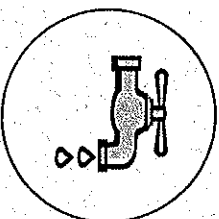


# **South Hadley Fire Districts Merger Study**



Prepared by  
Financial Advisory Associates, Inc.  
258 Main Street, Suite A2  
Buzzards Bay, MA 02532  
May 16, 2003



Financial Advisory Associates, Inc.

May 16, 2003

Prudential Committee  
South Hadley Fire District No. 1  
144 Newton Street  
South Hadley, MA 01075

Prudential Committee  
South Hadley Fire District No. 2  
20 Woodbridge Street  
South Hadley, MA 01075

Re: Final Report

Dear Prudential Committee Members:

Financial Advisory Associates, Inc. is pleased to deliver this final report for your consideration. We are very fortunate to have been afforded the opportunity to serve you and the citizens of South Hadley.

This document is the product of the efforts of many individuals. We would first like to thank the Prudential Committee members and Water Commissioners for their efforts during the study. The residents and taxpayers of South Hadley are well served.

We also wish to recognize the hard work and the enthusiastic cooperation provided to us by the staff and other officials of Fire District No. 1 and Fire District No. 2. We applaud their level of participation. It was truly outstanding.

In addition, we graciously thank the South Hadley Town Administrator and the staff from many of the Town's departments for their assistance and contributions.

Finally, I wish to compliment the FAA project team for their collective contributions to this report. Associate consultants Kathryn Griffin and Robert Barr, along with project coordinator Carolyn Baker and attorney Patrick Costello, each contributed to this project in their own special manner. Their collective work as presented in this report is a testimonial to their professionalism.

Sincerely,

FINANCIAL ADVISORY ASSOCIATES, INC.

A handwritten signature in cursive script that reads 'Michael Daley'. The signature is written in dark ink and is positioned above the printed name and title.

Michael Daley  
President

258 Main Street, Suite A-2, Buzzards Bay, MA 02532  
Voice: (508) 759-0700 Fax: (508) 759-6418 e-mail: [info@faa-inc.com](mailto:info@faa-inc.com)



**South Hadley Fire District No. 1 Prudential Committee**

James F. Carey, Chair  
Raymond M. Hopfe  
William W. Ryder

**Water Commissioner**

John A. Mikuszewski, Chair  
David T. Daly  
William L. Schenker  
Jeffrey Cyr, Water Superintendent

**Clerk/Treasurer**

Margaret St. Martin

**Fire Chief**

David E. Daly

**South Hadley Fire District No. 2 Prudential Committee**

Joan B. Rosner, Chair  
Kenneth McKenna  
Curtis G. Smith

**Water Commissioners**

James Menard, Chair  
Frank Detoma  
Dean Desrozier  
William Selkirk, Water Superintendent

**Clerk/Treasurer**

Sandra Selkirk

**Fire Chief**

Michael R. Koske

**Town of South Hadley**

**Ambulance Coordinator**

Ken McKenna

**Town Administrator**

Patricia Vinchesi

# Table of Contents

|          |                                                                |  |
|----------|----------------------------------------------------------------|--|
| <b>1</b> | <b>Executive Summary</b>                                       |  |
| <b>2</b> | <b>Legal Analysis</b>                                          |  |
| <b>3</b> | <b>Fire &amp; Ambulance Service<br/>Current System</b>         |  |
| <b>4</b> | <b>Fire Service - Ambulance -<br/>EMS Organization Options</b> |  |
| <b>5</b> | <b>District No. 1 Water Utility</b>                            |  |
| <b>6</b> | <b>District No. 2 Water Utility</b>                            |  |
| <b>7</b> | <b>Assets, Liabilities &amp; Equity</b>                        |  |
| <b>8</b> | <b>Appendix</b>                                                |  |

## Table of Contents

|                                                         | Page |
|---------------------------------------------------------|------|
| I. Executive Summary                                    | 1    |
| - Recommendations                                       | 16   |
| II. Legal Analysis                                      | 19   |
| III. Fire and Ambulance Service – Current System        | 40   |
| A. South Hadley Fire District No. 1                     | 42   |
| B. South Hadley Fire District No. 2                     | 50   |
| C. Town of South Hadley                                 | 57   |
| IV. Fire Service – Ambulance – EMS Organization Options | 67   |
| A. Future Services                                      | 68   |
| B. Options                                              | 69   |
| C. Findings                                             | 74   |
| D. Recommendations                                      | 80   |
| V. Water                                                | 86   |
| A. District No. 1 Water Utility                         | 87   |
| B. District No. 2 Water Utility                         | 96   |
| VI. Assets, Liabilities and Equity                      | 111  |
| <b>Appendices</b>                                       |      |
| - Briefing Document                                     | 120  |
| - Comments relating to Draft 1.0 – District No. 1       | 132  |
| - Comments relating to Draft 1.0 – District No. 2       | 135  |
| - Comments relating to Draft 1.0 – Water                | 137  |
| - Legal Insert                                          | 144  |



## **EXECUTIVE SUMMARY**

## Executive Summary

### Introduction

Financial Advisory Associates, Incorporated (FAA) was retained by South Hadley Fire District No.1 (FD#1) and South Hadley Fire District No. 2 (FD#2) in August 2002. We were engaged for the purpose of an evaluation and recommendation on a conceptual merger between all or a portion of the functions within the two fire Districts.

Since early in September, we have engaged in the process of data collection and analysis. During this process we have met with all of the elected and appointed officials of both Districts. We have also met with many of the employees from both Districts.

We attended a public hearing wherein we received comments from citizens and Town of South Hadley officials. In addition, we have also met with or spoken to several other municipal officials from the Town of South Hadley. Further, we have had contact with municipal officials in the Towns of Granby, Wellesley and Wilbraham. We have also met with multiple MWRA officials and the consulting engineers from both of the Districts' water departments.

We are extremely grateful to all of the District and non-district officials, employees and consultants for their enthusiastic participation in this study. This report is a reflection of the quality and effort provided to us by these individuals during this project.

This executive summary provides the reader with the highlights of our work. Each of the following sections of the report provides the reader with in-depth information relative to the legal, non-water operations, water operations and equity positions of the two Districts.

### Findings

Some of our findings are always unpredictable. Most are predictable. These predictable findings are generally demographic and financial in nature. Thus, we found that the Districts have spent a combined excess of \$34 million during the past 10 years.

We found that FD#1 has spent over \$26.6 million or about 78 percent of the total spending during the last 10 years. We also found that FD#2 has spent over \$7.4 million or about 22 percent of the total spending in the last 10 years.

*David*

With no changes in the current business models, we believe that the two Districts will jointly spend about \$49.9 million to provide services to their residents during the next 10 years. Of note, we expect that the level of spending will shift slightly to FD#2. Our models indicate the operational costs in District #2 have increased more than those in FD#1 during the more recent years. Thus, our trend forecasting models have estimated more expense growth in FD#2.

On the unpredictable side of our analysis, we have found that spending in the FD#1 is higher because of a disproportionate service burden placed upon this District's residents. The Town of South Hadley is presently the local governmental body that is responsible for providing Ambulance and Emergency Medical Services (EMS) to the Town's residents. Over the years, FD#1 has gradually become a more heavily weighted participant in cost of providing ambulances and EMS to the entire Town of South Hadley. We believe that the FD#1 has involuntarily acquired some of the Town's costs for Ambulance and EMS. Thus, we find that the taxpayers of this District currently pay more towards the cost of town-wide Ambulances and EMS than those taxpayers in FD#2.

We unexpectedly found that the current level of spending in South Hadley for police services is comparatively low. In addition to this low level of spending, South Hadley Police Officers are frequently taken away from their patrol function while they help transport ambulance users. In effect, a community that is already experiencing a low level of spending for police services is diverting some of those limited services away from the policing effort. We believe that at a minimum, the Town and the Districts must formalize their current Ambulance/EMS relationship into an equitable written agreement.

We have found that the two water utilities have diverse yet not incompatible business models. The water department in FD#1 does not produce water locally. This water company purchases its water from the Massachusetts Water Resource Authority (MWRA). The FD#2 water department pumps water for its customers from a local well.

We have found that neither water department has matured to the level of a fully redundant system. In both cases, there is only one source of water presently available to each of the water utilities. There are inter-connections between Districts and each system presently serves as the backup for the other in an emergency. We find that this is a less secure agreement for FD#2 since the MWRA places significant restrictions upon the resale of its water by FD#1.

We have seen the cost of water in FD#1 consistently exceed the cost of water in FD#2. We believe that was more a product of capital spending than any other area. FD#2 is now setting off on a more extensive capital outlay program. Our forecasting models indicate that during the next 10 years, the cost of water will be about the same in each District if no changes are made to the current business models. We also find that in 10 years both Districts will remain as single source providers. At that time they will still exist independently with a similar product cost.

**South Hadley Fire Districts #1 and #2**  
**Total Combined Districts' Expenditures Analysis**  
**Ten Years Ending June 30, 2002**

| Expenditure Type     | 1993                | 1994                | 1995                | 1996                | 1997                | 1998                | 1999                | 2000                | 2001                | 2002                | 10 Years             | % of Budget    |
|----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|----------------|
| Personal Services    | \$ 1,558,121        | \$ 1,652,341        | \$ 1,700,433        | \$ 1,761,059        | \$ 1,841,309        | \$ 1,918,580        | \$ 1,992,348        | \$ 2,176,954        | \$ 2,262,536        | \$ 2,323,008        | \$ 19,186,670        | 56.32%         |
| Purchase of Services | 216,577             | 220,592             | 328,830             | 229,749             | 368,759             | 511,371             | 732,295             | 873,702             | 833,965             | 789,851             | 5,105,691            | 14.99%         |
| Supplies             | 162,302             | 161,433             | 206,448             | 228,070             | 187,845             | 219,909             | 193,195             | 208,113             | 243,032             | 229,973             | 2,040,321            | 5.99%          |
| Other Charges/Expend | 117,514             | 127,425             | 140,778             | 86,131              | 88,834              | 122,620             | 118,650             | 134,487             | 126,981             | 124,857             | 1,188,276            | 3.49%          |
| Capital Outlay       | 364,063             | 967,845             | 655,620             | 427,598             | 437,944             | 228,685             | 767,946             | 457,660             | 343,302             | 281,377             | 4,932,041            | 14.48%         |
| Debt Service         | 257,360             | 265,489             | 190,980             | 144,340             | 139,090             | 133,840             | 128,590             | 123,400             | 118,090             | 112,840             | 1,614,019            | 4.74%          |
| <b>Total:</b>        | <b>\$ 2,675,937</b> | <b>\$ 3,395,126</b> | <b>\$ 3,223,090</b> | <b>\$ 2,876,947</b> | <b>\$ 3,063,782</b> | <b>\$ 3,134,985</b> | <b>\$ 3,933,025</b> | <b>\$ 3,974,315</b> | <b>\$ 3,927,906</b> | <b>\$ 3,861,906</b> | <b>\$ 34,067,019</b> | <b>100.00%</b> |

**Water Dept Annual Report**  
**Estimated Water System Users:**  
**FY Spending Per User:**

|     |     |     |     |           |           |           |           |           |           |
|-----|-----|-----|-----|-----------|-----------|-----------|-----------|-----------|-----------|
| N/A | N/A | N/A | N/A | 19,476    | 19,476    | 19,476    | 19,976    | 20,187    | 20,187    |
| N/A | N/A | N/A | N/A | \$ 157.31 | \$ 160.97 | \$ 201.94 | \$ 198.95 | \$ 194.58 | \$ 191.31 |

| Annual Spending/User |           |
|----------------------|-----------|
| 6 Yr Ave             | 3 Yr Ave  |
| \$ 164.18            | \$ 194.95 |

