Median Income (From National MHI)		EPA Score
			Amount	%	
1	Aspinwall Borough	\$52,740	\$1,315	3%	Mid-Range (2)
2	Avalon Borough	\$34,263	(\$17,162)	-33%	Weak (1)
3	Baldwin Borough	\$48,675	(\$2,750)	-5%	Mid-Range (2)
4	Baldwin Township	\$63,125	\$11,700	23%	Mid-Range (2)
5	Bellevue Borough	\$36,218	(\$15,207)	-30%	Weak (1)
6	Ben Avon Borough	\$69,239	\$17,814	35%	Strong (3)
7	Ben Avon Heights Borough	\$99,063	\$47,638	93%	Strong (3)
8	Bethel Park, Municipality of	\$59,795	\$8,370	16%	Mid-Range (2)
9	Blawnox Borough	\$36,758	(\$14,667)	-29%	Weak (1)
10	Braddock Borough	\$21,236	(\$30,189)	-59%	Weak (1)
11	Braddock Hills Borough	\$29,309	(\$22,116)	-43%	Weak (1)
12	Brentwood Borough	\$43,826	(\$7,599)	-15%	Mid-Range (2)
13	Bridgeville Borough	\$37,373	(\$14,052)	-27%	Weak (1)

<sup>6-14</sup> <http://factfinder.census.gov/servlet/ACSSAFFacts>

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

**Table 6-14: Median Household Income by Municipalities (2009)**

	Municipality Name	Municipality Median Household Income (ACS 2005-2009 Estimate)	Difference in Median Income (From National MHI)		EPA Score
			Amount	%	
14	Carnegie Borough	\$42,475	(\$8,950)	-17%	Mid-Range (2)
15	Castle Shannon Borough	\$46,301	(\$5,124)	-10%	Mid-Range (2)
16	Chalfant Borough	\$46,641	(\$4,784)	-9%	Mid-Range (2)
17	Churchill Borough	\$80,682	\$29,257	57%	Strong (3)
18	Collier Township	\$55,550	\$4,125	8%	Mid-Range (2)
19	Crafton Borough	\$42,872	(\$8,553)	-17%	Mid-Range (2)
20	Dormont Borough	\$45,475	(\$5,950)	-12%	Mid-Range (2)
21	East McKeesport Borough	\$40,616	(\$10,809)	-21%	Mid-Range (2)
22	East Pittsburgh Borough	\$22,898	(\$28,527)	-55%	Weak (1)
23	Edgewood Borough	\$56,683	\$5,258	10%	Mid-Range (2)
24	Emsworth Borough	\$51,681	\$256	0%	Mid-Range (2)
25	Etna Borough	\$33,381	(\$18,044)	-35%	Weak (1)
26	Forest Hills Borough	\$52,833	\$1,408	3%	Mid-Range (2)
27	Fox Chapel Borough	\$184,423	\$132,998	259%	Strong (3)
28	Franklin Park Borough	\$117,690	\$66,265	129%	Strong (3)
29	Green Tree Borough	\$65,923	\$14,498	28%	Strong (3)
30	Heidelberg Borough	\$34,219	(\$17,206)	-33%	Weak (1)
31	Homestead Borough	\$23,369	(\$28,056)	-55%	Weak (1)
32	Indiana Township	\$67,126	\$15,701	31%	Strong (3)
33	Ingram Borough	\$44,104	(\$7,321)	-14%	Mid-Range (2)
34	Kennedy Township	\$60,505	\$9,080	18%	Mid-Range (2)
35	Kilbuck Township	\$83,977	\$32,552	63%	Strong (3)
36	McCandless Township	\$70,480	\$19,055	37%	Strong (3)
37	McDonald Borough	\$42,153	(\$9,272)	-18%	Mid-Range (2)
38	McKees Rocks Borough	\$21,453	(\$29,972)	-58%	Weak (1)
39	Millvale Borough	\$33,456	(\$17,969)	-35%	Weak (1)
40	Monroeville, Municipality of	\$58,408	\$6,983	14%	Mid-Range (2)
41	Mount Lebanon, Municipality	\$74,003	\$22,578	44%	Strong (3)
42	Mount Oliver Borough	\$30,104	(\$21,321)	-41%	Weak (1)
43	Munhall Borough	\$42,438	(\$8,987)	-17%	Mid-Range (2)
44	Neville Township	\$40,132	(\$11,293)	-22%	Mid-Range (2)
45	North Braddock Borough	\$23,098	(\$28,327)	-55%	Weak (1)
46	North Fayette Township	\$62,378	\$10,953	21%	Mid-Range (2)
47	North Huntingdon Township	\$61,467	\$10,042	20%	Mid-Range (2)
48	North Versailles Township	\$39,160	(\$12,265)	-24%	Mid-Range (2)
49	Oakdale Borough	\$55,625	\$4,200	8%	Mid-Range (2)
50	O'Hara Township	\$81,107	\$29,682	58%	Strong (3)
51	Ohio Township	\$81,118	\$29,693	58%	Strong (3)
52	Penn Hills, Municipality of	\$44,749	(\$6,676)	-13%	Mid-Range (2)
53	Penn Township	\$64,853	\$13,428	26%	Strong (3)

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

**Table 6-14: Median Household Income by Municipalities (2009)**

	Municipality Name	Municipality Median Household Income (ACS 2005-2009 Estimate)	Difference in Median Income (From National MHI)		EPA Score
			Amount	%	
54	Peters Township	\$99,413	\$47,988	93%	Strong (3)
55	Pitcairn Borough	\$37,861	(\$13,564)	-26%	Weak (1)
56	Pittsburgh City	\$35,732	(\$15,693)	-31%	Weak (1)
57	Pleasant Hills Borough	\$64,403	\$12,978	25%	Strong (3)
58	Plum Borough	\$64,415	\$12,990	25%	Strong (3)
59	Rankin Borough	\$16,314	(\$35,111)	-68%	Weak (1)
60	Reserve Township	\$55,117	\$3,692	7%	Mid-Range (2)
61	Robinson Township	\$65,278	\$13,853	27%	Strong (3)
62	Ross Township	\$56,257	\$4,832	9%	Mid-Range (2)
63	Roslyn Farms Borough	\$119,063	\$67,638	132%	Strong (3)
64	Scott Township	\$51,349	(\$76)	0%	Mid-Range (2)
65	Shaler Township	\$59,533	\$8,108	16%	Mid-Range (2)
66	Sharpsburg Borough	\$31,593	(\$19,832)	-39%	Weak (1)
67	South Fayette Township	\$65,583	\$14,158	28%	Strong (3)
68	Stowe Township	\$31,837	(\$19,588)	-38%	Weak (1)
69	Swissvale Borough	\$38,518	(\$12,907)	-25%	Weak (1)
70	Thornburg Borough	\$113,750	\$62,325	121%	Strong (3)
71	Trafford Borough	\$37,723	(\$13,702)	-27%	Weak (1)
72	Turtle Creek Borough	\$36,021	(\$15,404)	-30%	Weak (1)
73	Upper St. Clair Township	\$109,223	\$57,798	112%	Strong (3)
74	Verona Borough	\$38,606	(\$12,819)	-25%	Mid-Range (2)
75	Wall Borough	\$32,303	(\$19,122)	-37%	Weak (1)
76	West Homestead Borough	\$48,491	(\$2,934)	-6%	Mid-Range (2)
77	West Mifflin Borough	\$43,968	(\$7,457)	-15%	Mid-Range (2)
78	West View Borough	\$48,675	(\$2,750)	-5%	Mid-Range (2)
79	Whitaker Borough	\$36,797	(\$14,628)	-28%	Weak (1)
80	Whitehall Borough	\$51,961	\$536	1%	Mid-Range (2)
81	Wilkins Township	\$44,811	(\$6,614)	-13%	Mid-Range (2)
82	Wilkesburg Borough	\$28,335	(\$23,090)	-45%	Weak (1)
83	Wilmerding Borough	\$22,648	(\$28,777)	-56%	Weak (1)

**6.3.3 Financial Management Indicators**

Financial management indicators calculate property tax revenues as a percent of the assessed value of and the property tax revenue collection rate. These metrics are primarily applicable in the analysis of municipal general obligation (property tax backed) bonds.

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

**Property Tax Burden Indicator:** This indicator is a measure of the taxable resources available to support debt. Table 6-15 shows the property tax burden indicator as derived by dividing a municipality's property tax revenue by the full market value of the taxable property within the municipality.