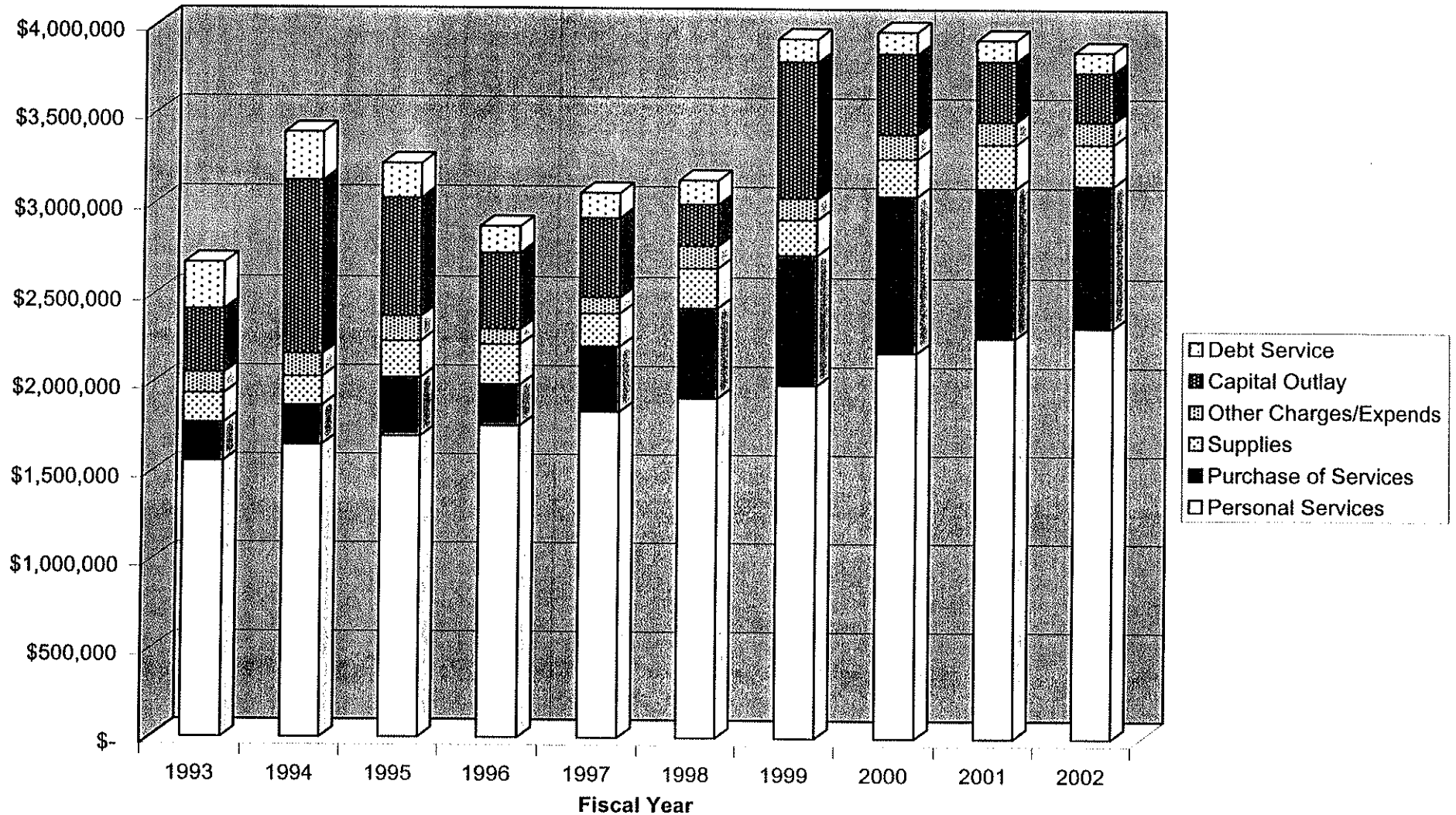
**Change from Prior Year**

|                      |            |               |               |                |              |              |               |              |               |               | Annual % Change |               |
|----------------------|------------|---------------|---------------|----------------|--------------|--------------|---------------|--------------|---------------|---------------|-----------------|---------------|
|                      |            |               |               |                |              |              |               |              |               |               | 9 Yr Ave        | 3 Yr Ave      |
| Personal Services    | N/A        | 6.05%         | 2.91%         | 3.57%          | 4.56%        | 4.20%        | 3.85%         | 9.27%        | 3.93%         | 2.67%         | 4.55%           | 5.29%         |
| Purchase of Services | N/A        | 1.85%         | 49.07%        | -30.13%        | 60.51%       | 38.67%       | 43.20%        | 19.31%       | -4.55%        | -5.29%        | 19.18%          | 3.16%         |
| Supplies             | N/A        | -0.54%        | 27.88%        | 10.47%         | -17.64%      | 17.07%       | -12.15%       | 7.72%        | 16.78%        | -5.37%        | 4.91%           | 6.38%         |
| Other Charges/Expend | N/A        | 8.43%         | 10.48%        | -38.82%        | 3.14%        | 38.03%       | -3.24%        | 13.35%       | -5.58%        | -1.67%        | 2.68%           | 2.03%         |
| Capital Outlay       | N/A        | 165.85%       | -32.26%       | -34.78%        | 2.42%        | -47.78%      | 235.81%       | -40.40%      | -24.99%       | -18.04%       | 22.87%          | -27.81%       |
| Debt Service         | N/A        | 3.16%         | -28.06%       | -24.42%        | -3.64%       | -3.77%       | -3.92%        | -4.04%       | -4.30%        | -4.45%        | -8.16%          | -4.26%        |
| <b>Total:</b>        | <b>N/A</b> | <b>26.88%</b> | <b>-5.07%</b> | <b>-10.74%</b> | <b>6.49%</b> | <b>2.32%</b> | <b>25.46%</b> | <b>1.05%</b> | <b>-1.17%</b> | <b>-1.68%</b> | <b>4.84%</b>    | <b>-0.60%</b> |

**Sources:**

South Hadley Fire District #1  
South Hadley Fire District #2

**South Hadley Fire Districts #1 and #2  
Combined 10 Year Total Expenditures History  
FY 1993 Through FY 2002**



**South Hadley Fire Districts #1 and #2**  
**Total Combined Districts' Expenditures Estimate**  
**Ten Years Ending June 30, 2012**

| Expenditure Type             | 2003                | 2004                | 2005                | 2006                | 2007                | 2008                | 2009                | 2010                | 2011                | 2012                | 10 Years            | % of Budget    |
|------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------|
| Personal Services            | \$ 2,432,958        | \$ 2,549,551        | \$ 2,673,248        | \$ 2,804,551        | \$ 2,943,999        | \$ 3,082,175        | \$ 3,249,709        | \$ 3,417,286        | \$ 3,595,644        | \$ 3,785,585        | \$30,544,707        | 61.26%         |
| Purchase of Services         | 722,143             | 725,291             | 775,339             | 815,280             | 896,185             | 934,263             | 1,015,297           | 1,030,872           | 1,048,129           | 1,066,532           | 9,029,331           | 18.11%         |
| Supplies                     | 247,577             | 255,275             | 263,276             | 271,592             | 280,240             | 289,234             | 298,590             | 308,325             | 318,457             | 329,005             | 2,861,570           | 5.74%          |
| Other Charges & Expenditures | 116,575             | 107,266             | 110,537             | 113,411             | 116,809             | 120,095             | 123,772             | 127,091             | 131,078             | 135,162             | 1,201,797           | 2.41%          |
| Capital Outlay               | 537,000             | 1,953,000           | 349,500             | 522,000             | 182,000             | 582,000             | 102,000             | 417,000             | 122,000             | 72,000              | 4,838,500           | 9.70%          |
| Debt Service                 | 107,590             | 102,340             | 192,090             | 184,573             | 177,020             | 159,815             | 152,960             | 146,075             | 81,500              | 79,250              | 1,383,213           | 2.77%          |
| <b>Total:</b>                | <b>\$ 4,163,842</b> | <b>\$ 5,692,723</b> | <b>\$ 4,363,990</b> | <b>\$ 4,711,407</b> | <b>\$ 4,596,253</b> | <b>\$ 5,177,582</b> | <b>\$ 4,942,328</b> | <b>\$ 5,446,649</b> | <b>\$ 5,296,808</b> | <b>\$ 5,467,534</b> | <b>\$49,859,117</b> | <b>100.00%</b> |

**2002 Water Dept Report**

**Estimated Water System Users:**

**FY Spending Per 2002 User:**

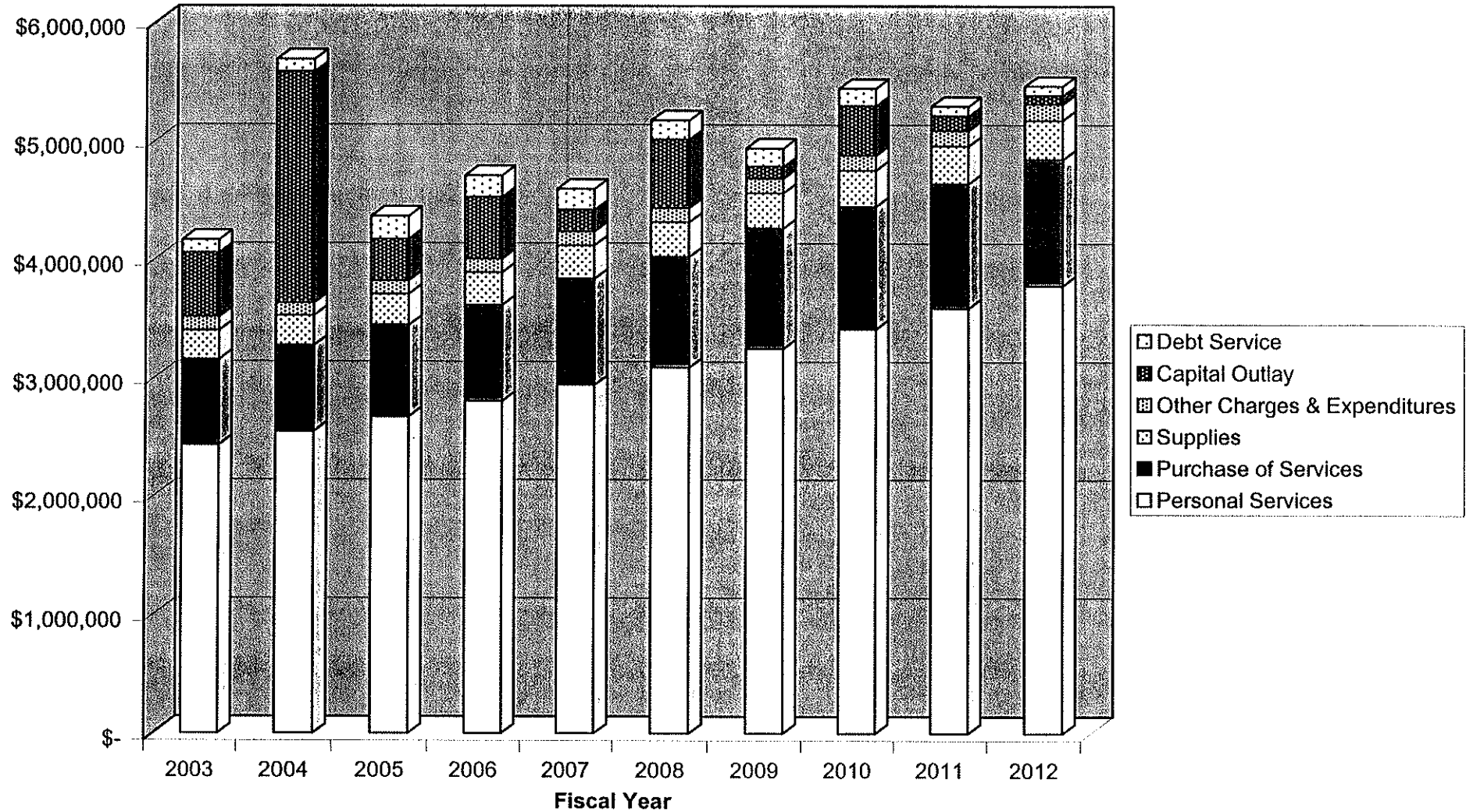
|           |           |           |           |           |           |           |           |           |           |        |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--------|
| 20,187    | 20,187    | 20,187    | 20,187    | 20,187    | 20,187    | 20,187    | 20,187    | 20,187    | 20,187    | 20,187 |
| \$ 206.26 | \$ 282.00 | \$ 216.18 | \$ 233.39 | \$ 227.68 | \$ 256.48 | \$ 244.83 | \$ 269.81 | \$ 262.39 | \$ 270.84 |        |

| Annual Spending/User |           |
|----------------------|-----------|
| 10 Yr Ave            | 3 Yr Ave  |
| \$ 246.99            | \$ 267.68 |

**Change from Prior Year**

|                            |              |               |                |              |               |               |               |               |               |              | Annual % Change |              |
|----------------------------|--------------|---------------|----------------|--------------|---------------|---------------|---------------|---------------|---------------|--------------|-----------------|--------------|
|                            |              |               |                |              |               |               |               |               |               |              | 10 Yr Ave       | 3 Yr Ave     |
| Personal Services          | 4.73%        | 4.79%         | 4.85%          | 4.91%        | 4.97%         | 5.03%         | 5.09%         | 5.16%         | 5.22%         | 5.28%        | 5.00%           | 5.22%        |
| Purchase of Services       | -8.57%       | 0.44%         | 6.90%          | 5.15%        | 9.92%         | 4.25%         | 8.67%         | 1.53%         | 1.67%         | 1.76%        | 3.17%           | 1.65%        |
| Supplies                   | 7.65%        | 3.11%         | 3.13%          | 3.16%        | 3.18%         | 3.21%         | 3.23%         | 3.26%         | 3.29%         | 3.31%        | 3.65%           | 3.29%        |
| Other Charges/Expenditures | -6.63%       | -7.99%        | 3.05%          | 2.60%        | 3.00%         | 2.81%         | 3.06%         | 2.68%         | 3.14%         | 3.12%        | 0.88%           | 2.98%        |
| Capital Outlay             | 90.85%       | 263.69%       | -82.10%        | 49.36%       | -65.13%       | 219.78%       | -82.47%       | 308.82%       | -70.74%       | -40.98%      | 59.11%          | 65.70%       |
| Debt Service               | -4.65%       | -4.88%        | 87.70%         | -3.91%       | -4.09%        | -9.72%        | -4.29%        | -4.50%        | -44.21%       | -2.76%       | 0.47%           | -17.16%      |
| <b>Total:</b>              | <b>7.82%</b> | <b>36.72%</b> | <b>-23.34%</b> | <b>7.96%</b> | <b>-2.44%</b> | <b>12.65%</b> | <b>-4.54%</b> | <b>10.20%</b> | <b>-2.75%</b> | <b>3.22%</b> | <b>4.55%</b>    | <b>3.56%</b> |

**South Hadley Fire Districts #1 and #2  
Combined 10 Year Total Expenditures History  
FY 2003 Through FY 2012**



**South Hadley Fire District #1**  
**Total District Expenditures Analysis**  
**Ten Years Ending June 30, 2002**

| Expenditure Type     | 1993                | 1994                | 1995                | 1996                | 1997                | 1998                | 1999                | 2000                | 2001                | 2002                | 10 Years             | % of Budget    |
|----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|----------------|
| Personal Services    | \$ 1,272,194        | \$ 1,323,631        | \$ 1,348,022        | \$ 1,364,222        | \$ 1,404,974        | \$ 1,453,423        | \$ 1,520,166        | \$ 1,674,546        | \$ 1,738,473        | \$ 1,776,889        | \$ 14,874,642        | 55.87%         |
| Purchase of Services | 158,985             | 170,467             | 284,092             | 176,329             | 316,781             | 460,293             | 686,825             | 835,197             | 776,575             | 741,766             | 4,607,311            | 17.31%         |
| Supplies             | 71,416              | 63,256              | 98,674              | 88,979              | 58,062              | 86,186              | 89,496              | 89,529              | 116,969             | 107,413             | 870,000              | 3.27%          |
| Other Charges/Expend | 67,773              | 72,399              | 84,356              | 51,061              | 39,069              | 57,752              | 53,111              | 65,092              | 63,489              | 74,930              | 609,032              | 2.29%          |
| Capital Outlay       | 276,194             | 766,993             | 612,214             | 387,633             | 340,478             | 129,859             | 691,594             | 386,050             | 294,073             | 190,483             | 4,075,572            | 15.31%         |
| Debt Service         | 253,005             | 242,010             | 190,980             | 144,340             | 139,090             | 133,840             | 128,590             | 123,400             | 118,090             | 112,840             | 1,586,185            | 5.96%          |
| <b>Total:</b>        | <b>\$ 2,099,567</b> | <b>\$ 2,638,756</b> | <b>\$ 2,596,338</b> | <b>\$ 2,212,564</b> | <b>\$ 2,298,454</b> | <b>\$ 2,321,353</b> | <b>\$ 3,169,782</b> | <b>\$ 3,173,813</b> | <b>\$ 3,107,690</b> | <b>\$ 3,004,422</b> | <b>\$ 26,622,741</b> | <b>100.00%</b> |

**Water Dept Annual Report**  
**Estimated Water System Users**  
**FY Spending per User**

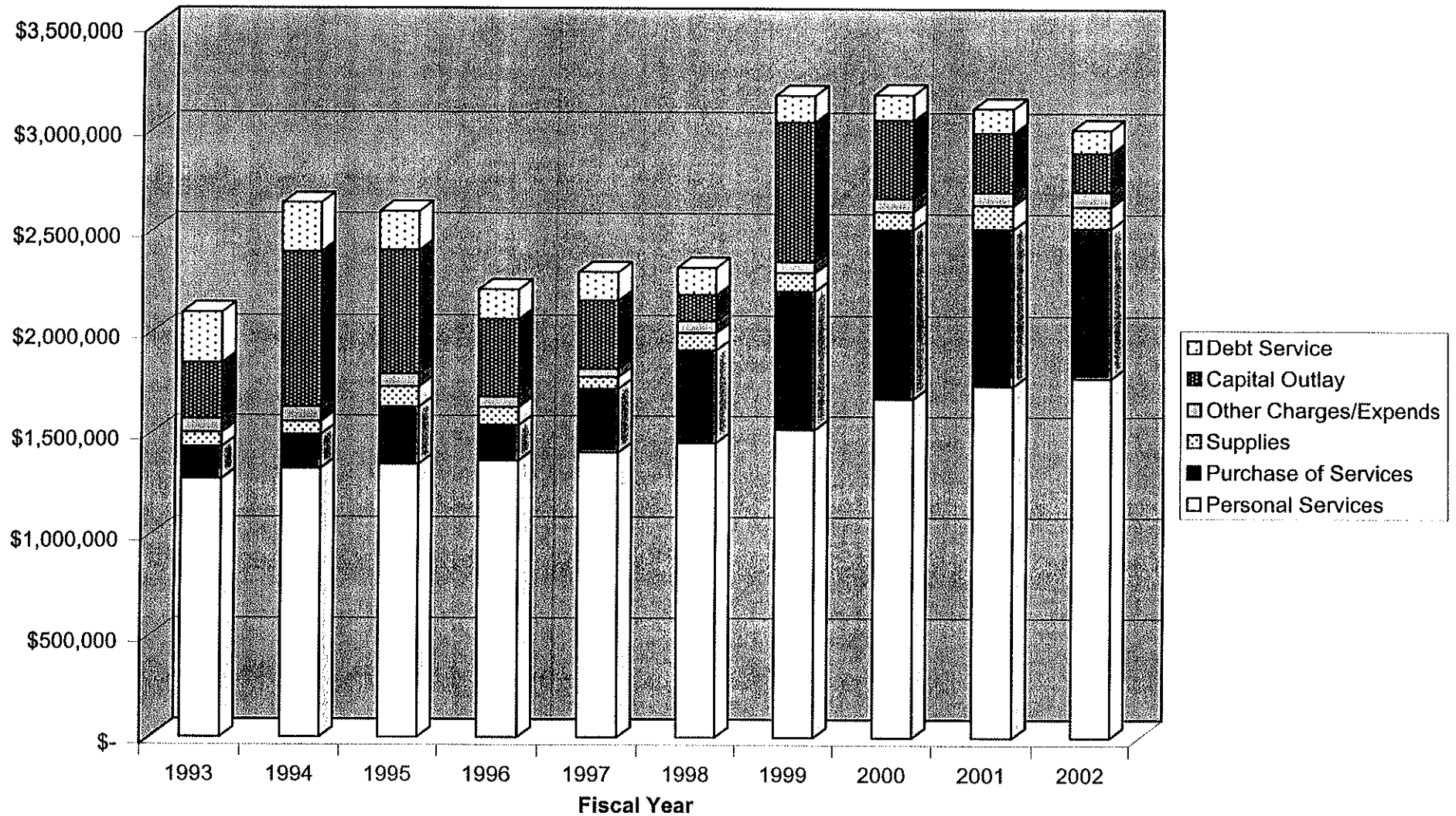
|           |           |           |           |           |           |           |           |           |           |  |                             |                 |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|-----------------------------|-----------------|
| 13,500    | 13,500    | 13,500    | 13,600    | 13,600    | 13,600    | 13,600    | 14,100    | 14,100    | 14,100    |  | <b>Annual Spending/User</b> |                 |
| \$ 155.52 | \$ 195.46 | \$ 192.32 | \$ 162.69 | \$ 169.00 | \$ 170.69 | \$ 233.07 | \$ 225.09 | \$ 220.40 | \$ 213.08 |  | <b>6 Yr Ave</b>             | <b>3 Yr Ave</b> |
|           |           |           |           |           |           |           |           |           |           |  | \$ 205.22                   | \$ 219.53       |

**Change from Prior Year**

|                      |            |               |               |                |              |              |               |              |               |               | <b>Annual % Change</b> |                 |
|----------------------|------------|---------------|---------------|----------------|--------------|--------------|---------------|--------------|---------------|---------------|------------------------|-----------------|
|                      |            |               |               |                |              |              |               |              |               |               | <b>9 Yr Ave</b>        | <b>3 Yr Ave</b> |
| Personal Services    | N/A        | 4.04%         | 1.69%         | 1.35%          | 2.99%        | 3.45%        | 4.59%         | 10.16%       | 3.82%         | 2.22%         | 3.81%                  | 5.40%           |
| Purchase of Services | N/A        | 7.22%         | 66.66%        | -37.93%        | 79.65%       | 46.30%       | 49.21%        | 21.60%       | -7.02%        | -4.48%        | 24.47%                 | 3.37%           |
| Supplies             | N/A        | -11.43%       | 55.99%        | -8.83%         | -34.75%      | 48.44%       | 3.84%         | 0.04%        | 30.67%        | -8.19%        | 8.31%                  | 7.51%           |
| Other Charges/Expend | N/A        | 6.83%         | -11.11%       | -20.66%        | -23.49%      | 47.82%       | -8.04%        | 22.56%       | -2.46%        | 18.02%        | 3.27%                  | 12.71%          |
| Capital Outlay       | N/A        | 177.70%       | -20.18%       | -36.68%        | -12.17%      | -61.86%      | 432.57%       | -44.18%      | -23.83%       | -35.23%       | 41.79%                 | -34.41%         |
| Debt Service         | N/A        | -4.35%        | -21.09%       | -24.42%        | -3.64%       | -3.77%       | -3.92%        | -4.04%       | -4.30%        | -4.45%        | -8.22%                 | -4.26%          |
| <b>Total:</b>        | <b>N/A</b> | <b>25.68%</b> | <b>-1.61%</b> | <b>-14.78%</b> | <b>3.88%</b> | <b>1.00%</b> | <b>36.65%</b> | <b>0.13%</b> | <b>-2.08%</b> | <b>-3.32%</b> | <b>5.05%</b>           | <b>-1.76%</b>   |

**Sources:**  
South Hadley Fire District #1

**South Hadley Fire District #1  
10 Year Total District Expenditures History  
FY 1993 Through FY 2002**



South Hadley Fire District #1  
Total District Expenditures Estimate  
Ten Years Ending June 30, 2012

| Expenditure Type      | 2003                | 2004                | 2005                | 2006                | 2007                | 2008                | 2009                | 2010                | 2011                | 2012                | 10 Years             | % of Budget    |
|-----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|----------------|
| Personal Services     | \$ 1,858,194        | \$ 1,943,902        | \$ 2,034,375        | \$ 2,129,890        | \$ 2,230,744        | \$ 2,337,248        | \$ 2,449,735        | \$ 2,568,556        | \$ 2,694,085        | \$ 2,826,718        | \$ 23,073,448        | 60.00%         |
| Purchase of Services  | 668,319             | 683,210             | 732,932             | 772,531             | 853,075             | 890,523             | 971,155             | 966,306             | 1,003,117           | 1,021,048           | 8,582,216            | 22.32%         |
| Supplies              | 121,939             | 125,868             | 129,986             | 134,304             | 138,834             | 143,585             | 148,572             | 153,808             | 159,303             | 165,076             | 1,421,271            | 3.70%          |
| Other Charges/Expends | 69,031              | 70,622              | 72,275              | 73,993              | 75,777              | 77,630              | 79,556              | 81,556              | 83,635              | 85,794              | 769,868              | 2.00%          |
| Capital Outlay        | 501,950             | 1,288,950           | 255,950             | 350,950             | 50,950              | 480,950             | 50,950              | 95,950              | 100,950             | 50,950              | 3,228,500            | 8.39%          |
| Debt Service          | 107,590             | 102,340             | 192,090             | 184,573             | 177,020             | 159,815             | 152,960             | 146,075             | 81,500              | 79,250              | 1,383,213            | 3.60%          |
| <b>Total:</b>         | <b>\$ 3,327,023</b> | <b>\$ 4,214,892</b> | <b>\$ 3,417,609</b> | <b>\$ 3,646,241</b> | <b>\$ 3,526,399</b> | <b>\$ 4,089,751</b> | <b>\$ 3,652,927</b> | <b>\$ 4,032,250</b> | <b>\$ 4,122,589</b> | <b>\$ 4,228,836</b> | <b>\$ 38,458,517</b> | <b>100.00%</b> |

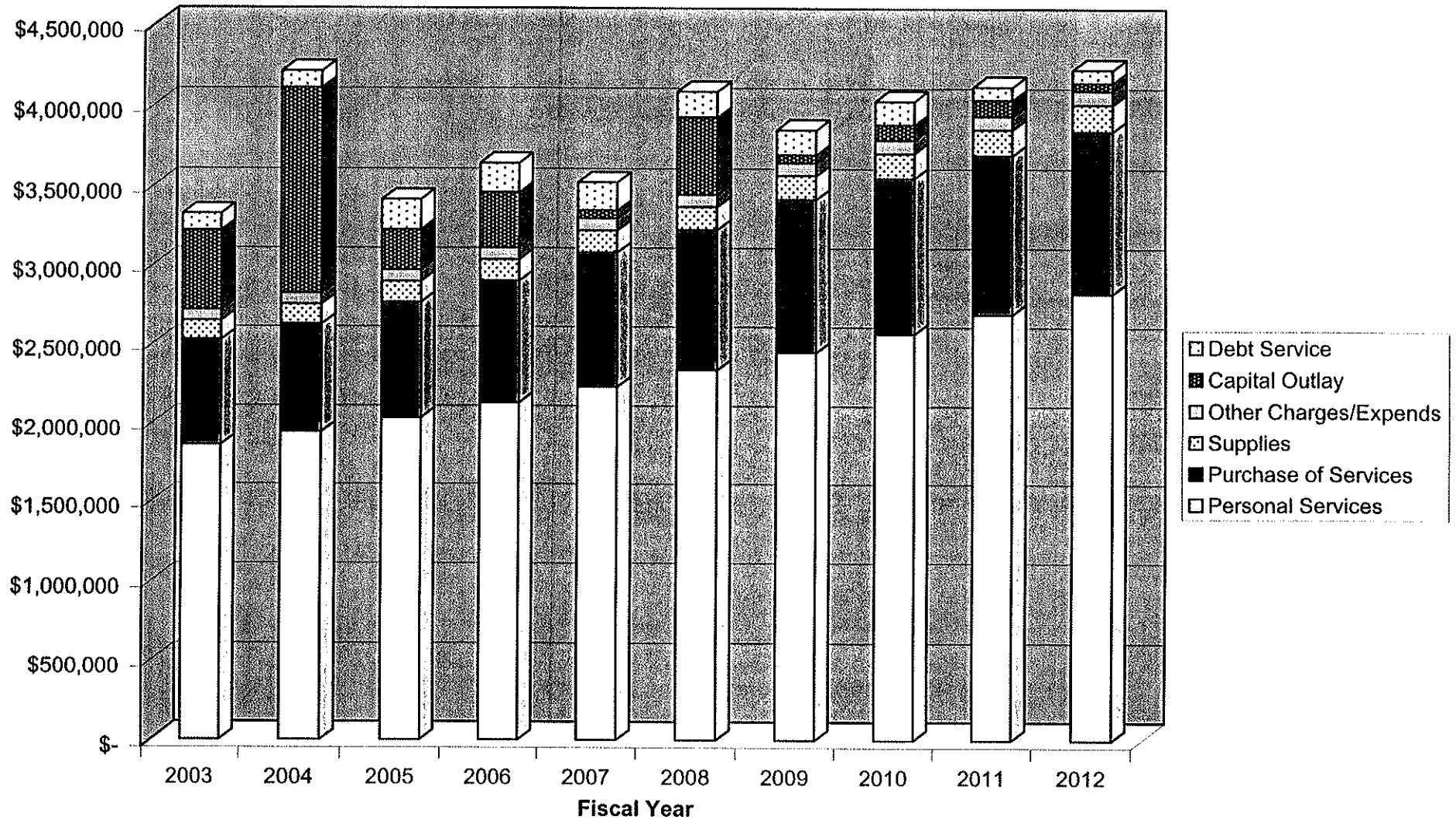
2002 Water Dept Report

| Estimated Water System Users: | 14,100    | 14,100    | 14,100    | 14,100    | 14,100    | 14,100    | 14,100    | 14,100    | 14,100    | 14,100    | Annual Spending/user |           |
|-------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------------|-----------|
| FY Spending 2002 per User:    | \$ 235.96 | \$ 298.93 | \$ 242.38 | \$ 258.60 | \$ 250.10 | \$ 290.05 | \$ 273.26 | \$ 285.98 | \$ 292.38 | \$ 299.92 | 10 Yr Ave            | 3 Yr Ave  |
|                               |           |           |           |           |           |           |           |           |           |           | \$ 272.76            | \$ 292.76 |

Change from Prior Year

|                       |               |               |                |              |               |               |               |              |              |              | Annual % Change |              |
|-----------------------|---------------|---------------|----------------|--------------|---------------|---------------|---------------|--------------|--------------|--------------|-----------------|--------------|
|                       |               |               |                |              |               |               |               |              |              |              | 10 Yr Ave       | 3 Yr Ave     |
| Personal Services     | 4.57%         | 4.61%         | 4.65%          | 4.70%        | 4.74%         | 4.77%         | 4.81%         | 4.85%        | 4.89%        | 4.92%        | 4.75%           | 4.89%        |
| Purchase of Services  | -9.90%        | 2.23%         | 7.28%          | 5.40%        | 10.43%        | 4.39%         | 9.05%         | 1.56%        | 1.70%        | 1.79%        | 3.39%           | 1.68%        |
| Supplies              | 13.52%        | 3.22%         | 3.27%          | 3.32%        | 3.37%         | 3.42%         | 3.47%         | 3.52%        | 3.57%        | 3.62%        | 4.43%           | 3.57%        |
| Other Charges/Expends | -7.87%        | 2.31%         | 2.34%          | 2.38%        | 2.41%         | 2.45%         | 2.48%         | 2.51%        | 2.55%        | 2.58%        | 1.41%           | 2.55%        |
| Capital Outlay        | 163.51%       | 156.79%       | -80.14%        | 37.12%       | -85.48%       | 843.96%       | -89.41%       | 88.32%       | 5.21%        | -49.53%      | 99.04%          | 14.67%       |
| Debt Service          | -4.65%        | -4.88%        | 87.70%         | -3.91%       | -4.09%        | -9.72%        | -4.29%        | -4.50%       | -44.21%      | -2.76%       | 0.47%           | -17.16%      |
| <b>Total:</b>         | <b>10.74%</b> | <b>26.69%</b> | <b>-18.92%</b> | <b>6.69%</b> | <b>-3.29%</b> | <b>15.98%</b> | <b>-5.79%</b> | <b>4.65%</b> | <b>2.24%</b> | <b>2.58%</b> | <b>4.16%</b>    | <b>3.16%</b> |