**Table 6-15: Property Tax Revenue Indicator Criteria**

Categorization	Low	to	High
Strong	0.00%	to	2.00%
Mid-Range	2.00%	to	4.00%
Weak	> 4.00%		

The aggregate anticipated municipal property tax revenue, including millage for overlapping entities of school district and county times the assessed value of real estate, for the municipalities served by ALCOSAN in 2009 was \$1.1 billion. The aggregate full market value for the ALCOSAN municipalities was \$51.6 billion; resulting in an ALCOSAN service area wide property tax / full market value ratio of 2.14%, a Mid-Range score. However, the weighted average of the indicators for the individual municipalities is 1.98%, a Strong score. Contributions from municipalities in Washington and Westmoreland Counties are excluded from this analysis because their service populations account for only 1 percent of the ALCOSAN service population.

Table 6-16 shows the results of this indicator for the individual municipalities within the service area. The market value of real estate data for this indicator come from the 2009 NewPA municipal Financial Data and the millage data comes from the 2009 NewPA Tax Rates/Millage data<sup>6-15</sup>.

**Table 6-16: Municipal Property Tax Burden by Municipality**

Municipality Name	2009 Full Market Value	2009 Expected Property Tax Revenue (Including Overlapping Entities)	Revenue as % of Property Value	Benchmark
Aspinwall	\$178,794,519	\$4,734,593	3%	Mid-Range (2)
Avalon	\$157,057,739	\$5,171,660	3%	Mid-Range (2)
Baldwin	\$765,818,017	\$22,972,703	3%	Mid-Range (2)
Baldwin	\$88,209,397	\$2,865,816	3%	Mid-Range (2)
Bellevue	\$266,774,176	\$8,322,229	3%	Mid-Range (2)
Ben Avon	\$105,954,002	\$2,710,744	3%	Mid-Range (2)
Ben Avon Heights	\$36,572,274	\$961,206	3%	Mid-Range (2)
Bethel Park	\$2,101,192,897	\$55,423,585	3%	Mid-Range (2)

<sup>6-15</sup> <http://munstatspa.dced.state.pa.us/ReportViewer.aspx?R=MunicipalTaxInformation>

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

**Table 6-16: Municipal Property Tax Burden by Municipality**

<b>Municipality Name</b>	<b>2009 Full Market Value</b>	<b>2009 Expected Property Tax Revenue (Including Overlapping Entities)</b>	<b>Revenue as % of Property Value</b>	<b>Benchmark</b>
Blawnox	\$70,019,258	\$1,945,897	3%	Mid-Range (2)
Braddock	\$48,396,396	\$642,035	1%	Strong (3)
Braddock Hills	\$69,580,139	\$701,144	1%	Strong (3)
Brentwood	\$346,141,137	\$12,221,385	4%	Mid-Range (2)
Bridgeville	\$204,889,408	\$5,079,438	2%	Mid-Range (2)
Carnegie	\$317,073,847	\$9,850,368	3%	Mid-Range (2)
Castle Shannon	\$317,679,696	\$2,823,289	1%	Strong (3)
Chalfant	\$23,103,097	\$230,813	1%	Strong (3)
Churchill	\$257,284,553	\$2,093,596	1%	Strong (3)
Collier	\$709,421,521	\$16,822,952	2%	Mid-Range (2)
Crafton	\$228,731,709	\$7,066,456	3%	Mid-Range (2)
Dormont	\$274,441,241	\$8,109,563	3%	Mid-Range (2)
East McKeesport	\$59,098,759	\$1,901,707	3%	Mid-Range (2)
East Pittsburgh	\$41,303,399	\$706,374	2%	Strong (3)
Edgewood	\$203,365,661	\$1,989,844	1%	Strong (3)
Emsworth	\$93,078,735	\$2,325,980	2%	Mid-Range (2)
Etna	\$105,097,631	\$3,490,014	3%	Mid-Range (2)
Forest Hills	\$318,858,213	\$3,584,119	1%	Strong (3)
Fox Chapel	\$1,099,799,478	\$26,279,313	2%	Mid-Range (2)
Franklin Park	\$1,202,908,075	\$25,884,303	2%	Mid-Range (2)
Green Tree	\$510,016,304	\$13,153,983	3%	Mid-Range (2)
Heidelberg	\$49,252,788	\$1,380,241	3%	Mid-Range (2)
Homestead	\$190,870,514	\$2,416,951	1%	Strong (3)
Indiana	\$521,937,557	\$12,696,465	2%	Mid-Range (2)
Ingram	\$100,756,874	\$2,648,130	3%	Mid-Range (2)
Kennedy	\$498,886,787	\$10,983,232	2%	Mid-Range (2)
Kilbuck	\$49,539,310	\$1,323,362	3%	Mid-Range (2)
McCandless	\$2,090,541,753	\$45,375,543	2%	Mid-Range (2)
McKees Rocks	\$147,980,696	\$1,618,728	1%	Strong (3)
Millvale	\$80,761,125	\$2,672,562	3%	Mid-Range (2)
Monroeville	\$2,316,320,343	\$52,512,372	2%	Mid-Range (2)
Mount Oliver	\$72,877,778	\$1,703,068	2%	Mid-Range (2)
Mt. Lebanon	\$2,361,972,495	\$68,593,524	3%	Mid-Range (2)
Munhall	\$358,390,394	\$4,615,452	1%	Strong (3)

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

**Table 6-16: Municipal Property Tax Burden by Municipality**

<b>Municipality Name</b>	<b>2009 Full Market Value</b>	<b>2009 Expected Property Tax Revenue (Including Overlapping Entities)</b>	<b>Revenue as % of Property Value</b>	<b>Benchmark</b>
Neville	\$119,399,124	\$3,331,587	3%	Mid-Range (2)
North Braddock	\$77,539,524	\$1,048,705	1%	Strong (3)
North Fayette	\$1,012,023,292	\$25,903,107	3%	Mid-Range (2)
North Versailles	\$409,252,521	\$13,486,614	3%	Mid-Range (2)
Oakdale	\$55,233,898	\$1,413,589	3%	Mid-Range (2)
O'Hara	\$1,009,772,049	\$24,084,618	2%	Mid-Range (2)
Ohio	\$454,204,990	\$10,469,371	2%	Mid-Range (2)
Penn Hills	\$1,565,978,577	\$46,030,687	3%	Mid-Range (2)
Pitcairn	\$66,486,564	\$1,710,746	3%	Mid-Range (2)
Pittsburgh	\$13,348,820,505	\$206,773,230	2%	Strong (3)
Pleasant Hills	\$509,300,217	\$4,802,844	1%	Strong (3)
Plum	\$1,273,400,742	\$32,783,055	3%	Mid-Range (2)
Rankin	\$12,607,251	\$200,939	2%	Strong (3)
Reserve	\$126,687,319	\$3,645,245	3%	Mid-Range (2)
Robinson	\$1,569,634,358	\$10,472,412	1%	Strong (3)
Ross	\$2,126,326,140	\$48,126,458	2%	Mid-Range (2)
Rossllyn Farms	\$50,724,710	\$1,720,130	3%	Mid-Range (2)
Scott	\$831,903,759	\$20,740,713	2%	Mid-Range (2)
Shaler	\$1,402,760,384	\$39,225,781	3%	Mid-Range (2)
Sharpsburg	\$96,068,863	\$2,771,696	3%	Mid-Range (2)
South Fayette	\$941,406,538	\$6,922,030	1%	Strong (3)
Stowe	\$175,252,660	\$1,655,703	1%	Strong (3)
Swissvale	\$253,126,146	\$3,008,905	1%	Strong (3)
Thornburg	\$53,398,840	\$1,315,992	2%	Mid-Range (2)
Turtle Creek	\$99,544,722	\$1,131,802	1%	Strong (3)
Upper St. Clair	\$1,835,776,811	\$49,783,550	3%	Mid-Range (2)
Verona	\$94,309,321	\$905,622	1%	Strong (3)
Wall	\$10,976,057	\$299,992	3%	Mid-Range (2)
West Homestead	\$129,009,125	\$1,556,882	1%	Strong (3)
West Mifflin	\$1,107,170,121	\$32,689,446	3%	Mid-Range (2)
West View	\$271,521,225	\$7,014,517	3%	Mid-Range (2)
Whitaker	\$26,416,867	\$829,150	3%	Mid-Range (2)
Whitehall	\$684,018,312	\$19,864,425	3%	Mid-Range (2)
Wilkins	\$376,098,172	\$2,983,582	1%	Strong (3)

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

---

**Table 6-16: Municipal Property Tax Burden by Municipality**

Municipality Name	2009 Full Market Value	2009 Expected Property Tax Revenue (Including Overlapping Entities)	Revenue as % of Property Value	Benchmark
Wilkinsburg	\$380,461,566	\$17,608,058	5%	Weak (1)
Wilmerding	\$44,993,543	\$1,467,689	3%	Mid-Range (2)

**Property Tax Revenue Collection Rate:** The property tax collection rate is considered in the EPA guidance as an indicator of the efficiency of the tax collection system and the ability of property owners to pay current property tax levies<sup>6-16</sup>. Contributions from municipalities in Washington and Westmoreland Counties are excluded from this analysis. Wall Borough was also excluded, since a real estate tax figure was not provided in the NewPA data. The EPA indicators are described in Table 6-17.