**South Hadley Fire District #1  
10 Year Total District Expenditures Estimate  
FY 2003 Through FY 2012**



South Hadley Fire District #2  
Total District Expenditures Analysis  
Ten Years Ending June 30, 2002

| Expenditure Type     | 1993              | 1994              | 1995              | 1996              | 1997              | 1998              | 1999              | 2000              | 2001              | 2002              | 10 Years            | % of Budget    |
|----------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------|----------------|
| Personal Services    | \$ 285,926        | \$ 328,710        | \$ 354,411        | \$ 398,836        | \$ 436,335        | \$ 465,137        | \$ 472,182        | \$ 502,408        | \$ 524,063        | \$ 546,019        | \$ 4,312,028        | 57.92%         |
| Purchase of Services | 57,592            | 50,128            | 44,737            | 53,420            | 51,978            | 51,078            | 45,470            | 38,505            | 57,389            | 48,084            | 498,381             | 6.69%          |
| Supplies             | 90,886            | 98,177            | 107,774           | 139,091           | 129,783           | 133,723           | 103,699           | 118,584           | 126,043           | 122,560           | 1,170,321           | 15.72%         |
| Other Charges/Expend | 49,741            | 55,026            | 76,422            | 35,070            | 49,765            | 64,868            | 65,539            | 69,395            | 63,492            | 49,927            | 579,245             | 7.78%          |
| Capital Outlay       | 87,869            | 200,852           | 43,406            | 39,964            | 97,466            | 98,826            | 76,352            | 71,610            | 49,229            | 90,694            | 856,470             | 11.51%         |
| Debt Service         | 4,355             | 23,479            | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | 27,834              | 0.37%          |
| <b>Total:</b>        | <b>\$ 576,370</b> | <b>\$ 756,370</b> | <b>\$ 626,751</b> | <b>\$ 664,382</b> | <b>\$ 765,328</b> | <b>\$ 813,632</b> | <b>\$ 763,243</b> | <b>\$ 800,502</b> | <b>\$ 820,215</b> | <b>\$ 857,484</b> | <b>\$ 7,444,278</b> | <b>100.00%</b> |

Water Dept Annual Report  
Estimated Water System Users:  
FY Spending Per User:

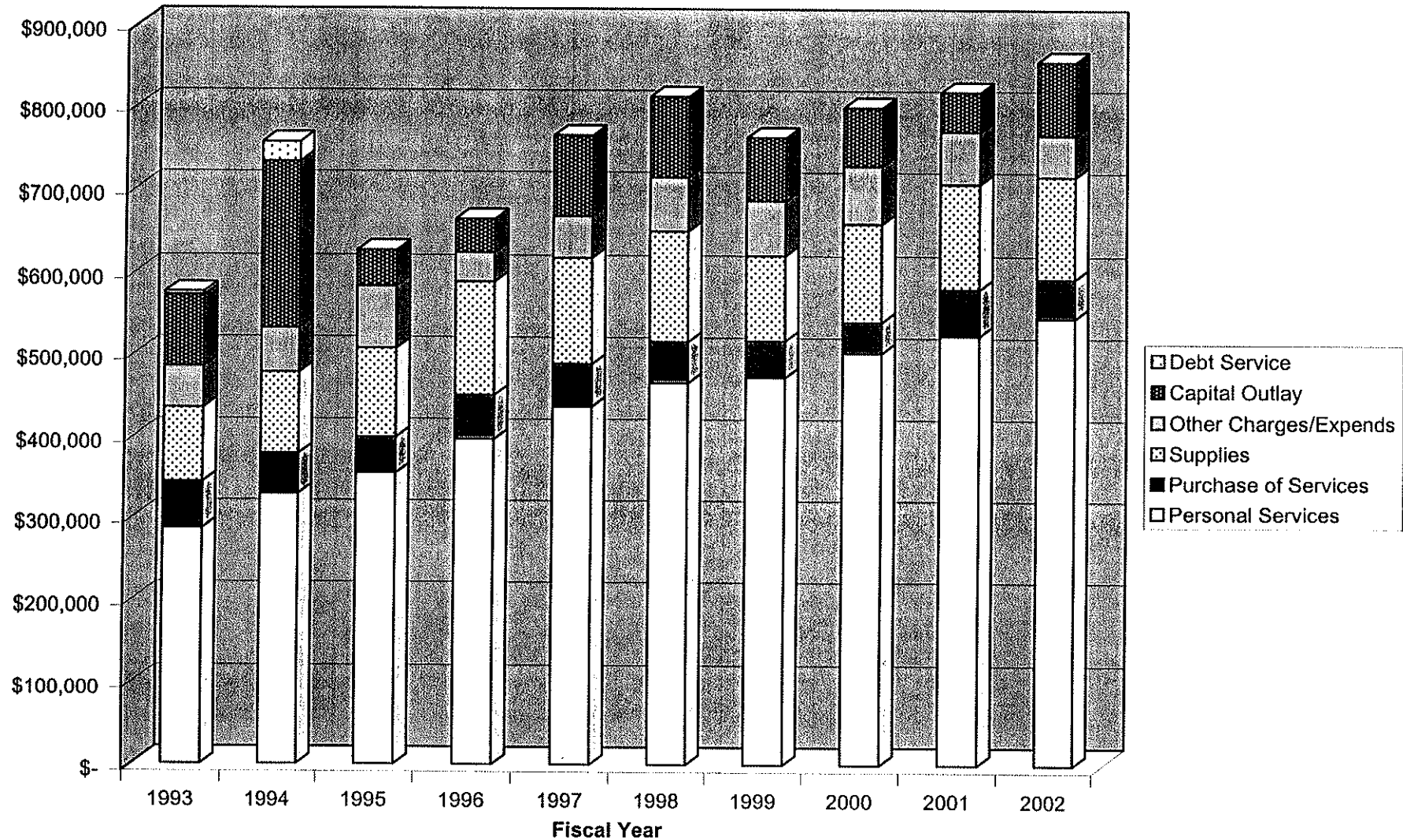
|     |     |     |     |           |           |           |           |           |           |                      |           |
|-----|-----|-----|-----|-----------|-----------|-----------|-----------|-----------|-----------|----------------------|-----------|
| N/A | N/A | N/A | N/A | 5,876     | 5,876     | 5,876     | 5,876     | 6,087     | 6,087     | Annual Spending/User |           |
| N/A | N/A | N/A | N/A | \$ 130.25 | \$ 138.47 | \$ 129.89 | \$ 136.23 | \$ 134.75 | \$ 140.87 | 6 Yr Ave             | 3 Yr Ave  |
|     |     |     |     |           |           |           |           |           |           | \$ 135.08            | \$ 137.28 |

Change from Prior Year

|                      |            |               |                |              |               |              |               |              |              |              | Annual % Change |              |
|----------------------|------------|---------------|----------------|--------------|---------------|--------------|---------------|--------------|--------------|--------------|-----------------|--------------|
|                      |            |               |                |              |               |              |               |              |              |              | 9 Yr Ave        | 3 Yr Ave     |
| Personal Services    | N/A        | 14.96%        | 7.82%          | 11.97%       | 9.95%         | 6.60%        | 1.51%         | 6.40%        | 4.31%        | 4.19%        | 7.52%           | 4.97%        |
| Purchase of Services | N/A        | -12.96%       | -10.75%        | 19.41%       | -2.70%        | -1.73%       | -10.98%       | -15.32%      | 49.04%       | -16.21%      | -0.24%          | 5.84%        |
| Supplies             | N/A        | 8.02%         | 9.78%          | 29.06%       | -6.69%        | 3.04%        | -22.45%       | 14.35%       | 6.29%        | -2.76%       | 4.29%           | 5.96%        |
| Other Charges/Expend | N/A        | 10.63%        | 38.88%         | -54.11%      | 41.90%        | 30.35%       | 1.03%         | 5.88%        | -8.51%       | -21.37%      | 4.97%           | -8.00%       |
| Capital Outlay       | N/A        | 128.58%       | -78.39%        | -7.93%       | 143.88%       | 1.39%        | -22.74%       | -6.21%       | -31.25%      | 84.64%       | 23.55%          | 15.72%       |
| Debt Service         | N/A        | 439.08%       | -100.00%       | 0.00%        | 0.00%         | 0.00%        | 0.00%         | 0.00%        | 0.00%        | 0.00%        | 37.68%          | 0.00%        |
| <b>Total:</b>        | <b>N/A</b> | <b>31.23%</b> | <b>-17.14%</b> | <b>6.00%</b> | <b>15.19%</b> | <b>6.31%</b> | <b>-6.19%</b> | <b>4.88%</b> | <b>2.46%</b> | <b>4.54%</b> | <b>5.26%</b>    | <b>3.96%</b> |

Sources:  
South Hadley Fire District #2

**South Hadley Fire District #2**  
**10 Year Total District Expenditures History**  
**FY 1993 Through FY 2002**



South Hadley Fire District #2  
Total District Expenditures Estimate  
Ten Years Ending June 30, 2012

| Expenditure Type      | 2003              | 2004                | 2005              | 2006                | 2007                | 2008                | 2009                | 2010                | 2011                | 2012                | 10 Years             | % of Budget    |
|-----------------------|-------------------|---------------------|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|----------------|
| Personal Services     | \$ 574,764        | \$ 605,648          | \$ 638,874        | \$ 674,861          | \$ 713,255          | \$ 754,927          | \$ 799,975          | \$ 848,730          | \$ 901,559          | \$ 958,867          | \$ 7,471,259         | 65.53%         |
| Purchase of Services  | 53,824            | 42,082              | 42,406            | 42,749              | 43,110              | 43,740              | 44,142              | 44,566              | 45,013              | 45,484              | 447,114              | 3.92%          |
| Supplies              | 125,638           | 129,407             | 133,289           | 137,288             | 141,407             | 145,649             | 150,018             | 154,519             | 159,154             | 163,929             | 1,440,299            | 12.63%         |
| Other Charges/Expends | 47,544            | 36,644              | 38,262            | 39,419              | 41,032              | 42,465              | 44,216              | 45,535              | 47,443              | 49,369              | 431,928              | 3.79%          |
| Capital Outlay        | 35,050            | 664,050             | 93,550            | 171,050             | 131,050             | 101,050             | 51,050              | 321,050             | 21,050              | 21,050              | 1,610,000            | 14.12%         |
| Debt Service          | -                 | -                   | -                 | -                   | -                   | -                   | -                   | -                   | -                   | -                   | -                    | 0.00%          |
| <b>Total:</b>         | <b>\$ 836,820</b> | <b>\$ 1,477,831</b> | <b>\$ 946,381</b> | <b>\$ 1,065,166</b> | <b>\$ 1,069,853</b> | <b>\$ 1,087,831</b> | <b>\$ 1,089,401</b> | <b>\$ 1,414,399</b> | <b>\$ 1,174,219</b> | <b>\$ 1,238,699</b> | <b>\$ 11,400,600</b> | <b>100.00%</b> |

2002 Water Dept Report

Estimated Water System Users:

FY Spending Per 2002 User:

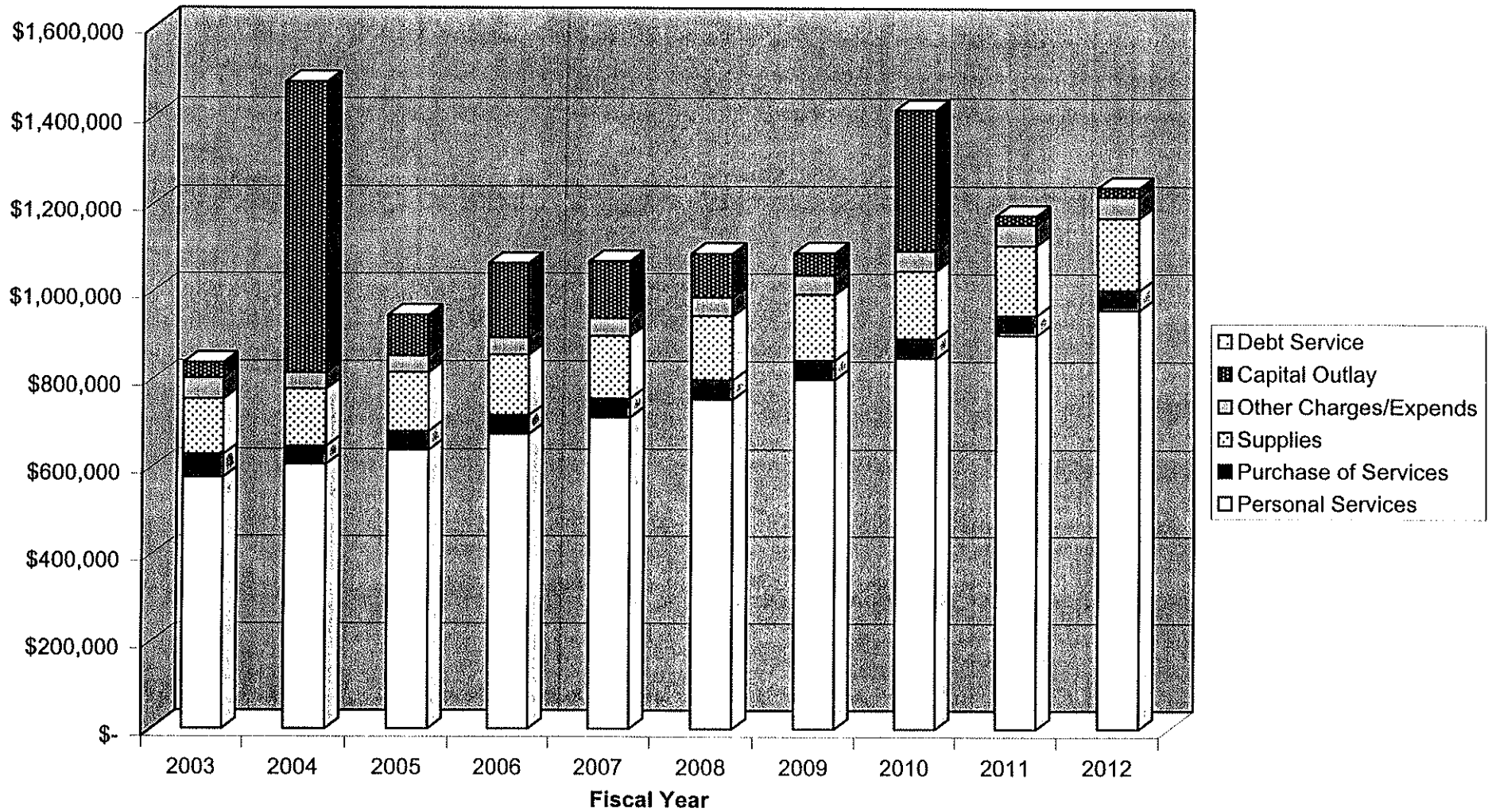
|           |           |           |           |           |           |           |           |           |           |       |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------|
| 6,087     | 6,087     | 6,087     | 6,087     | 6,087     | 6,087     | 6,087     | 6,087     | 6,087     | 6,087     | 6,087 |
| \$ 137.48 | \$ 242.78 | \$ 155.48 | \$ 174.99 | \$ 175.76 | \$ 178.71 | \$ 178.97 | \$ 232.36 | \$ 192.91 | \$ 203.50 |       |

| Annual Spending/User |           |
|----------------------|-----------|
| 10 Yr Ave            | 3 Yr Ave  |
| \$ 187.29            | \$ 209.59 |