**Table 6-17: Property Tax Collection Indicator Criteria**

Property Tax Revenue/Property Tax Levied			
Categorization	High	to	Low
Strong	100%	to	98
Mid-Range	98%	to	94%
Weak	< 94%		

The overall indicator is 93%, which is a Weak score. Please see the Property Collection Rate detail for each municipality in Table 6-18. The incidences of collection rates exceeding 100% are assumed to reflect the timing of tax payments.

**Table 6-18: Property Tax Collection Rate by Municipality**

Municipality Name	2009 Property Tax Revenues	2009 Expected Tax Revenues (Municipality Only)	Collection Rate	Categorization
Aspinwall	\$853,789	\$809,135	106%	Weak (1)
Avalon	\$1,360,097	\$1,415,090	96%	Mid-Range (2)
Baldwin	\$4,852,693	\$5,062,057	96%	Mid-Range (2)

<sup>6-16</sup> Combined Sewer Overflows – Guidance for Financial Capability Assessment and Schedule Development, Page 34

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

**Table 6-18: Property Tax Collection Rate by Municipality**

<b>Municipality Name</b>	<b>2009 Property Tax Revenues</b>	<b>2009 Expected Tax Revenues (Municipality Only)</b>	<b>Collection Rate</b>	<b>Categorization</b>
Baldwin Township	\$824,498	\$837,989	98%	Strong (3)
Bellevue	\$1,692,237	\$1,867,419	91%	Weak (1)
Ben Avon	\$565,684	\$602,878	94%	Weak (1)
Ben Avon Heights	\$216,330	\$237,720	91%	Weak (1)
Bethel Park	\$4,210,435	\$4,580,601	92%	Weak (1)
Blawnox	\$591,751	\$474,030	125%	Strong (3)
Braddock	\$442,033	\$517,841	85%	Weak (1)
Braddock Hills	\$451,753	\$487,061	93%	Weak (1)
Brentwood	\$2,807,498	\$2,769,129	101%	Strong (3)
Bridgeville	\$935,555	\$973,225	96%	Mid-Range (2)
Carnegie	\$2,195,077	\$2,282,932	96%	Mid-Range (2)
Castle Shannon	\$2,343,663	\$1,785,360	131%	Strong (3)
Chalfant	\$163,609	\$159,411	103%	Strong (3)
Churchill	\$1,106,769	\$1,222,102	91%	Weak (1)
Collier Township	\$2,285,264	\$2,482,975	92%	Weak (1)
Crafton	\$1,836,343	\$1,601,122	115%	Strong (3)
Dormont	\$3,760,646	\$2,272,373	165%	Strong (3)
East McKeesport	\$344,534	\$360,502	96%	Mid-Range (2)
East Pittsburgh	\$560,092	\$625,746	90%	Weak (1)
Edgewood	\$1,272,439	\$1,354,619	94%	Weak (1)
Emsworth	\$457,783	\$465,394	98%	Strong (3)
Etna	\$665,363	\$945,879	70%	Weak (1)
Forest Hills	\$2,515,150	\$2,662,466	94%	Mid-Range (2)
Fox Chapel	\$2,190,422	\$2,474,549	89%	Weak (1)
Franklin Park	\$1,462,964	\$1,543,331	95%	Mid-Range (2)
Green Tree	\$1,979,425	\$1,999,417	99%	Strong (3)
Heidelberg	\$399,052	\$418,649	95%	Mid-Range (2)
Homestead	\$1,026,350	\$1,908,705	54%	Weak (1)

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

**Table 6-18: Property Tax Collection Rate by Municipality**

<b>Municipality Name</b>	<b>2009 Property Tax Revenues</b>	<b>2009 Expected Tax Revenues (Municipality Only)</b>	<b>Collection Rate</b>	<b>Categorization</b>
Indiana Township	\$1,467,486	\$1,435,328	102%	Strong (3)
Ingram	\$734,495	\$695,222	106%	Strong (3)
Kennedy Township	\$908,655	\$972,829	93%	Weak (1)
Kilbuck Township	\$344,370	\$346,775	99%	Strong (3)
McCandless Township	\$2,844,222	\$3,135,813	91%	Weak (1)
McKees Rocks	\$1,040,826	\$1,183,846	88%	Weak (1)
Millvale	\$648,672	\$726,850	89%	Weak (1)
Monroeville	\$4,306,385	\$5,095,905	85%	Weak (1)
Mount Oliver	\$898,097	\$619,461	145%	Strong (3)
Mt. Lebanon Twp	\$10,718,049	\$11,550,046	93%	Weak (1)
Munhall	\$3,298,956	\$3,673,502	90%	Weak (1)
Neville Township	\$480,777	\$567,146	85%	Weak (1)
North Braddock	\$706,744	\$852,935	83%	Weak (1)
North Fayette Township	\$2,981,637	\$3,039,106	98%	Strong (3)
North Versailles Township	\$2,640,096	\$2,864,768	92%	Weak (1)
Oakdale	\$165,099	\$165,702	100%	Strong (3)
O'Hara Township	\$2,052,794	\$2,221,499	92%	Weak (1)
Ohio Township	\$1,100,734	\$1,249,064	88%	Weak (1)
Penn Hills Township	\$6,900,485	\$7,203,501	96%	Mid-Range (2)
Pitcairn	\$362,156	\$382,298	95%	Mid-Range (2)
Pittsburgh <sup>6-17</sup>	\$131,913,614	\$144,167,261	92%	Weak (1)
Pleasant Hills	\$3,112,015	\$3,183,126	98%	Mid-Range (2)
Plum	\$5,209,652	\$3,789,641	137%	Strong (3)
Rankin	\$179,304	\$173,980	103%	Strong (3)
Reserve Township	\$487,242	\$505,482	96%	Mid-Range (2)
Robinson Township	\$3,977,313	\$4,787,385	83%	Weak (1)

<sup>6-17</sup> Pittsburgh 2009 Data is unavailable on the NewPA website data is from the 2009 Certified Annual Financial Report.

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

**Table 6-18: Property Tax Collection Rate by Municipality**

<b>Municipality Name</b>	<b>2009 Property Tax Revenues</b>	<b>2009 Expected Tax Revenues (Municipality Only)</b>	<b>Collection Rate</b>	<b>Categorization</b>
Ross Township	\$3,958,844	\$4,182,696	95%	Mid-Range (2)
Rosslyn Farms	\$464,148	\$532,609	87%	Weak (1)
Scott Township	\$3,834,378	\$4,087,143	94%	Weak (1)
Shaler Township	\$4,138,203	\$4,278,419	97%	Mid-Range (2)
Sharpsburg	\$713,693	\$768,551	93%	Weak (1)
South Fayette Township	\$3,339,653	\$3,615,001	92%	Weak (1)
Stowe Township	\$1,237,372	\$1,098,834	113%	Strong (3)
Swissvale	\$2,230,355	\$2,303,448	97%	Mid-Range (2)
Thornburg	\$227,027	\$266,994	85%	Weak (1)
Turtle Creek	\$815,962	\$846,130	96%	Mid-Range (2)
Upper St. Clair Township	\$5,591,417	\$6,241,641	90%	Weak (1)
Verona	\$687,524	\$608,295	113%	Strong (3)
West Homestead	\$973,169	\$1,201,075	81%	Weak (1)
West Mifflin	\$7,220,657	\$8,049,127	90%	Weak (1)
West View	\$1,447,837	\$1,542,241	94%	Weak (1)
Whitaker	\$260,599	\$249,111	105%	Strong (3)
Whitehall	\$3,410,283	\$3,762,101	91%	Weak (1)
Wilkins Township	\$1,520,953	\$1,697,331	90%	Weak (1)
Wilkinsburg	\$4,644,577	\$5,326,462	87%	Weak (1)
Wilmerding	\$296,754	\$272,211	109%	Strong (3)

## 6.4 Analyzing Financial Capability Indicators

### 6.4.1 Financial Indicators Numerical Scores

To generate a financial capability score, financial capability indicators are compared to national benchmarks established in the EPA guidance. Table 6-19 shows the EPA criteria established in the guidance document.

Indicators from the previous sections calculated using the population-weighted averages of all municipal scores are compiled in Table 6-20. Each score is calculated and its corresponding indicator identified. The overall rating is an average of the six components; it is presented in the final row and will be used in the Financial Capability matrix.

### 6.4.2 Current Conditions Financial Capability Matrix

The Residential Indicator and the Financial Capability Indicators are combined in the Financial Capability Matrix to result in one overall indicator. The results of the financial capability matrix under current conditions (prior to the implementation of the Wet Weather Plan) are shown on Table 6-21. The current conditions matrix indicates that, as a group, the municipalities comprising the ALCOSAN service area currently have a “medium burden” for wastewater service.

**Table 6-19: Permittee Financial Capability Indicator Benchmarks**

Indicator	Strong (3)	Mid-Range (2)	Weak (1)
Bond Rating	AAA-A (S&P) or Aaa-A (Moody's)	BBB (S&P) Baa (Moody's)	BB-D (S&P) Ba-C (Moody's)
Overall Net Debt as a Percent of Full Market Property Value	Below 2%	2% - 5%	Above 5%
Unemployment Rate	More than 1% below the National Average	± 1% of the National Average	More than 1% above the National Average
Median Household Income	More than 25% above National MHI	± 25% of the National MHI	More than 25% below National MHI
Property Tax as a Percent of Full Market Property Value	Below 2%	2% - 4%	Above 4%
Property Tax Collection Rate	Above 98%	94% - 98%	Below 94%
<b>Service Area Indicator</b>	<b>Population-weighted average of municipal indicators</b>		

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

**Table 6-20: Financial Capability Indicators – Weighted Average of Service Area**

Metric	ALCOSAN Service Area Weighted Value	Score	Score Value
Bond Rating	2.49	Mid-Range	2
Overall Net Debt as a Percent of Full Market Property Value	6.55%	Weak	1
Unemployment	-0.8%	Mid-Range	2
Median Household Income	0.6%	Mid-Range	2
Property Tax Revenues as a Percent of Full Market Property Value	2.14%	Mid-Range	2
Property Tax Revenue Collection Rate	93%	Weak	1
Permittee Indicators Score	1.67	Mid-Range	

This assessment does not include near or long-term costs for the implementation of ALCOSAN’s Wet Weather Plan or for concomitant municipal compliance costs or municipal renewal and replacement costs. The magnitude and impacts of future ALCOSAN and municipal wet weather control costs are addressed in Section 11 of this document.

**Table 6-21: Current Conditions Financial Capability Matrix**

Residential Indicator (Cost Per Household as a % MHI)			
Financial Capability Indicators	Low (<1.0%)	Mid-Range (1.0 - 2.0%)	High (>2.0%)
Weak (<1.5)	Medium Burden	High Burden	High Burden
Mid-Range (1.5 - 2.5)	Low Burden	<b>Medium Burden</b>	High Burden
Strong (>2.5)	Low Burden	Low Burden	Medium Burden

Analyses of the affordability and financial capability implications of the Recommended Regional Plan are found in section 9.4 (Regional Integration and System-Wide Alternatives Analysis) and Section 11 (Financial Capability Assessment).

## 6.5 Additional Economic and Demographic Factors

In addition to following EPA guidelines for completion of the financial capability assessment matrix, a discussion of socioeconomic trends in the ALCOSAN service area is essential to provide the full context for regulatory discussions concerning scheduling and level of wet weather controls.

### 6.5.1 Population History

The dominant demographic concerns of the ALCOSAN service area are the related factors of an aging population and a declining population. The relationship and its effects on the economics of the region are explained in this section.

**Population Age:** Due to industrial decline in the second half of the 20th century which accelerated in the 1980s, Pittsburgh and Allegheny County suffered substantial losses in working-age population. The effects of the outmigration of young and working-age people linger still, as shown in Table 6-22. The most significant demographic disruptions can be seen in the age groups “15 to 24,” “25 to 34,” and “75+” (highlighted in green, blue, and red, respectively). The 15 to 24 age group decreased dramatically from 1980 to 2000 but shows some recovery in 2010. The 45 to 54 and 75+ age groups have increased substantially over the same time period. The cohort aged 15 to 34 in 1980 (now 45-64) has contained the largest share of total population of any other 20-year age group – 33% in 1980 and 28% in 2010. As this cohort continues getting older, it will continue to increase average service area age and the birth rate within the cohort will approach zero.

There is at least one improvement to the demographics that, if it becomes a trend, will benefit the region in the future: 2010 data shows a 1.6% increase in the share of population between ages 15 and 24. This is the first increase in that age group’s share of the population in over 30 years. Regardless of this improvement, the overall share of the under 14 population and over 45 population (highlighted purple in Table 6-22) shows the lingering demographic damage of the 1980s and 1990s.

**Table 6-22: Service Area Municipalities’ Population Distributed by Age**

Age Cohort as Percent of Total Population				
Age	1980	1990	2000	2010
<5	5.4%	6.3%	5.5%	5.2%
5 to 14	13.2%	11.4%	12.5%	10.7%
15 to 24	18.0%	13.1%	12.5%	14.1%
25 to 34	15.4%	16.6%	12.7%	13.1%
35 to 44	10.4%	14.6%	15.7%	11.9%
45 to 54	11.4%	10.2%	14.1%	15.1%

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

**Table 6-22: Service Area Municipalities' Population Distributed by Age**

Age Cohort as Percent of Total Population				
Age	1980	1990	2000	2010
55 to 64	12.5%	10.6%	9.2%	13.2%
65 to 74	8.5%	10.2%	8.8%	7.8%
75+	5.1%	7.0%	8.9%	8.8%
Population over 45	39%	39%	41%	45%
Population over 55	28%	29%	27%	30%

**Historic Population Decline:** As shown in Table 6-23, the populations of Pittsburgh and Allegheny County declined between 1960 and 2010 by an average of 13% and 6% per decade, respectively. As noted in the previous section, many of the out-migrants from the region were young people entering the workforce.

The declines in population from 1970 through 1990 coincided with the decline of the steel industry in the Pittsburgh region and concurrent job losses in other heavy industries. Looking at more recent history over the past 20 years, the population of the City of Pittsburgh declined approximately 20% and the population in all of Allegheny County declined by around 8%.

**Table 6-23: Pittsburgh and Allegheny County Population Change**

Population Change 1950 to Present				
Year	Pittsburgh		Allegheny County	
	Population	Population Change	Population	Population Change
1960	604,300	-	1,628,600	-
1970	520,100	-14%	1,605,100	-1%
1980	432,700	-17%	1,450,200	-10%
1990	369,900	-15%	1,336,400	-8%
2000	334,600	-10%	1,281,700	-4%
2010	305,700	-9%	1,223,300	-5%
<b>Change from 1990 to 2010</b>		<b>-17%</b>		<b>-8%</b>

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

---

Research from the University of Pittsburgh explains that this trend may continue into the future due to an unfavorable balance between the birth rate and the death rate. According to Chris Briem and Peter Morrison in their 2004 paper, *How Migration Flows Shape the Elderly Population of Metropolitan Pittsburgh*, “18 percent of the metropolitan area’s residents are 65 or older (compared with 12 percent nationally); and 30 percent of all area households have at least one member who is 65 or older (compared with 23 percent nationally).” This has implications for future growth as Briem and Morrison explain:

“Ongoing regional out-migration has narrowed the region’s internal demographic capacity for future population growth. The demographic crosscurrents of births and deaths have reversed, giving rise to natural decrease on a region wide basis....deaths now outnumber births, and there is no immediate prospect that natural *increase* will resume, owing to the relatively few people of reproductive age who remain compared with the considerable number of elderly in the population.”

The large elderly population of the region has helped drive healthcare to the largest employment growth center in the region. Chris Briem and Richard Schulz in their 1998 paper, *Economic Impact of the Elderly in Allegheny County*, show that the elderly spend at double the rate of all consumers on healthcare. To determine what this spending means for the regional economy, Briem and Schulz use an economic simulation model to estimate the effects of a decline in elderly population to the national average (a net loss of 152,000 elderly region-wide). The result of their modeling led to an additional loss of 50,000 non-elderly residents. The non-elderly population decline was due to job losses, which were estimated to be one job for every nine elderlies. Thus, if the mortality rate of the regional population continues to outpace its birth rate, the job market will be adversely affected and suppress future population growth.

**ALCOSAN Service Area Population History:** The population within the ALCOSAN service area, including residents in unsewered areas has paralleled the decline evidenced by the City of Pittsburgh and by Allegheny County in general. As may be seen in Table 6-24, the ALCOSAN service area population has declined by approximately 10.4% over the past 20 years (1990 - 2010).

**Table 6-24: ALCOSAN Service Area Population History**

Year	Total Population in Service Area	Non-Contributing Population in Service Area	Contributing Population in Service Area
1990	943,000	64,000	879,000
2010	836,000	12,000 <sup>6-18</sup>	824,000
Change	-11.4%	-81.3%	-6.3%

---

<sup>6-18</sup> Some of the reduction in the non-contributing population is due to advancements in GIS technology since the 1990s which refined the contributing sewersheds.