Change from Prior Year

|                       |               |               |                |               |              |              |              |               |                |              | Annual % Change |              |
|-----------------------|---------------|---------------|----------------|---------------|--------------|--------------|--------------|---------------|----------------|--------------|-----------------|--------------|
|                       |               |               |                |               |              |              |              |               |                |              | 10 Yr Ave       | 3 Yr Ave     |
| Personal Services     | 5.26%         | 5.37%         | 5.49%          | 5.60%         | 5.72%        | 5.84%        | 5.97%        | 6.09%         | 6.22%          | 6.36%        | 5.79%           | 6.23%        |
| Purchase of Services  | 11.94%        | -21.82%       | 0.77%          | 0.81%         | 0.84%        | 1.46%        | 0.92%        | 0.96%         | 1.00%          | 1.05%        | -0.21%          | 1.00%        |
| Supplies              | 2.51%         | 3.00%         | 3.00%          | 3.00%         | 3.00%        | 3.00%        | 3.00%        | 3.00%         | 3.00%          | 3.00%        | 2.95%           | 3.00%        |
| Other Charges/Expends | -4.77%        | -22.93%       | 4.42%          | 3.02%         | 4.09%        | 3.49%        | 4.12%        | 2.98%         | 4.19%          | 4.06%        | 0.27%           | 3.74%        |
| Capital Outlay        | -61.44%       | 1794.58%      | -85.91%        | 82.84%        | -23.38%      | -22.89%      | -49.48%      | 528.89%       | -93.44%        | 0.00%        | 206.98%         | 145.15%      |
| Debt Service          | 0.00%         | 0.00%         | 0.00%          | 0.00%         | 0.00%        | 0.00%        | 0.00%        | 0.00%         | 0.00%          | 0.00%        | 0.00%           | 0.00%        |
| <b>Total:</b>         | <b>-2.41%</b> | <b>76.60%</b> | <b>-35.96%</b> | <b>12.55%</b> | <b>0.44%</b> | <b>1.68%</b> | <b>0.14%</b> | <b>29.83%</b> | <b>-16.98%</b> | <b>5.49%</b> | <b>7.14%</b>    | <b>6.11%</b> |

**South Hadley Fire District #2**  
**10 Year Total District Expenditures Estimate**  
**FY 2003 Through FY 2012**



## **Recommendations**

We have come to find that there is no single compelling economic reason for merging these two fire Districts. It appears that the level of spending for fire services in South Hadley is not outside of the norm for communities of similar nature. It also appears that the average cost of water for the residents of South Hadley is competitive with the costs of neighboring communities.

However, the level of spending for South Hadley is below the norm in the area of police services. South Hadley further reduces its level of police services by using police officers as ambulance attendants. We believe that the shifting of all ambulance and EMS responsibility to one or a combination of the fire Districts will improve the level of police services in South Hadley.

We believe that once the ambulance and EMS duties are shifted away from the town, a full service single station fire District will best provide the citizens of South Hadley with the level of public safety they require. Since writing their annual report in December of 1976, FD#1's leadership has held to the following unfulfilled objective:

"It is time this year to consider additional permanent personnel for fire-fighting and related services. At the present time there are thirteen (13) permanent firefighters and fifteen (15) call firefighters. The thirteen (13) permanent firefighters provide for the station being manned by three (3) men on every shift. However, in time of sickness, vacations or personnel taking time off in lieu of cash payments for working overtime or call back services, a three (3) man shift is naturally reduced to two (2) men. Then in time of accident and medical emergencies, when a police officer and one of the two on duty firefighters man the Town ambulance, only one man remains in the fire station with all of the apparatus. It is the feeling of our Prudential Committee that there should be four (4) permanent firefighters on each shift. ... Once the shifts are up to four (4) men, there would be at least two men on duty around the clock, even in the absence of a man for vacation or sickness, during the time a firefighter is out of the station on a medical or accident emergency. Better fire service could be provided when a full shift works and the need for substitutes would be reduced.

In the same 1976 annual report to the District, Chief Engineer Francis T. Moynahan further wrote:

"We are in need of additional manpower on duty with each shift at the fire station in order to give proper service in time of emergency. ... Three men on a shift are a bare minimum and we have grown to a point where the bare minimum is not enough."

It is twenty-six years later and these objectives have not been met. Chief Moynahan reported growth to 249 fire calls and 658 ambulance calls for a total of 907 emergency calls in 1976. Currently we find that FD#1 responds to an annual average of about 300 fire calls. In addition 1,500 ambulance runs result in about 1,200 patient trips to medical facilities. The number of emergency calls has doubled since Chief Moynahan made his 1976 case for more staff.

We believe that the merged fire departments will generate a synergy that will make the whole much greater than the parts. We agree with the 1976 management leaders of FD#1. It is for this reason that we recommend a merger of the two fire departments. We further suggest the new District consider the use of five (5) Prudential Committee members.

With regard to the water utilities, we find the same to be true. Our forecasting models indicate that the cost of water in both independent Districts will average around \$4 per thousand gallons over the next 10 years (\$4.06 in FD#1 and \$3.94 in FD#2). This fairly similar cost does not include the development of a second source of water for either District. At the end of the 10 years both systems will each have only developed two mechanical methods of acquiring water from their single sources of supply.

We believe that the synergy created by the merged water utilities could be substantial. We believe that cost savings resulting from reduced MWRRA purchases could be directed towards the development of a second domestic well. It is for this reason that we recommend the districts consider a merger of the two water departments. If enacted, we suggest the new District utilize five (5) Water Commission members.

## **Process**

The process we recommend for the merger is as follows:

FY 2003:

- Each District should fund and participate in Phase Two of the merger process:
  - The Town must be negotiated out of the ambulance business and future relationships defined;
  - Each District must complete their own due diligence and prepare for their District meetings;
  - Issues of contention between the Town and/or Districts must be negotiated and settled;
  - Transition documents and special legislation must be negotiated, drafted and presented to District meetings;
  - Final allocations of assets and liabilities must be agreed upon and incorporated into the special act;
  - An engineering analysis should be completed to assure compatibility of the water systems and an initial business plan developed for presentation to the District meetings.

FY 2004:

- Each District must vote at the Annual Meeting to file a special act in the state legislature;
- State legislation must be advanced, voted and signed into law.

FY2005:

- Preliminary implementation of the new District begins;
- New District officials elected;
- First single District meeting held and budget voted.

FY2006:

- Full implementation begins 07/01/05.



## **LEGAL ANALYSIS**

## **ANALYSIS OF LEGAL AUTHORITY OF SOUTH HADLEY FIRE DISTRICTS AND ENABLING STATUTES/SPECIAL ACTS**

### **1) FIRE DISTRICTS GENERALLY**

- A. Chapter 48 of the General Laws
- B. Officers of a Fire District
- C. The substantive provisions of G.L. c. 48, §§ 60 *et seq.*
- D. Additional statutes applicable to Fire Districts

- 1. Massachusetts Torts Claims Act
- 2. Conflict of Interest Laws
- 3. Procurement and Construction Statutes
- 4. Open Meeting Law
- 5. Local Option Statutes

### **E. Summary**

### **2) SPECIAL LEGISLATION OF THE SOUTH HADLEY FIRE DISTRICTS**

### **3) PROPERTY RIGHTS OF THE SOUTH HADLEY FIRE DISTRICTS**

### **4) LEGAL RELATIONSHIP OF FIRE DISTRICTS NO. 1 AND NO. 2 WITH THE TOWN OF SOUTH HADLEY AND THE MASSACHUSETTS WATER RESOURCES AUTHORITY**

#### **A. Town of South Hadley**

- 1. Assessment/Collection Functions
- 2. Ambulance Services

#### **B. MWRA**

### **5) AMENDMENT OF THE SOUTH HADLEY FIRE DISTRICTS' POWERS, AUTHORITY AND JURISDICTION**

#### **A. Petition To General Court**

#### **B. Local Authority**

### **6) MISCELLANEOUS**

## INTRODUCTION

The following analysis of the legal authority and enabling statutes/special acts relating to South Hadley Fire District No. 1 (District No. 1) and South Hadley Fire District No. 2 (District No. 2) is provided to outline the legal jurisdiction, powers and authority of Fire Districts generally, Districts No. 1 and No. 2 specifically, and to address the particular circumstances relating to Districts No. 1, No. 2 and the Town of South Hadley. I believe it is essential to fully understand the underlying authority of the subject Fire Districts in order to effectively analyze or assess the potential for merger or other joint execution of the Fire Districts' duties and responsibilities. This analysis will furthermore provide a framework for consideration of integration of Fire District functions with those available from the Town of South Hadley.

### 1) FIRE DISTRICTS GENERALLY

A fire district is a governmental entity, typically created by special legislation, possessing substantial power and authority in the specifically defined areas of responsibility entrusted to it by statute or special act. Fire districts are governmental units, which share many of the legal attributes of towns and cities, but their powers and duties are much more limited than those of full-fledged municipal corporations. The Supreme Judicial Court of Massachusetts has held that a fire district is a "quasi municipal corporation." Cohen v. Board of Water Commissioners, Fire Dist. No. 1, South Hadley, 411 Mass. 744, 747 (1992).

Like a true municipal corporation (for example, an incorporated city or town), [a] district is a "body corporate" . . . existing within definite geographical borders, and empowered by the State to carry out typically governmental or political functions. . . . Unlike a true municipal corporation, it does not have general powers to regulate the internal affairs of its defined area; it has only specific and limited responsibilities. . . .

Cohen, 411 Mass. at 747-48 (1992).

#### A. Chapter 48 of the General Laws

The statute providing for the establishment and operation of fire districts is Chapter 48 of the Massachusetts General Laws. G.L. c. 48, §§ 60 *et seq.* This statute provides a detailed blueprint for the establishment, organization and governance of fire districts, and establishes the authority of a district to raise funds for its operation through taxation and the issuance of bonds.<sup>1</sup> The power to create fire districts derives in turn from the Massachusetts Constitution, which authorizes the Legislature...

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<sup>1</sup> The authority of fire districts to secure operational funds through borrowing is established elsewhere in the General Laws. *See* G.L. c. 44, §4.

to erect and constitute metropolitan or regional entities . . . established with other than existing city or town boundaries, for any general or special public purpose or purposes, and to grant to these entities such powers, privileges and immunities as the general court shall deem necessary or expedient for the regulation and government thereof.

Mass. Const., Amend. Art. 2, §8.

## **B. Officers of a Fire District**

The officers of a fire district are its clerk, the prudential committee, moderator and treasurer, as well as such other boards or committees as may be specifically authorized by special act or district bylaws. The prudential committee is elected by the voters of the district and functions much as selectmen do in a town. The clerk is generally responsible for recording the votes of the fire district and for certifying to the assessors of the town all votes of the district authorizing interest to be added to taxes and other sums of money voted to be raised. The treasurer receives all money belonging to the district and is required to pay over and account for the same according to district order or that of the prudential committee. The moderator is typically elected by ballot either for a particular meeting or for a term of service and possesses all powers of the moderator of a town meeting.

## **C. The substantive provisions of G.L. c. 48, §§ 60 *et seq.***

The provisions of Chapter 48 authorize a fire district:

- ☐ to establish and organize a fire department for the purpose of extinguishing fires (§§ 64 and 65);
- ☐ to convene district meetings (§66);
- ☐ to assess taxes for the purchase of firefighting equipment and other expenditures incidental to the operation of a fire department, providing water and hydrant service, purchase of land, construction of buildings, purchase, operation and maintenance of ambulances (§69);
- ☐ to assess, collect and abate taxes and other sums of money voted to be raised by the district (§73);
- ☐ to hold real estate for the public use of its inhabitants and to lease out its land, public buildings or parts thereof (§77A);
- ☐ subject to certain limits, to annex territory to (or exclude it from) the district (§79).

## **D. Additional statutes applicable to Fire Districts**

### **1. Massachusetts Tort Claims Act**

Fire districts are liable to suit in the same manner as other governmental entities, and are subject to the procedural requirements and limitations on liability set forth in G.L. c. 258, the Massachusetts Tort Claims Act. District employees are not personally liable for negligence claims; only the district itself may be held liable in negligence, subject to a limitation of liability in the amount of \$100,000 per plaintiff per claim. Conversely, fire districts are not subject to suit for intentional torts (such as defamation, assault and battery, false arrest, deceit, invasion of privacy) of their officers and employees.

### **2. Conflict of Interest Laws**

Fire districts are considered public agencies for purposes of G.L. 268A, the conflict of interest law, and district officers and employees are subject to the provisions of the statute. *See* G.L. c. 48, § 90.

### **3. Procurement and Construction Statutes**

As public agencies or instrumentalities, fire districts are also subject to the procurement and construction bidding requirements of the General Laws. Specifically, the provisions of G.L. c.30B, the so-called Uniform Procurement Act, governs the procurement of goods and services by “governmental bodies”, including districts and departments or instrumentalities of a district. Accordingly, procurement contracts entered into by a fire district, its prudential committee, water commissioners or fire commissioners, are subject to the advertisement, proposal solicitation or competitive bidding requirements of G.L. c.30B. Generally, such procurements are exercised by a “Procurement Officer”, an individual duly authorized by law, charter or local bylaw to secure supplies or services for a particular governmental entity. For the purposes of Chapter 30B, a prudential committee or board of commissioners may participate in procurements as the de facto procurement officer, or the prudential committee or board of commissioners may delegate authority to an individual to take action in connection with a procurement on its behalf.

The provisions of G.L. c.48, §1 provide that the prudential committee of a fire district may “expend money so raised and borrowed” on behalf of the district, which, in my opinion, infers the right of the Prudential Committee to enter into contracts on behalf of the fire district. The Prudential Committee may also contract to let or lease land pursuant to the provisions of c.48, §77A.