**Regional Planning Agency Projections:** As a counter-argument to this population decline experience over the past decades, the Southwestern Pennsylvania Commission, the regional planning agency which serves Pittsburgh and the 10 counties in Southwestern Pennsylvania, has projected the population declines of the past 50 years to diminish and marginally reverse between 2010 and 2020. The reversal is attributable to anticipated flows of migrants into the city, which will be absolutely necessary if population decline is to be reversed. The 2010 increase in the share of 15-24-year olds may be a harbinger of that growth. A detailed discussion of population projections through the WWP planning period of 2046 is provided in Section 7.1.1 of this document. As detailed therein, modest population growth is projected. This growth has been incorporated into the future base wastewater flow projections (Section 7.2) for purposes of hydraulic capacity analysis as appropriate for conservative (bias towards over-sizing capacity requirements) engineering planning. As detailed in Section 11 (Financial Capability Assessment), conservative financial planning and the historical data suggest that an assumption of no significant population growth (or loss) is made in the affordability analysis of the recommended wet weather control strategy.

### **6.5.2 Household Trends**

While the population within the ALCOSAN service area declined by approximately 10% in the twenty-year period of 1990 to 2010, the number of households declined by a modest 2% as shown on Table 6-25 below. These data suggest a declining household size, which is supported by the Census data. The average household size has declined from about 3 persons per household to 2.3 persons per household, or a drop of 24% between 1990 and 2010. The declining and aging population described above also manifests in the composition of households within the ALCOSAN service area. Family households as a percentage of all households have declined from 67% to 57% since 1990, a decline in relative percentage of 13%. Family households declined in real numbers from 294,800 in 1990 to 248,500 in 2010 for a numeric decline of about 15%.

The percentage of households headed by both husbands and wives fell from 50% in 1990 to 40% in 2010, a relative drop of 20% while the households headed by females remained relatively stable as a percentage of the total households. The percentage of non-family households relative to total households has increased from 35% in 1990 to 43% in 2010. These three statistics are significant because two parent households tend to have higher incomes than non-family households and family households headed by single parents.<sup>6-19</sup> Taken together with the overall aging of the population in the service area, these household composition trends do not forecast significant income growth. An examination of the historical and recent income levels further illustrates this point.

---

<sup>6-19</sup> US Census Bureau, "Income, Poverty, and Health Insurance Coverage in the United States, 2007"

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

---

**Table 6-25: Demographic Trends in ALCOSAN Service Area 1990 to 2010<sup>a</sup>**

Indicator		1990	2010	20 Year Change
1	Households <sup>b</sup>	448,800	438,835	-2%
2	Household Size	3.0	2.3	-24%
3	Family Households as % All Households	65%	57%	-13%
4	Households Headed by Husbands and Wives as % of all Households	50%	40%	-20%
5	% of Households Headed by Females	13%	12%	-3%
6	Non-Family Households as % of all Households	35%	43%	26%
7	% Households with Incomes Below Poverty Level	12%	13%	5%

<sup>a</sup>Based on data for Census block groups within the ALCOSAN service area.

<sup>b</sup> Municipal level data. Census block group data are unavailable.

### **6.5.3 Income Growth Trends**

Since 1989, income levels in the service area have increased more slowly than national incomes and inflation. Tables 6-26 and 6-27 show the growth in national median household income was higher than the population weighted annualized growth for the service area two out of the last three decades. Inflation as measured by the Consumer Price Index (CPI), both locally and nationally, outpaced income growth in each decade, sometimes by over a half of a percent. This disparity between the CPI annualized growth rate and the service area median household income growth rate is important because the American Community Survey uses the CPI to inflate income data points collected in non-current months. As a result, any American Community Survey MHI number is likely to be overinflated to an extent.

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

**Table 6-26: Service Area Municipality Income Growth**  
(Data Available for Municipalities Over 10,000 Population)

Municipality	Median Household Income				Annualized Growth Rates		
	Population (2010 ACS)	1989 Census	1999 Census	2005-2009 ACS Estimate	1989-1999	1999-2009	1989-2009
Bethel Park	32,313	\$41,149	\$53,791	\$59,795	2.7%	1.1%	1.9%
McCandless	28,457	\$46,887	\$62,159	\$70,480	2.9%	1.3%	2.1%
Monroeville	28,386	\$36,422	\$44,653	\$58,408	2.1%	2.7%	2.4%
Mount Lebanon	33,137	\$45,801	\$60,783	\$74,003	2.9%	2.0%	2.4%
Penn Hills	42,329	\$32,376	\$39,960	\$44,749	2.1%	1.1%	1.6%
Pittsburgh	305,704	\$20,747	\$28,588	\$35,732	3.3%	2.3%	2.8%
Plum borough	27,126	\$36,782	\$48,386	\$64,415	2.8%	2.9%	2.8%
Ross Township	31,105	\$36,388	\$46,542	\$56,257	2.5%	1.9%	2.2%
Shaler Township	28,757	\$36,972	\$49,118	\$59,533	2.9%	1.9%	2.4%
Upper St. Clair	19,229	\$67,657	\$87,581	\$109,223	2.6%	2.2%	2.4%
West Mifflin	20,313	\$26,867	\$36,130	\$43,968	3.0%	2.0%	2.5%
<b>Population Weighted</b>					<b>2.9%</b>	<b>2.1%</b>	<b>2.5%</b>

**Table 6-27: Other Income Growth and Inflation Measures**

Area	Median Household Income			Annualized Growth Rates		
	1989 Census	1999 Census	2005-2009 American Community Survey	1989-1999	1999 -2009	1989 -2009
United States	\$30,056	\$41,994	\$51,425	3.4%	2.0%	2.7%
Pennsylvania	\$29,069	\$40,106	\$49,737	3.3%	2.2%	2.7%
Allegheny County	\$28,136	\$38,329	\$46,641	3.1%	2.0%	2.6%
CPI National				3.0%	2.6%	2.8%
CPI Pittsburgh				3.1%	2.7%	2.9%

#### **6.5.4 Distressed Municipalities**

In 1987, the Municipalities Financial Recovery Act (Act 47) was passed in an effort to address the short-term and long-term financial difficulties faced by Pennsylvania municipalities. The primary objectives of Act 47 were to aid municipalities to restore their financial integrity through bankruptcy, consolidation with healthy municipalities and grants.

In order to determine if a municipality was distressed, 11 criteria are evaluated<sup>6-20</sup>, including whether or not the municipality has had a deficit over a three-year period, has defaulted on an interest payment, or has missed payroll for 30 days. At least one criterion must be met for a municipality to be eligible for Act 47 status.

Of ALCOSAN's municipalities, seven have at one time been determined to be distressed, though four have been rescinded. The three remaining municipalities with Act 47 status contain 39% of the service area by population. A distressed municipality could face challenges and possibly be restricted from borrowing the full amount required to affordable. The list of Act 47 determinations and rescissions appear below:

Determinations<sup>6-21</sup>

- Borough of Braddock, Allegheny County - June 15, 1988
- Borough of Rankin, Allegheny County - January 9, 1989
- City of Pittsburgh, Allegheny County - December 29, 2003

Rescissions:

- Borough of Wilksburg Allegheny County - Designated 1/19/88; Rescinded 11/10/98
- Borough of East Pittsburgh - Allegheny County Designated 11/13/92; Rescinded 12/27/99
- Borough of North Braddock - Allegheny County Designated 5/22/95; Rescinded 4/11/03
- Borough of Homestead, Allegheny County - Designated 3/22/93; Rescinded 3/28/07

#### **6.5.5 Income Variations by Municipal Sewer Types**

As detailed in Section 6.2.2, there is a broad range of median household incomes among the 83 municipalities within the ALCOSAN service area, ranging from less than \$18,000 annually to more than \$220,000 while the service area-wide MHI is \$46,400. Thirty-six of the municipalities have municipal MHIs less than the service area median. These municipalities are divided between collection system type; 17 have sanitary sewer systems and 19 have combined or mixed systems. Forty-seven municipalities have MHIs greater than the service area median. Of these, 43 are sanitary sewer, three have mixed systems and one has a combined system. The municipalities are shown by ranked MHIs and sewer types on Table 6-28.

---

<sup>6-20</sup> <http://www.newpa.com/sites/default/files/uploads/MunicipalFinancialRecoveryAct.pdf> Pg. 3-4

<sup>6-21</sup> <http://www.newpa.com/get-local-gov-support/technical-assistance/request-assistance/act-47>

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

**Table 6-28: Sorted Municipal Median Household Incomes (2012 Estimates)  
and Collection System Type**

Municipality		Municipal Collection System Type	2012 Estimated MHI	Municipality		Municipal Collection System Type	2012 Estimated MHI
1	Rankin	Combined	\$17,600	43	Chalfant	Sanitary	\$50,200
2	Braddock	Combined	\$22,900	44	West Homestead	Mixed	\$52,200
3	North Versailles	Sanitary	\$22,900	45	West View	Mixed	\$52,400
4	McKees Rocks	Combined	\$23,100	46	North Huntingdon	Sanitary	\$52,900
5	Wilmerding	Combined	\$24,400	47	Scott	Sanitary	\$55,300
6	East Pittsburgh	Combined	\$24,700	48	Emsworth	Sanitary	\$55,700
7	North Braddock	Mixed	\$24,900	49	Aspinwall	Combined	\$56,800
8	Homestead	Mixed	\$25,200	50	Forest Hills	Sanitary	\$56,900
9	Wilkinsburg	Sanitary	\$30,500	51	Baldwin	Sanitary	\$59,100
10	Braddock Hills	Sanitary	\$31,600	52	Reserve	Sanitary	\$59,400
11	Mount Oliver	Sanitary	\$32,400	53	Collier	Sanitary	\$59,800
12	Sharpsburg	Combined	\$34,000	54	Oakdale	Sanitary	\$59,900
13	Stowe	Combined	\$34,300	55	Kennedy	Sanitary	\$60,100
14	Wall	Sanitary	\$34,800	56	Ross	Sanitary	\$60,600
15	Etna	Combined	\$35,900	57	Edgewood	Sanitary	\$61,000
16	Millvale	Combined	\$36,000	58	Monroeville	Sanitary	\$63,500
17	Avalon	Sanitary	\$36,900	59	Shaler	Sanitary	\$64,100
18	Heidelberg	Sanitary	\$36,900	60	Bethel Park	Sanitary	\$64,600
19	Robinson	Sanitary	\$37,100	61	Whitehall	Sanitary	\$66,300
20	Pittsburgh	Mixed	\$38,500	62	Penn	Sanitary	\$67,800
21	Turtle Creek	Combined	\$38,800	63	Baldwin	Sanitary	\$68,000
22	Bellevue	Sanitary	\$39,000	64	North Fayette	Sanitary	\$69,300
23	Blawnox	Sanitary	\$39,600	65	South Fayette	Sanitary	\$70,600
24	Whitaker	Sanitary	\$39,600	66	Green Tree	Sanitary	\$71,000
25	Bridgeville	Sanitary	\$40,200	67	Ben Avon	Sanitary	\$74,600
26	Trafford	Sanitary	\$40,600	68	McCandless	Sanitary	\$74,900
27	Pitcairn	Combined	\$40,800	69	Plum	Sanitary	\$77,700
28	Swissvale	Mixed	\$41,500	70	Peters	Sanitary	\$79,400
29	East McKeesport	Sanitary	\$42,400	71	Mount Lebanon	Sanitary	\$79,700
30	Neville	Sanitary	\$43,200	72	Pleasant Hills	Sanitary	\$80,500
31	Penn Hills	Sanitary	\$44,900	73	Churchill	Sanitary	\$86,900
32	McDonald	Combined	\$45,400	74	O'Hara	Sanitary	\$87,300
33	Carnegie	Mixed	\$45,700	75	Kilbuck	Sanitary	\$90,400
34	Munhall	Mixed	\$45,700	76	Indiana	Sanitary	\$90,500
35	Verona	Sanitary	\$45,900	77	Ohio	Sanitary	\$95,400
36	Crafton	Mixed	\$46,200	78	Upper St. Clair	Sanitary	\$96,600
37	West Mifflin	Sanitary	\$47,100	79	Ben Avon Heights	Sanitary	\$106,700

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

Municipality		Municipal Collection System Type	2012 Estimated MHI	Municipality		Municipal Collection System Type	2012 Estimated MHI
38	Brentwood	Sanitary	\$47,200	80	Thornburg	Sanitary	\$122,500
39	Ingram	Mixed	\$47,500	81	Rosslyn Farms	Sanitary	\$128,200
40	Wilkins	Sanitary	\$48,300	82	Franklin Park	Sanitary	\$134,800
41	Dormont	Sanitary	\$49,000	83	Fox Chapel	Sanitary	\$223,900
42	Castle Shannon	Sanitary	\$49,900				

**6.5.6 Poverty Rates**

Paralleling the diversity in median household incomes between and within the ALCOSAN municipalities, there is a broad range of household poverty rates between the communities. As shown on Table 6-29, household poverty rates within the municipalities range from less than 1% to more than 36%. The combined household poverty rate for the municipalities is 13%.

The older municipalities, including the City of Pittsburgh tend to have the highest poverty rates. The twenty-three municipalities that have combined sewerage or mixed sewerage (portions of the municipality being combined or mixed) account for nearly 65% of the households in poverty. Fifteen of the 23 combined or mixed municipalities have poverty rates exceeding 15% and all but four have poverty rates greater than 10%. Six of the sanitary sewered municipalities have poverty rates exceeding 15% and sixteen sanitary sewered municipalities have poverty rates exceeding 10%.

**Table 6-29: Municipal Poverty Rates**

Municipality		Municipal Collection System Type	Estimated % of Households with Incomes Below the Poverty Level	Municipality		Municipal Collection System Type	Estimated % of Households with Incomes Below the Poverty Level
1	Rankin	Combined	37%	43	Munhall	Mixed	9%
2	Homestead	Mixed	36%	44	Ingram	Mixed	9%
3	Braddock	Combined	34%	45	Oakdale	Sanitary	9%
4	East Pittsburgh	Combined	32%	46	Whitaker	Sanitary	9%
5	McKees Rocks	Combined	31%	47	Scott	Sanitary	8%
6	Wilmerding	Combined	30%	48	Green Tree	Sanitary	8%
7	Braddock Hills	Sanitary	28%	49	West View	Mixed	8%
8	Wilkinsburg	Sanitary	24%	50	Penn	Sanitary	8%
9	Wall	Sanitary	24%	51	Ross	Sanitary	7%
10	Sharpsburg	Combined	22%	52	Monroeville	Sanitary	7%
11	Mount Oliver	Sanitary	22%	53	Reserve	Sanitary	7%

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

**Table 6-29: Municipal Poverty Rates**

Municipality		Municipal Collection System Type	Estimated % of Households with Incomes Below the Poverty Level	Municipality		Municipal Collection System Type	Estimated % of Households with Incomes Below the Poverty Level
12	Turtle Creek	Combined	21%	54	Pleasant Hills	Sanitary	7%
13	Pittsburgh	Mixed	21%	55	Forest Hills	Sanitary	6%
14	Verona	Sanitary	20%	56	Robinson	Sanitary	6%
15	Stowe	Combined	20%	57	Chalfant	Sanitary	6%
16	North Braddock	Mixed	20%	58	Emsworth	Sanitary	6%
17	Swissvale	Mixed	18%	59	North Fayette	Sanitary	6%
18	Avalon	Sanitary	18%	60	Bethel Park	Sanitary	6%
19	Carnegie	Mixed	18%	61	North Huntingdon	Sanitary	5%
20	Aspinwall	Combined	18%	62	Shaler	Sanitary	5%
21	Millvale	Combined	15%	63	Ben Avon	Sanitary	5%
22	North Versailles	Sanitary	13%	64	Ohio	Sanitary	5%
23	East McKeesport	Sanitary	13%	65	Kennedy	Sanitary	5%
24	Pitcairn	Combined	13%	66	McCandless	Sanitary	5%
25	Blawnox	Sanitary	13%	67	Mount Lebanon	Sanitary	5%
26	Etna	Combined	12%	68	Kilbuck	Sanitary	5%
27	Edgewood	Sanitary	12%	69	Collier	Sanitary	5%
28	Crafton	Mixed	11%	70	Indiana	Sanitary	5%
29	Bellevue	Sanitary	11%	71	Churchill	Sanitary	4%
30	Brentwood	Sanitary	11%	72	Peters	Sanitary	4%
31	Heidelberg	Sanitary	11%	73	Plum	Sanitary	4%
32	Bridgeville	Sanitary	10%	74	O'Hara	Sanitary	3%
33	Neville	Sanitary	10%	75	Upper St. Clair	Sanitary	3%
34	West Homestead	Mixed	10%	76	Fox Chapel	Sanitary	3%
35	Penn Hills	Sanitary	10%	77	Baldwin	Sanitary	3%
36	Castle Shannon	Sanitary	10%	78	South Fayette	Sanitary	3%
37	West Mifflin	Sanitary	10%	79	Thornburg	Sanitary	2%
38	Baldwin	Sanitary	10%	80	Franklin Park	Sanitary	2%
39	Dormont	Sanitary	10%	81	Rosslyn Farms	Sanitary	1%
40	McDonald	Combined	10%	82	Ben Avon Heights	Sanitary	0%
41	Wilkins	Sanitary	10%	83	Trafford	Sanitary	No Data
42	Whitehall	Sanitary	9%		<b>All ALCOSAN Municipalities</b>		<b>13%</b>

Source: US Census - American Community Survey 5-year estimates

## **6.6 ALCOSAN Institutional Analysis**

### **6.6.1 ALCOSAN Corporate Structure**

ALCOSAN was incorporated in March 1946 under the Pennsylvania Municipality Authorities Act. The ALCOSAN Board of Directors is authorized under the Articles of Incorporation to have seven members. Three members are appointed by the City of Pittsburgh, three members by Allegheny County, and one member is appointed jointly by the two entities. Board members serve five-year terms with staggered terms to provide for continuity.