As discussed later in this report in Section 2, the Water Commissioners of each district are authorized by Special Act to contract with one another for the purpose of supplying each district and its inhabitants with water. The enabling Acts also authorize the fire districts to acquire water rights and interests in real property, which would presumably be done either by agreement or by exercise of eminent domain powers.<sup>2</sup>

Accordingly, for the purposes of the Uniform Procurement Act, the Prudential Committees would clearly have authority to enter into contracts on behalf of their respective fire districts. I also believe that under the provisions of Chapter 529, the District No. 2 Water Commissioners may execute contracts for supply or services pursuant to Chapter 30B. Given the lack of any more specific enabling authority in the Special Acts or District bylaws, the Fire Districts may want to examine the possibility of incorporating specific language into their bylaws to clarify which committee, Board of Commissioners, or other delegated officer or employee is responsible for the execution of contracts to further the purposes of the Fire Districts. Short of a specific bylaw to this end, the Prudential Committee or Water Commissioners may delegate contracting authority to officers of the Fire District, as they deem appropriate. Such a delegation of authority should be evidenced by a vote of the Prudential Committee or Water Commissioners and the filing of a certified copy of said vote with the District Clerk.

Fire Districts are also subject to the provisions of G.L. c.30, §39M, et seq., relative to the construction, reconstruction, alteration, remodeling or repair of public works, and the provisions of G.L. c.149, §844A, et seq., relative to the construction, reconstruction, installation, demolition, maintenance or repair of buildings by public agencies. The majority of capital improvement projects undertaken by fire districts will fall within the provisions of c.30, §39M (e.g. water pump or treatment stations, water main/hydrant construction, installation or repair projects), but non-water related building construction, demolition or alteration projects would be governed by the public building requirements set forth in c.149. These respective provisions of General Law govern the advertisement, bidding, contract award and contractor payment procedures, which must be followed in these construction projects. The Commonwealth of Massachusetts has issued guideline materials relative to the design and construction of public projects, which provide detailed information relative to these procedures.

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<sup>2</sup> Many special acts creating or enabling fire districts specifically provide that such districts assume all the powers, duties and liabilities set forth in the General Laws relating to fire and/or water districts. District No. 1's enabling legislation is silent in this regard. The Acts of 1909, Chapter 239 provide that the District No. 2 "shall have all the powers and be subject to all the duties and liabilities set forth in all general laws now or hereafter in force relating to fire districts." The Acts of 1909, Chapter 529, which authorizes District No. 2 to provide itself and its inhabitants with water, does not specifically vest the District with the powers vested in water districts by General Law. Rather, Chapter 529 provides, in detail, the powers and authority of District No. 2 relative to water supply functions, which powers are similar in scope to those enumerated in the General Laws. I believe that both Districts No. 1 and No. 2, as de facto public water supply entities, are duly authorized to exercise all powers granted to fire and water districts by General Law, in addition to the specific authority vested in them by Special Act. For reference, the relevant Water District statute is G.L. c.40, §39H through 42K.

## **Additional Statutes (continued)**

### **4. Open Meeting Law**

Fire Districts are also subject to the provisions of G.L. c.39, §23B that relate to the meetings of governmental bodies. All meetings of governmental bodies must be open to the public except as otherwise provided in §23B. No quorum of a governmental body shall meet in private for the purpose of deciding on or deliberating toward a decision on any matter pending before the governmental body unless the meeting complies with the requirements of the open meeting law. Executive sessions may be convened for the purposes enumerated in §23B only. The provisions of c.39, §23B do provide that, except in an emergency, a notice of every meeting of a governmental body, including a fire district, shall be filed with the clerk of the town in which the body acts, and the notice or a copy thereof shall be publicly posted in the office of the town clerk or the principal official bulletin board of the town at least 48 hours, including Saturdays but not Sundays and legal holidays, prior to any such meeting. The fire district officer calling the meeting shall file the notice thereof with the town clerk and the notices are to be posted by the town clerk in his office or on the principal official bulletin board of the town. The notice must be printed in easily readable type and shall contain the date, time and place of the meeting. Fire districts are also required by §23B to maintain accurate records of their meetings, setting forth the date, time, place, members present or absent and the action taken at each meeting, including executive sessions.

### **5. Local Option Statutes**

Like municipalities, fire districts may choose to adopt, by vote of the district meeting, certain provisions of General Law relative to their operations. Upon review of documentation provided by the Fire Districts, it appears that the Fire Districts have adopted the following provisions of General Law:

**Local Option Statutes (continued)**  
**a. District No. 1**

| <b>M.G.L.<br/>Chapter/Section</b> | <b>Date Adopted</b> | <b>Subject</b>                                                                                  |
|-----------------------------------|---------------------|-------------------------------------------------------------------------------------------------|
| 391, §§42A to 42B                 | March 10, 1924      | Acts of 1923 related to unpaid water rents                                                      |
| 41, §§1 and 2                     | March 14, 1955      | By ballot, annual elections, Acts of 1955 to enlarge by moving boundaries                       |
| 32B                               | March 12, 1956      | By ballot, annual election                                                                      |
| 32B, §§763 and 10                 | March 12, 1973      | Acts of 1972 regarding amount of life insurance                                                 |
| 32B, §7A                          | March 12, 1973      | Voted percentage to be paid for health insurance                                                |
| 41, §119                          | March 11, 1974      | Changed date for annual meeting and election                                                    |
| 151, §12A                         | June 13, 1980       | Acts of 1979 related to not using free cash for the purpose of reducing property tax in FY 1981 |
| 44, §53F                          | April 28, 1986      | Accepted for FY 1987 related to compensating balance                                            |
| 642                               | April 30, 1990      | Acts of 1989 relating to automatic sprinkler approved with additional wording                   |
| 291                               | April 29, 1991      | Acts of 1990 related to enhanced 911 service                                                    |
| 32B, §18                          | April 26, 1993      | Accepted relating to health insurance                                                           |
| 399                               | April 26, 1993      | Act of 1992 related to Early Retirement Incentive                                               |
| 32B, §8A                          | May 15, 1995        | Accepted relating to self-funding health insurance                                              |

**Local Option Statutes (continued)****b. District No. 2**

| <b>M.G.L.<br/>Chapter/Section</b> | <b>Date Adopted</b> | <b>Subject</b>                                                                                                             |
|-----------------------------------|---------------------|----------------------------------------------------------------------------------------------------------------------------|
| 32B                               | February 8, 1957    | By ballot; annual election                                                                                                 |
| 32B, §9                           | February 8, 1957    | Upon retirement; medical coverage remains 100%                                                                             |
| 32B, §§9C and 11A                 | November 25, 1957   | Life reduces to 50%                                                                                                        |
| 32B, §9A                          | March 5, 1965       | Annual meeting voted ½ premiums for life & health for the retirees                                                         |
| 32B, §7A                          | October 13, 1972    | Special District Meeting                                                                                                   |
| 32B, §9E                          | October 13, 1972    | Special District Meeting voted to pay not less than 50% of insurance paid by district, current and retired 60/40 employees |
| 32B, §10A                         | October 13, 1972    | Special District Meeting voted to provide dental coverage                                                                  |
| 32B, §10A                         | March 2, 1973       | Annual Meeting voted to increase life from \$1,000 to \$2,000                                                              |
| 44, §65                           | May 3, 1993         | Annual Meeting voted vacation pay before leaving for vacation                                                              |
| 32B, §10A                         | August 14, 1989     | Special District Meeting voted to authorize District to provide dental (75/25)                                             |

## **E. Summary**

While a fire district's jurisdiction is established specifically by legislative grant, a district generally possesses comprehensive authority in the fields of fire suppression/prevention and public water supply, as authorized by General Law or special Act. As public governmental entities, fire districts are subject to numerous provisions of General Law governing liability, employment, contracting, governance and administrative matters. In addition to the powers and limitations established by operation of G.L. c. 48 and the other General Laws outlined above, many fire districts possess unique attributes by virtue of the terms of the special Acts under which a district is created.

**1) SPECIAL LEGISLATION RELATIVE TO THE  
SOUTH HADLEY FIRE DISTRICTS**

The Special Acts adopted by the Legislature creating Fire Districts No. 1 and No. 2, and defining their respective territories, powers and authority are summarized as follows:

**A. Fire District No. 1 in the Town of South Hadley**

| <b>CHAPTER</b> | <b>PURPOSE</b> |
|----------------|----------------|
|----------------|----------------|

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Acts of 1872, Chapter 114 | An Act to Supply the Village of South Hadley Falls with Water: This legislation authorized and created Fire District No. 1 of the Town of South Hadley for the purpose of supplying itself and its inhabitants with water to extinguish fires, generate steam, and for domestic and other purposes, including the establishment of public fountains and hydrants. Fire District No. 1 was authorized to take and hold the water of Buttery Brook and other land necessary for raising, holding and preserving such water and conveying the same to the District. The Fire District was furthermore authorized to issue bonds for the purpose of paying all necessary expenses and liabilities incurred in conjunction with the exercise of its authority. |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                           |                                                                                                                                        |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Acts of 1873, Chapter 117 | This Act authorized the Town of South Hadley to loan bonds to Fire District No. 1 and authorized the Fire District to sell said bonds. |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------|

|                           |                                                        |
|---------------------------|--------------------------------------------------------|
| Acts of 1876, Chapter 167 | This Act extended the boundaries of the Fire District. |
|---------------------------|--------------------------------------------------------|

|                           |                                                                                   |
|---------------------------|-----------------------------------------------------------------------------------|
| Acts of 1889, Chapter 462 | This Act authorized the Town of South Hadley to loan money to Fire District No. 1 |
|---------------------------|-----------------------------------------------------------------------------------|

Acts of 1892, Chapter 46

This Act formalized Fire District No. 1's status as "a corporation", and enlarged its powers as follows: prior takings and purchases of land, water rights, easements were ratified and confirmed; authorized the issuance of bonds not to exceed \$30,000; authorized the establishment of a sinking fund for the payment of District loans; authorized the Fire District to raise by taxation funds sufficient to pay for annual operation of its water works and interest on bonds, notes and contributions to the sinking fund; authorized the Fire District to purchase and take and hold such other lands, water rights and easements within the Town of South Hadley as may be required to enlarge, extend or protect its water works. The Fire District was authorized to raise funds by taxation for such purposes, a certified copy of the appropriation vote raising such funds to be sent to the South Hadley Assessors and said sums were then to be collected by the offices of the Town in accordance with provisions of General Law governing Fire Districts. This Act also established a penalty for the corrupting/diverting of the Fire District's water in an amount equal to three times the amount of damages assessed, and, furthermore, authorized a fine of \$300 or imprisonment for a period of up to one year for any such violation.

Acts of 1892, Chapter 221

This Act authorized the Fire District to borrow an additional \$5,000.

Acts of 1893, Chapter 347

This Act authorized the Fire District to issue bonds for the purpose of refunding a loan.

Acts of 1894, Chapter 277

This Act authorized the Town of South Hadley to use its sinking funds to pay for a loan to Fire District No. 1.

Acts of 1895, Chapter 63

This Act specifically authorized the taking or purchase of additional land in Chicopee located at the source and along the course of Buttery Brook or any of its branches, together with all water thereon, for the purpose of protecting the Fire District's water supply.

Acts of 1898, Chapter 52

This Act authorized the Fire District to issue bonds/debt for the recent land taking in Chicopee.

Acts of 1898, Chapter 126

This Act authorized the Fire District to refund a portion of its debt.

Acts of 1911, Chapter 168

This Act confirmed and ratified certain acts of Fire District No. 1 authorizing the appropriation for a new water main and a vote to borrow \$12,000, which, apparently, had not been properly executed.

Acts of 1955, Chapter 41

This Act authorized the annexation of additional territory to the north up to the existing boundary of Fire District No. 2.

| <b>Chapter</b>           | <b>Purpose</b>                                                                                                                                                                                                                                                                 |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Acts of 1955, Chapter 83 | This Act abandoned the Buttery Brook reservoir as a water source for the Fire District and authorized the Fire District to sell or otherwise convey said property and/or rights therein.                                                                                       |
| Acts of 1957, Chapter 35 | This Act authorizes Fire District No. 1 and Fire District No. 2 to supply each other with water, subject to the terms and conditions agreed upon by their respective Water Commissioners (subject to acceptance of the Act by a majority vote of the voters in each District). |

## **B. Fire District No. in the Town of South Hadley**

### **Chapter**

Acts of 1909, Chapter 239

### **Purpose**

This Act established Fire District No. 2 in the Town of South Hadley as a body corporate possessing the powers and privileges and subject to the duties and liabilities set forth in all General Laws now or hereafter in force relating to Fire Districts. The Act specifically authorized the District to supply itself with water for the extinguishment of fires and for domestic and other purposes, to establish fountains and hydrants and to relocate and discontinue the same, to regulate the use of water and fix and collect rates to be paid therefore, to take, acquire by lease, purchase or otherwise and hold property, lands, rights of way and easements for the purposes of this Act and to prosecute and defend any or all actions relating to the property and affairs of the District.