ALCOSAN's administrative staff is headed by the Executive Director, who carries out the Board's policies. The Executive Director's senior staff includes the Director of Operations and Maintenance, the Director of Engineering and Construction, the Director of Environmental Compliance, the Director of Finance and Administration, and the Director of Regional Conveyance.

ALCOSAN employs approximately 350 personnel. This includes management personnel such as foremen; assistant foremen; professional, and supervisory employees; as well as approximately 260 employees represented by the Utility Workers of America and nine guards represented by the Teamsters Union.

### **6.6.2 Pennsylvania Municipal Code**

Responsibility for providing the necessary wastewater infrastructure is given to local government units, although the regulatory functions rest with the Commonwealth. Chapter 12 of the Pennsylvania Municipal Code (Act 39) addresses the rights and responsibilities of local governments for providing sewage conveyance and/or treatment capabilities.

Municipalities were given the right to enter all public and private lands in order to excavate and lay sewers and drains, making just compensation to the owner. Further, they were empowered to set and collect rates, rentals, or charges for the use of sewers, sewer systems, or sewage treatment works by the owners of these lands. Municipalities were also given the ability to relinquish their responsibility for providing sewage treatment to municipal authorities.

User charges can be calculated in a variety of ways. Three specific methods are described in the code, although they are not meant to preclude any other manner for setting rates. The methods described in the code for setting revenues are:

- Revenues can be set to equal operating expenses
- Revenues can be set to equal operating expenditures plus debt service
- Revenues can be set to equal operating expenses, debt service, and a ten percent margin of safety

The Pennsylvania Municipal Code states that "it shall be lawful for any county, city, borough, incorporated town, or township to execute such agreements and contracts ... with an authority [to provide]... sewer, sewerage, or sewage treatment service to it or to its inhabitants." Any rights granted to an authority through the municipal code are in addition to the powers and

privileges granted to authorities by the Municipality Authorities Act. The municipal code was intended to expand, rather than limit, the powers set forth in the Municipality Authorities Act.

### **6.6.3 Municipality Authorities Act**

Pennsylvania passed its Municipality Authorities Act in 1945 with the primary purpose of expanding municipal borrowing powers. Municipal authorities are empowered to finance and build, and to serve as the operator, lessor or lessee of municipal facilities. The scope and powers of municipal authorities under the Act are enumerated in Section 5607. Permissible projects are defined broadly in Section 5602.

Under the Act, municipal authorities may actively operate sewerage and other facilities or they may serve as passive financing mechanisms. There are 23 municipal wastewater or water/wastewater authorities within the ALCOSAN service area. Of these, 18 are for wastewater only and five are for water and wastewater. Two of the wastewater authorities serve as financing authorities.

Operating authorities have facilities and labor devoted to sewer operations and maintenance, they collect service fees from users to fund operations and debt payments.<sup>6-22</sup> A financing authority borrows money to finance the construction or acquisition for a sewer project, and then leases the improvement back to the municipality to operate.<sup>6-23</sup> Whereas the revenue bonds issued by operating authorities are backed by the rates charged by the authority, sewer systems leased from financing authorities are backed by the full faith and credit of the municipality. There are twenty-three municipal authorities in the ALCOSAN service area that provide or support municipal wastewater collection services. These authorities are listed on Table 6-30. Their service areas are shown on Figure 6-3.

### **6.6.4 Sewage Facilities Act**

Act 537 requires all municipalities to develop and maintain updated sewage facilities plans to protect public health from water-borne diseases, prevent future sewage disposal problems, and protect water quality. The Act also specifies state policy of efficient resource utilization through the consolidation of wastewater facilities, if warranted. Most ALCOSAN member municipalities adopted a county-wide (circa 1970) 537 plan as the basis for their plans.<sup>6-24</sup>

Revisions to the municipal plans since 1970 have focused on local collection sewer issues. A number of municipalities which have growth potential have prepared detailed updates to their plans since 1970. In 1996 at PaDEP's request, ALCOSAN prepared a 537 Plan addressing the upgrading and expansion of its treatment plant. This plan was subsequently adopted by the ALCOSAN municipalities as an update to the 1970 document.

---

6-22 Municipal Authorities in Pennsylvania, DCED, Page 19

6-23 Municipal Authorities in Pennsylvania, DCED, Page 21

6-24 The *Comprehensive Sewerage Needs Plan 1970 - 2000* prepared by Green Engineering Company

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

**Table 6-30: Municipal Wastewater Authorities within the ALCOSAN Service Area**

Authority Name		County	Utility Service	Type (Finance or Operating)	Services Provided to Other Municipalities ?	Municipalities Receiving Services	Municipalities Served Outside of ALCOSAN Service Area	Notes
					(Within ALCOSAN Service Area)			
1	Bethel Park Municipal Authority	Allegheny	Sewer	O	No	NA	Bethel Park Municipality	Provides conveyance interceptor sewer and wastewater treatment. Most of Bethel Park and all of South Park are served by the Authority's Piney Fork Wastewater Treatment Plant. Collection systems are maintained by the municipalities.
							South Park Township	
2	Collier Township Municipal Authority	Allegheny	Sewer	O	No	NA	NA	Collier Twp. MA and South Fayette Twp. MA jointly own and maintain portions of the Thoms Run Road trunk sewer.
3	Fox Chapel Sanitary Authority	Allegheny	Sewer	F	No	NA	NA	
4	Girty's Run Joint Sewer Authority	Allegheny	Sewer	O	Yes	Millvale Borough	NA	Consists of the trunk sewer running along Girty's Run from West View to the ALCOSAN interceptor system (regulatory structure A-67) located near the Millvale Riverfront Park on the Allegheny River. Operation and maintenance serves provided by the McCandless Township Sanitary Authority.
						Reserve Township		
						Ross Township		
						Shaler Township		
						West View Borough		

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

**Table 6-30: Municipal Wastewater Authorities within the ALCOSAN Service Area**

Authority Name		County	Utility Service	Type (Finance or Operating)	Services Provided to Other Municipalities ?	Municipalities Receiving Services	Municipalities Served Outside of ALCOSAN Service Area	Notes
					(Within ALCOSAN Service Area)			
5	Deer Creek Drainage Basin Authority	Allegheny	Sewer	O	Yes	Indiana Township	Richland Township	DCDBA conveys wastewater to multiple treatment facilities such as Allegheny Valley Joint Sewage Authority (Harmar), Upper Allegheny Joint Sewage Authority (Tarentum), and ALCOSAN. The Authority also provides collection system maintenance for Indiana Township.
							Hampton Township	
							Harmar Township	
6	McCandless Township Sanitary Authority	Allegheny	Sewer	O	Yes	Franklin Park Borough		Ownership, operation and maintenance of the Bear Run and Lowries Run sanitary sewers were transferred from Franklin Park in 2006.
						Ross Township	Bradford Woods	MTSA has four treatment plants ranging in size from 100,000 gallons per day to 6 million gallons per day. MTSA owns and operates portions of the Franklin Park collection sewerage and operates and maintains the Girty's Run Joint Sewer Authority trunk sewer and storage tanks.
						Millvale (via Girty's Run)	Franklin Park Borough	
						Shaler (via Girty's Run)	Hampton Township	
						West View (Via Girty's Run)	Marshall Township	
							Ross Township	

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

**Table 6-30: Municipal Wastewater Authorities within the ALCOSAN Service Area**

Authority Name	County	Utility Service	Type (Finance or Operating)	Services Provided to Other Municipalities ?	Municipalities Receiving Services	Municipalities Served Outside of ALCOSAN Service Area	Notes	
				(Within ALCOSAN Service Area)				
7	McDonald Borough Sewer Authority	Washington	Sewer	O	No	NA		
8	Monroeville Municipal Authority	Allegheny	Water and Sewer	O	No	NA		
9	Munhall Sanitary Sewer Municipal Authority	Allegheny	Sewer	O	Yes	Munhall Borough	NA	Wastewater flow from West Mifflin and Whitaker Boroughs is conveyed to ALCOSAN via the Homestead Run trunk sewer.
						West Mifflin Borough		
						Whitaker Borough		
10	North Huntingdon Township Municipal Authority	Westmoreland	Sewer	O	Yes	North Huntingdon Township	Hempfield Twp.	A portion of North Huntingdon Township is within the ALCOSAN service area. The remainder of the Township is served by the Authority's 3.3 million gallon per day Youghiogheny WWTP and by the Western Westmoreland Municipal Authority's Brush Creek WWTP.
							Irwin Borough	
							Manor Borough	
							Sewickley Twp.	
							South Versailles Borough	
White Oak Borough								