Acts of 1909, Chapter 529

This Act was adopted "to provide for a water supply for Fire District No. Two.." It authorized Fire District No. Two to take, purchase or otherwise acquire and hold the waters of any pond or stream or of any ground source/wells located within the limits of Fire District No. 2. It furthermore authorized the acquisition of lands, rights of way and easements necessary for collecting, storing, holding, purifying and preserving the purity of such water and for conveying the same to the District. The Fire District was authorized to construct dams, reservoirs, stand pipes, tanks, buildings, etc. and to do such other things as may be necessary to establish and maintain effective water works, including wells, reservoirs, pumping works, aqueducts, conduits, pipes, as may be necessary. The Fire District was specifically authorized to issue bonds, notes or scrip for the purpose of paying the necessary expenses and liabilities incurred under the provisions of this Act. The Act furthermore provided that whenever a tax was voted by the Fire District, the clerk shall send a certified copy thereof to the Assessors of the Town of South Hadley whereupon the assessment would be committed to the Town Collector for collection of said tax in the manner consistent with the collection of Town taxes. This Act provided that Fire District No. Two shall elect by ballot three persons to constitute a Board of Water Commissioners, which would exercise all authority granted to the Fire District by this Act and not otherwise specifically provided for. The Water Commissioners shall be subject to such "instructions, rules and regulations as the District may impose by its vote". The Fire Commissioners were authorized by the Act to appoint a Treasurer.

| <b>Chapter</b>            | <b>Purpose</b>                                                                                                                                                                                                                                                                                        |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Acts of 1910, Chapter 337 | This Act amended Chapter 529 of the Acts of 1909 by revising the name of the District to read “Fire District No. 2 in the Town of South Hadley” and by authorizing the Treasurer of the Fire District to serve as Treasurer to the Board of Water Commissioners.                                      |
| Acts of 1912, Chapter 634 | This Act authorized the Fire District to bond and expend funds up to \$10,000.                                                                                                                                                                                                                        |
| Acts of 1917, Chapter 235 | This Act authorized the Fire District to borrow for the purposes of increasing its water supply.                                                                                                                                                                                                      |
| Acts of 1925, Chapter 200 | This Act provided further authorization to borrow.                                                                                                                                                                                                                                                    |
| Acts of 1931, Chapter 82  | This Act enlarged the territory of Fire District No. 2.                                                                                                                                                                                                                                               |
| Acts of 1931, Chapter 351 | This Act further authorized borrowing by the Fire District.                                                                                                                                                                                                                                           |
| Acts of 1949, Chapter 127 | This Act extended the geographical limits of Fire District No. 2.                                                                                                                                                                                                                                     |
| Acts of 1954, Chapter 412 | This Act authorized the Fire District to borrow for the acquisition/construction of easements/improvements, etc. for water supply purposes.                                                                                                                                                           |
| Acts of 1954, Chapter 498 | This Act further extended the limits of Fire District No. 2.                                                                                                                                                                                                                                          |
| Acts of 1957, Chapter 34  | This Act “corrects and extends” the boundaries of the Fire District.                                                                                                                                                                                                                                  |
| Acts of 1957, Chapter 35  | This Act authorizes Fire District No. 1 and Fire District No. 2 to supply each other with water, subject to the terms and conditions agreed upon by their respective Water Commissioners of the Fire Districts (subject to acceptance of this Act by a majority vote of the voters in each District). |
| Acts of 2002, Chapter 168 | This Act authorizes Fire District No. 2 to convey certain parcels of land to the Commonwealth of Massachusetts for conservation purposes.                                                                                                                                                             |

### 3) PROPERTY RIGHTS OF THE SOUTH HADLEY FIRE DISTRICTS

The South Hadley Fire Districts, pursuant to their special Acts, possess the authority to acquire and hold all waters or aquifers located within the geographical limits specified in the Acts not already appropriated for purposes of public water supply, together with any water rights connected with such resources. The Districts also possess the authority to acquire and hold all lands located within their respective territories (and, with respect to Fire District No. 1, certain land in Chicopee), and to construct and maintain on such lands all structures necessary to enable them to carry out their statutory purposes.<sup>3</sup>

The South Hadley Fire Districts are furthermore vested with all of the other powers set forth in the provisions of G.L. c.48, §60, et seq. and the aforementioned Acts. The Districts obviously have the authority to acquire, construct and maintain all structures and facilities necessary for the purpose of acquiring, storing, supplying, preserving and purifying water. The Districts also may acquire, construct and maintain all structures necessary to maintain their Fire Departments. In addition, the Districts are governmental bodies, which, by their legislative mandate, must convene public meetings and provide for the proper administration of its affairs. Accordingly, not all buildings or structures owned and maintained by the Districts must be specifically constructed for narrowly tailored water supply or fire protection uses. In fact, the provisions of G.L. c.48, §77A, which were adopted by the Legislature in 1993, provide generally that “a fire district may hold real estate for the public use of its inhabitants...” In my opinion, this language provides fire districts with broad authority to hold real estate for general uses, including public meetings, office space for clerical or administrative employees of the Districts, storage of equipment, supplies and records, provided that such uses are for “public purposes.”

Given the Districts’ broad general authority in the areas of water supply and fire protection, together with the broad “public use” criteria provided for fire district real estate holdings in the provisions of G.L. c.48, §77A, the Districts have significant latitude with respect to their right to hold and maintain buildings, structures, and facilities, with the primary caveat being that any such buildings, structures or facilities must be used for public purposes.

The Fire District No. 1 bylaws (Prudential Committee, Section 4) provide that the Prudential Committee “shall have custody of the property of the District and keep the same in good condition at all times.” The Fire District No. 2 bylaws (Article V, Section 1) vests in the

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<sup>3</sup>Note that although the provisions of the Acts of 1892, Chapter 46 authorized District No. 1 “to purchase and take and hold such other lands, water rights and easements within the Town of South Hadley as may be required to enlarge, extend or protect its water works”, I believe this authority is limited to such lands and water rights in the Town not within the geographic boundaries of District No. 2. I note that District No. 2 was not created until 1909, and the provisions of Acts of 1955, Chapter 41 (extending District No. 1’s boundary to that of District No. 2) and the analogous provisions of G.L. c.40, §39A which prohibit a Water District from annexing any territory wherein a water supply or water distribution system has already been established.

Prudential Committee “management and control of all property, real and personal, belonging to the District and used in the prevention and extinguishing of fires,” subject to such instructions, rules and regulations as the District Meeting may impose by its vote. The Board of Water Commissioners is vested by the terms of Article VI, Section 1 with “the care, custody, management and control of all property, real and personal, belonging to the District, except the property placed under the control of the Prudential Committee.”

#### **4) LEGAL RELATIONSHIP OF THE SOUTH HADLEY FIRE DISTRICTS WITH THE TOWN OF SOUTH HADLEY AND MASSACHUSETTS WATER RESOURCES AUTHORITY**

##### **A. South Hadley**

###### **1. Assessment Collection Functions**

Fire District No. 1 is specifically authorized by the provisions of the Acts of 1892, Chapter 46 to raise funds by taxation for its legislated purposes and to certify a copy of the appropriation vote raising such funds to the South Hadley Assessors, which sums are then to be collected by the offices of the Town in accordance with the provisions of General Law governing Fire Districts. Fire District No. 2 is authorized by the Acts of 1909, Chapter 529 to “vote” a tax to fund its operations, whereupon the Clerk of the District shall send a certified copy thereof to the Assessors of the Town of South Hadley, which tax would then be committed to the Town Collector for collection in “the manner consistent with the collection of Town taxes”. The provisions of G.L. c.48, §73 provide that a Fire District Clerk shall certify to the Assessors of the Town all votes of the District authorizing interest to be added to taxes and all sums of money voted to be raised, which shall be assessed and collected in the same manner as Town taxes and shall be paid over to the District Treasurer. Thus, both by the provisions of the special legislation enabling Fire Districts No. 1 and No. 2 and by the provisions of G.L. c.48, §73, a legal relationship between the respective Fire Districts and the Assessors and Tax Collector of the Town of South Hadley is created. In essence, the Assessors and the Tax Collector are obligated to provide those services necessary for the assessment and collection of Fire District taxes upon receipt of a certified copy of an appropriation vote from the District Clerk. The Assessors, Treasurer and Collector of the Town of South Hadley have the same powers and perform the same duties relative to the assessment and collection of the money voted by the Fire Districts as they have and exercise relative to the assessment collection and abatement of Town taxes.

The provisions of G.L. c.41, §108B provide that in a town in which a District has been created and is operating under a law which requires the Assessors of the town to assess District taxes and the Collector of Taxes of the town to collect such taxes, such District shall annually appropriate money for the salary or compensation of the Assessors and Collector of Taxes, which shall be in addition to the amounts fixed by the Town for the salary or compensation of said officers as provided by Section 108. Tax Collectors who are certified Massachusetts Municipal Collectors by the Massachusetts Collectors and Treasurers Association are entitled to additional compensation by the Town under the provisions of G.L. c.41, §108P. The Prudential Committee of each Fire District determines what amounts are to be appropriated for the purposes of said

salaries. If the Prudential Committee and the Selectmen of the Town cannot agree on the amounts to be paid to the Assessors and Tax Collector, the Commissioner of Revenue of the Commonwealth of Massachusetts is to be notified and he/she may determine the amounts to be paid, which amounts shall then be included in the aggregate amount assessed annually for District taxes. Fire Districts are also authorized to appropriate sums of money for books, forms and other necessary expenses of the Assessors and Collector of Taxes in connection with the assessment and collection of District taxes.

Thus, both Fire Districts are obliged to contribute to the costs of the salaries of the South Hadley Assessors and Tax Collector to the extent that said Town officials provide services for the Fire Districts.

## **2. Ambulance Services**

Fire Districts are specifically authorized to provide ambulance service by G.L. c.48, §69. Districts may enter into Agreements with other municipalities for joint provision of or mutual assistance with respect to said services...(Insert/Comment on current terms of intermunicipal agreement).

## **B. Massachusetts Water Resources Authority**

In 1947, the General Court, upon adoption of the Acts of 1947, Chapter 575, authorized the Metropolitan District Commission (MDC) to furnish water to certain towns and districts and to construct an aqueduct system from the Quabbin Reservoir to the Chicopee Valley. By virtue of this legislation, the MDC was granted certain rights to take land and water rights in several towns in the Chicopee Valley, including South Hadley, provided that said water rights were not being used for water supply purposes by said municipalities. The MDC was also specifically authorized to enter into agreements with towns and districts for the sale and provision for water for public water supply purposes.

In 1984, the Massachusetts Water Resources Authority (MWRA) was created by the General Court to operate, regulate, finance, and modernize the water works and sewerage systems serving the Greater Metropolitan Boston area. The MWRA assumed all of the MDC's duties, responsibilities and powers in this regard, including those water supply and distribution service functions authorized by the provisions of Chapter 575 of the Acts of 1947.

To date, only Fire District No. 1 has entered into a water supply agreement with the MWRA. District No. 1 initially executed a contract for the purchase of water from the MDC through the Chicopee Valley Aqueduct in 1951. District No. 1 has continuously received water from MDC/MWRA resources from that date to the present time. The latest Water Supply Continuation Agreement between the MWRA and Fire District No. 1 was executed on December 12, 1997 and will expire on December 31, 2007.

South Hadley Fire District No. 2 has always maintained its own independent water sources which, to date, have been adequate to meet District No. 2's water consumption needs. Thus, District No. 2 has never engaged in any agreement with the MDC/MWRA for water supply purposes.

The water supply agreements authorized by the provisions of the Acts of 1947, Chapter 575 have been incorporated, by reference, into the MWRA Enabling Act (Chapter 372 of the Acts of 1984, Section 8(d)). According to sources within the MWRA, any proposed merger of South Hadley Fire Districts No. 1 and No. 2 would require a legislative amendment to Section 8(d), at least, to change the names of the South Hadley entity. Such a merger would furthermore require an amendment to the Water Supply Continuation Agreement between the MWRA and Fire District No. 1. In addition to name changes in the above-referenced documents, a reassessment of available resources within a reconstructed District and assumptions relative to potential demand would likely be required. In the event that MWRA water would be consumed in territory formerly lying within the geographical boundaries of District No. 2, the MWRA would also have to determine whether the newly merged Water District would be required to fulfill the conditions of the MWRA Policy No. 10 - Entrance of a New Community to MWRA Water Works System. This process would entail the filing of an application by the Fire District, approval by MEPA, and approvals by the MWRA Advisory Board and Board of Directors.

The MWRA has also opined that, under Section 8(d) of the MWRA enabling act, the MWRA is only authorized to provide water for local water systems of the political subdivisions listed in that section. Accordingly, MWRA water may not be used in any unlisted community or district or private property located outside the boundaries of the listed communities without the approval of the Advisory Board, regulatory bodies, and amended legislation. Accordingly, District No. 1 cannot, under the terms of the MWRA Enabling Act, sell water provided to it by the MWRA to District No. 2, or its consumers. Neither the MWRA Enabling Act nor the Fire District No. 1 Water Supply Continuation Agreement, however, would prevent District No. 1 from developing its own local sources of water supply or the procurement of water from District No. 2. In the event that District No. 1 developed its own adequate local source of supply or obtained water from sources other than the MWRA and, thus, reduced its reliance upon the MWRA water source, the demand assumptions upon which the Water Supply Continuation Agreement is based would likely be reviewed and the Agreement would be modified, accordingly. In the event that District No. 1 were to choose not to renew its contractual relationship with the MWRA at the expiration of the current Water Supply Continuation Agreement, District No. 1 would be responsible for a "special charge" based upon its proportional share of debt service for facilities constructed in accordance with the Agreement for as long as the MWRA incurs said debt service or until a negotiated "buy-out" agreement has been negotiated and executed by District No. 1 and the MWRA.

In summary, Fire District No. 1 has engaged in an Agreement with the MDC/MWRA since 1951 whereby the MDC/MWRA has provided District No. 1 with water from the Quabbin Reservoir due to District No. 1's inadequate local sources. Since its creation in 1909, Fire District No. 2 has supplied its inhabitants with water, and has otherwise met its fire suppression and water supply needs, from local water sources within the territorial boundaries of District No. 2.

As of this day, District No. 2 maintains its self-sufficiency. A proposed merger between Districts No. 1 and No. 2 would, thus, likely require District No. 1 to reassess its need for MWRRA water supply. To the extent that MWRRA water would be supplied to inhabitants of the current territory of District No. 2, legislative amendments would be required authorizing such use.

## **5. AMENDMENT OF THE POWERS, AUTHORITY OR JURISDICTION OF SOUTH HADLEY FIRE DISTRICTS NO. 1 and NO. 2.**

### **A. Petition to General Court**

As stated above, the South Hadley Fire Districts are separate and distinct bodies politic created and empowered by Special Act of the General Court. Historically, the Districts' powers have been established, amended and expanded by enactment of supplemental special legislation, or by amendment to the provisions of G.L. c. 48 which govern fire districts, generally.

Amendments to the powers, authority or jurisdiction of the Fire Districts may be adopted upon petition to the General Court by the Prudential Committee, Water or Fire Commissioners (within their respective areas of authority) upon a vote authorizing such a petition by the voters of a District at a duly convened meeting. Typically, the Districts will prepare the substantive text of the proposed amendment, it is presented to a State Representative or Senator for review and processing by counsel and various committees of the General Court, and upon final approval by the House of Representatives, Senate and the Governor, the amendment becomes law in the form of an Act.

### **B. Local Authority**

A fire district may annex adjacent territory and its inhabitants, by vote at a district meeting called for that purpose, if a majority of the voters of said territory file a petition with the Prudential Committee seeking annexation of said territory, the limits of which must be specifically defined in the petition. (G.L. c. 48, § 79.) The Prudential Committee shall, upon receipt of such a petition, prepare a warrant article with respect to the annexation petition for action by the District at its next meeting. While the language of §79 is silent as to the ability of a Fire District to annex territory wherein a water supply or water distribution system has already been established, analogous provisions of G.L. c.40, §39A, which apply to cities and towns, provide that no water supply or water distribution system shall be established to supply water in any town while the inhabitants of any part thereof are being served directly by a water company, water supply district, water district, or fire district, with certain exceptions not relevant here. As a matter of general law, when a city or town establishes a water supply or distribution system within its boundaries, it acquires the exclusive right to provide water service to that territory and its inhabitants. Absent express authorization by the General Court, I do not believe that the Districts could acquire or annex territory outside the boundaries of the respective Districts which is already serviced by a duly established town, city or district water supply system.

The Prudential Committee is the body responsible for administration of each District. It may call special District meetings, as it deems necessary (or as required, if petitioned by voters pursuant to G.L. c. 48, § 66), and it is responsible for preparing the warrants for the annual and special District meetings. Administrative matters such as determination of annual meeting or election dates may be established by District bylaw and adoption by vote of the District meeting.

Routine personnel and business administration matters not expressly reserved to the District meeting by statute, special act or District bylaw would fall within the scope of authority of the Prudential Committee itself.