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

**Table 6-30: Municipal Wastewater Authorities within the ALCOSAN Service Area**

Authority Name	County	Utility Service	Type (Finance or Operating)	Services Provided to Other Municipalities ?	Municipalities Receiving Services	Municipalities Served Outside of ALCOSAN Service Area	Notes	
				(Within ALCOSAN Service Area)				
11	North Versailles Township Authority	Allegheny	Sewer	O	No	NA	NA	
12	Oakdale Borough Authority	Allegheny	Sewer	F	No	NA	NA	
13	Ohio Township Sanitary Authority	Allegheny	Sewer	O	No	NA	NA	
14	Penn Township Sewage Authority	Westmoreland	Sewer	O	No	NA	NA	
15	Peters Township Municipal Authority	Washington	Sewer	O	No	NA	NA	A small portion of Peters Township is serviced by ALCOSAN via Upper St. Clair
16	Pittsburgh Water & Sewer Authority	Allegheny	Water and Sewer	O	No	NA	NA	
17	Pleasant Hills Authority	Allegheny	Sewer	O	No	NA	NA	

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

**Table 6-30: Municipal Wastewater Authorities within the ALCOSAN Service Area**

Authority Name	County	Utility Service	Type (Finance or Operating)	Services Provided to Other Municipalities ?	Municipalities Receiving Services	Municipalities Served Outside of ALCOSAN Service Area	Notes	
				(Within ALCOSAN Service Area)				
18	Plum Borough Municipal Authority	Allegheny	Water and Sewer	O	No	NA	NA	
19	Municipal Authority Township of Robinson	Allegheny	Water and Sewer	O	No	NA	Collier Township	A portion of Robinson Township is served by ALCOSAN. The bulk of the Township is served by one of three treatment plants owned and operated by the RTMA. Portions of Collier and North Fayette Townships flow to the Campbell's Run wastewater treatment plant.
							North Fayette Township	
20	Municipal Authority of South Fayette	Allegheny	Sewer	O	Yes	McDonald Borough	NA	Operation and maintenance in the upper section of the Robinson Run inter-municipal trunk sewer is managed by the Municipal Authority of the Township of South Fayette.
						Oakdale Borough		
						North Fayette Township		
						South Fayette Township		
21	West Mifflin Sanitary Sewer Authority	Allegheny	Sewer	O	No	NA	NA	A portion of West Mifflin Borough is served by ALCOSAN via the Homestead Run trunk sewer within Munhall Borough.

**ALCOSAN Clean Water Plan**  
**Section 6 - Current Conditions Financial & Institutional Assessment**

**Table 6-30: Municipal Wastewater Authorities within the ALCOSAN Service Area**

Authority Name		County	Utility Service	Type (Finance or Operating)	Services Provided to Other Municipalities ?	Municipalities Receiving Services	Municipalities Served Outside of ALCOSAN Service Area	Notes
					(Within ALCOSAN Service Area)			
22	Municipal Authority of West View	Allegheny	Water and Sewer	O	No	NA	NA	The authority provides water services to 32 municipalities within Allegheny, Beaver and Butler Counties.
23	Western Westmoreland Municipal Authority	Westmoreland	Sewer	O	Interceptor sewers and pump station conveyance to ALCOSAN interceptor system	North Huntingdon Township	Irwin Borough	A small portion of North Huntingdon and Penn Townships flow towards ALCOSAN's Turtle Creek interceptor sewer. Wastewater from the remainder of the service area goes to the Brush Creek Wastewater Treatment Plant.  The WWMA operates and maintains the main interceptor and the force main. The NHTMA and Penn Twp operate and maintain the collection systems.
						Penn Township	Hempfield Township	
							Manor Borough	
							North Irwin Borough	
Penn Township								

### **6.6.5 Service Agreements**

**ALCOSAN – Municipal Agreements:** ALCOSAN, the City of Pittsburgh, and certain other municipalities in and around Allegheny County have entered into Standard Municipal Agreements under which ALCOSAN is designated the exclusive agent of the respective municipalities to furnish sewage treatment and disposal service which can provide uniform sewage charges throughout the service area.

Each municipality was given the option of either paying the aggregate of all user bills within its jurisdiction or authorizing ALCOSAN to bill the municipality's users directly. If charges are not paid within sixty days, the municipality is required to pay ALCOSAN the delinquent balance sixty days after notification of delinquency by ALCOSAN. The annual municipal budgets are required to include funds that are sufficient to meet its obligation to ALCOSAN. If the entire amount due to ALCOSAN is not paid out of current revenues, the balance must be paid out of the current revenues of the municipality for succeeding years.

The Standard Municipal Agreement was developed in the late 1940s at the time of the construction of the initial interceptor system and treatment plant. ALCOSAN also entered into an "Upper Allegheny Agreement" with certain communities for which additional expenditures for connecting facilities were required. These include the Boroughs of Verona and Blawnox, the Township of O'Hara, and the Municipality of Penn Hills. In addition to the provisions in the Standard Municipal Agreement, the Upper Allegheny Agreement authorizes ALCOSAN to impose an additional service charge to recover additional construction and operating costs related to providing services.

The Standard Municipal Agreements require the participating municipalities to bring sewage, at their own expense, to specified points of connection to ALCOSAN's interceptor sewers. Such agreements cannot be terminated before the expiration of one year after the payment of all Authority indebtedness.

Service Agreements entered into since 1993 also impose limitations on the type and volume of flows from municipalities, exclude storm water, and impose surcharges for excessive inflow and infiltration. In addition, the municipalities are required to eliminate sources of extraneous flows.

**Inter-Municipal Agreements:** Between the 83 customer municipalities, there are 189 known unique inter-municipal service agreements; if ALCOSAN agreements are included, there are 272 known agreements in the service area. These agreements establish the rights and responsibilities of each party regarding long-term assets constructed for the collection, conveyance, and treatment of sewage. Of the 189 unique inter-municipal service agreements, at least 35 are agreements between sewer authorities (or joint committees) and municipalities.

In addition to the service agreements, there are 27 known equipment sharing agreements between municipalities; the agreements include items like backhoes, flow monitors, and vector trucks. These sharing agreements often follow from purchasing agreements which are facilitated through councils of government. An example of all of the intersection of each of these is provided by the South Hills Area Council of Government, which in July 2000 worked in

conjunction with Scott Township to procure the purchase of a new vector truck, which was then shared by all participants in the South Hills Area COG.<sup>6-25</sup>

### 6.6.6 Municipal Governance

There are four types of local government units within ALCOSAN’s service area: boroughs, first class townships, second class townships, and cities. The boroughs account for fifty-seven of the municipalities within the service area. Although there is no population requirement for incorporation as a borough, forty-six of the boroughs in the service area have fewer than 10,000 total residents.

Townships are classified into two categories: first class and second class. To be considered a first-class township, a municipality must have a population density of 300 residents per square mile and residents must approve of the reclassification by vote, while second class townships have a population density of less than 300 residents per square mile at their time of incorporation<sup>6-26</sup>. In the ALCOSAN’s service area there are 20 first class townships, which make up 24% of local governments, and 5 second class townships, which make up 6%.

Pennsylvania has three city classifications: first class, second class, and third class. First class cities have populations over 1,000,000, second class cities have populations between 1,000,000 and 250,000, and third-class cities have populations between 250,000 and 80,000. With a population of 334,563, Pittsburgh is classified as a second-class city.<sup>6-27</sup> Table 6-31 shows municipalities by class in the service area.

Regardless of classification, every local government unit in the state must adhere to the Local Government Unit Debt Act of Pennsylvania, which limits cities, townships, and boroughs to a borrowing capacity, based on the amount of principal borrowed, to 250% of the average of the past three years’ total revenues.<sup>6-28</sup>

**Table 6-31: Service Area Municipal Class Summary**

Municipal Category	Number
Borough	57
First Class Township (Municipality)	20
Second Class Township	5
City	1

---

<sup>6-25</sup> [www.schacog.com](http://www.schacog.com) Accessed Dec. 2, 2010. For more detailed information about ALCOSAN service area councils of government and equipment sharing agreements, see Appendix 6.

<sup>6-26</sup> Township Commissioner’s Handbook, 2005, Third Edition, Pg. 2

<sup>6-27</sup> City Government in Pennsylvania Handbook, 2002, Second Edition Pg. 4

<sup>6-28</sup> Local Government Unit Debt Act, 1996, Pg. 9