Similarly, administrative functions related to the duties and functions of the Water and Fire Commissioners would be exercised by those elected bodies, unless otherwise directed by statute, special act or District bylaws.

In summary, any substantive amendment or expansion of the Districts' powers, authority or jurisdiction would, unless already authorized by General or Special Law, be subject to the approval of the General Court. The Fire Districts may annex additional territory which is not already being serviced by a public water supply entity pursuant to G.L. c. 48, § 79 upon petition to the Prudential Committee and vote by the District meeting. The District meeting, upon recommendation of the Prudential Committee, Water or Fire Commissioners or a petition by voters pursuant G.L. c. 48, § 66, may adopt bylaws for the governance of District affairs. The Prudential Committee or Water/Fire Commissioners may establish regulations and/ or procedures governing routine personnel or business matters within their respective areas of operation.

## **6) MISCELLANEOUS**

### **A. Proposition 2½ Limits on Taxation**

Fire Districts No. 1 and No. 2 are each authorized by General Law and their respective Acts to raise funds by taxation for the purchase of firefighting equipment and other expenses incidental to the operation of a fire department, for the provision of water service, purchase of land, construction of buildings, and the purchase, operation and maintenance of ambulances. The limits imposed upon municipal taxing authority by G.L. c.59, §21C apply, by the specific terms of the statute, to "a city or town". Accordingly, fire districts (and other quasi-municipal entities) do not appear to be bound by the limits of Proposition 2½. Furthermore, there do not appear to be any "pre-Proposition 2½" limitations on the taxation powers of fire districts.



## **FIRE AND AMBULANCE**

## **Fire and Ambulance Service**

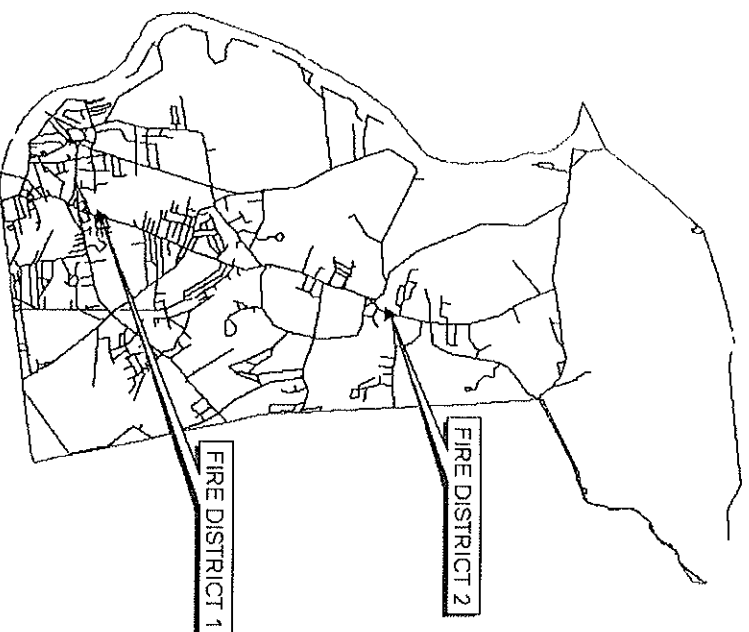
### **Current System Description**

Currently the Town of South Hadley is served by two fire departments, South Hadley Fire District No. 1 (FD#1) and South Hadley Fire District No. 2 (FD#2). Each department is an independent district that is governed by their own elected officials and supported by taxes levied by the district. Each Fire District owns and operates one fire station. Both fire departments operate together at fire and emergency incidents.

FD#1 houses the three Town owned ambulances and provides one Emergency Medical Technician for the first ambulance, and two Emergency Medical Technicians for the second ambulance when required. Further information on the operation of the ambulance is provided below.

The South Hadley Police Department is the Public Safety Answering Point (PSAP) for the receipt of all 911 and other emergency calls, and provides the dispatch/communications function for the fire and ambulance services.

The following map shows the location of the two fire stations.



### **SOUTH HADLEY FIRE STATION LOCATIONS**

**FIRE**  
**South Hadley Fire District No. 1**

## **South Hadley Fire District No. 1**

FD#1 operates out of one fire station located at 144 Newton Street.

### **Organization/Staffing**

- 15 career personnel (full-time) that includes:
  - 1 Fire Chief, EMT
  - 2 Assistant Chiefs
  - 2 Lieutenants, EMT
  - 8 firefighter/emergency medical technicians (EMT)
  - The 2 Lieutenants and 10 firefighters/EMT are divided into four groups with a minimum of 3 personnel on duty 24/7.
- 20 call personnel (paid on call) firefighters
  - These personnel are alerted via pagers and paid per call
  - Within this group four (4) are EMT-I and two (2) are Paramedics.

### **Services**

FD#1 provides a range of services that include:

- Fire suppression
- Emergency medical services
- Operates the Town ambulance in conjunction with the South Hadley Police Department
- Provides first responder emergency medical service with automatic external defibrillators (AED) on the ambulances and the first line pump.
- Fire Prevention and Code Enforcement
- Hazardous Material Response
- Special Rescue
- Rope Rescue
- Ice Rescue
- Dive Team

### **Apparatus and Equipment**

FD# 1 operates a fleet of equipment that consists of:

- Ladder 1 – 1993 Sutphen 75' aerial platform
- Engine 2 – 1985 Duplex/Ward – due for replacement in 2005
- Engine 3 – 1973 Maxim (spare engine used by both departments – former District 2 engine)
- Brush Truck – 1990 Ford
- Pickup – 2000 Ford
- Rescue Truck – 1987 Chevrolet - used for dive team, ice rescue and hazardous material cleanup

## Incidents

FD#1 responds to both fire and emergency medical incidents. The following figures are averages for the past 10 years:

- Fire – average of 300 fire calls per year – all types
- Ambulance – average of 1,500 calls per year – 1,200 resulted in transport to the hospital.

## Finance

The non-water services portion of FD#1 includes the Fire Department, Emergency Medical Services and governance costs. Over the past 10 years, the costs for the operation of this portion of the district's services have increased by about 40 percent.

The price of these operations has expanded from \$.931 million in fiscal year 1993 to over \$1.305 million in fiscal year 2002. During the past 10 years the District has expended just under \$11.5 million for these purposes.

From the perspective of a taxpayer, since some time in FY 1996, the District's assessors have maintained records that allowed us to look at both the average non-water services spending per single-family residence and the average spending on a total taxable parcels basis. In 1996 spending was at its lowest level in the seven years that we analyzed. In 1997, the spending per average single-family property owner was \$228.47 and the average spending per taxable parcel was \$207.56. In FY 2002, those figures were \$270.44 and \$249.03 respectively. This represents spending increases allocated to those classes of taxpayers during the past six years of over 18 percent and 20 percent respectively.

When we take a three-year average using the period FY 96, FY 97 and FY 98, the District's average spending allocable to all single-family parcels was \$232.94. Total spending per parcel averaged \$211.85. The three fiscal years ending on June 30, 2002 saw average spending levels of \$266.26 per single-family residence and \$245.15 per taxable parcel within the district. The three-year average spending increased for single-family residential owners by almost 15 percent. The increase in spending converts to about 5 percent per year per parcel. This reconciles with our analysis that calculates average annual spending increases of 5.45 percent over the past three years.

This change in spending can be measured against the change in the number of residential parcels. Residential parcels serviced by the district grew from 2,927 in 1995 to 3,079 in 2001 or about 5.2 percent. This converts to less than .9 percent per year. The Fire District's total parcels serviced increased from 5,219 in 1995 to 5,431 in 2001. This increase averages about .67 percent annually during the past six years. Thus, we assume that some of the District's increased spending is attributed to this modest growth while the bulk of the increased spending is attributable to inflation and policy decisions by management.

Salaries and employee benefits comprise the bulk of the District's non-water expenditures. About 85 percent of the District's non-water utility disbursements were for personal services. This expenditure object has increased over the last nine years at an average annual rate of 3.81 percent. During the past 10 years the district has spent about 67 percent of its total spending directly for payroll. Pension costs have been about 7 percent of the budget and other employee benefits such as insurance have made up another 11 percent of the budget. Over 11 percent of the spending over the last 10 years has been devoted to services and supplies. The final 4 percent of the spending has been for capital outlay.

We have used the District's historical data to project estimated future spending. Our models suggest that the District could be annually spending in excess of \$2.25 million for these non-water related services by fiscal year 2012. This is an increase of more than 73 percent over the FY '02 level of spending. We estimate that the District will expend more than \$18.1 million to administer itself and provide fire and emergency medical services over the next 10 years. This can be contrasted against the \$11.45 million spent over the prior 10 years. Thus, the District's total annual spending for non-water related services is estimated to grow by over 58 percent during the next 10 years. Our models indicate average annual spending increases can be expected to be about 5.65 percent per year over the next 10 years.

Our models indicate that the personal services portion of the District's future budgets can be expected to become more heavily weighted than the average of the past 10 years. We see this category growing from 84.64 percent to about 88.64 percent of the district's budget. This assumes no changes in current staffing levels.

We have provided detailed analysis and graphics for both the historical and projected costs. These estimates assume that the district will remain the same as it is today and there will be no changes in the organization.

**South Hadley Fire District #1  
Non-Water Expenditures Analysis  
Ten Years Ending June 30, 2002**

| Expenditure Type     | 1993              | 1994                | 1995                | 1996                | 1997                | 1998                | 1999                | 2000                | 2001                | 2002                | 10 Years             | % of Budget    |
|----------------------|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|----------------|
| Personal Services    | \$ 831,899        | \$ 863,157          | \$ 877,524          | \$ 913,542          | \$ 935,381          | \$ 952,705          | \$ 976,130          | \$ 1,079,085        | \$ 1,104,252        | \$ 1,161,294        | \$ 9,694,971         | 84.84%         |
| Purchase of Services | 95,061            | 110,156             | 135,895             | 125,643             | 136,352             | 129,835             | 115,378             | 140,595             | 148,201             | 141,737             | 1,278,855            | 11.17%         |
| Other Charges/Expend | 2,500             | 700                 | 10,000              | -                   | -                   | 5,000               | 3,100               | -                   | -                   | -                   | 21,300               | 0.19%          |
| Capital Outlay       | 1,713             | 250,817             | 118,726             | 83                  | 1,781               | 2,113               | 25,000              | 54,856              | 1,123               | 2,625               | 458,838              | 4.01%          |
| <b>Total:</b>        | <b>\$ 931,174</b> | <b>\$ 1,224,831</b> | <b>\$ 1,142,145</b> | <b>\$ 1,039,269</b> | <b>\$ 1,073,514</b> | <b>\$ 1,089,653</b> | <b>\$ 1,119,608</b> | <b>\$ 1,274,535</b> | <b>\$ 1,253,577</b> | <b>\$ 1,305,657</b> | <b>\$ 11,453,964</b> | <b>100.00%</b> |

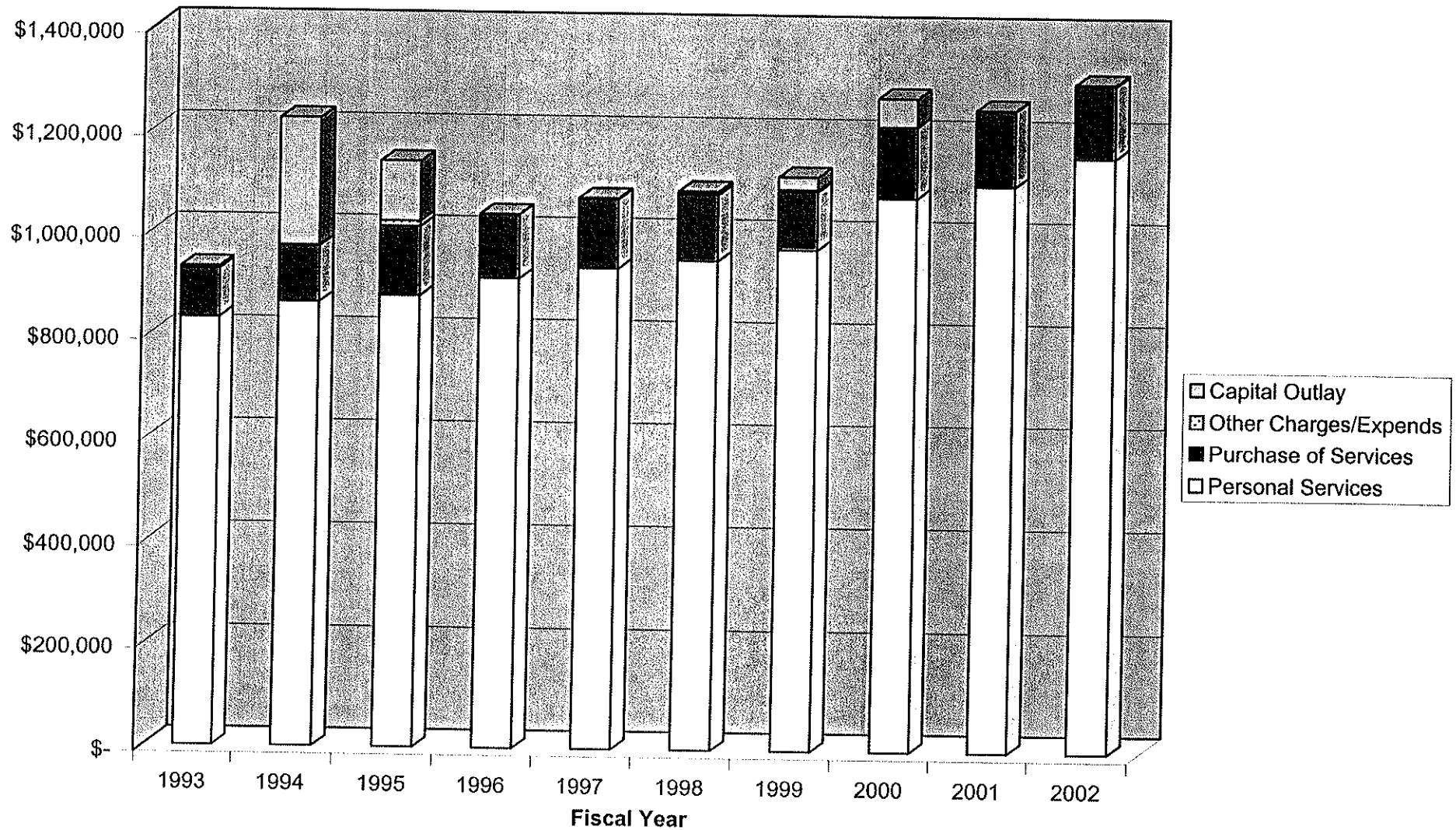
|                                        |     |     |           |             |             |             |             |             |             |             |  |  |
|----------------------------------------|-----|-----|-----------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--|--|
| Assessor LA-4 Single Family Value:     | N/A | N/A | N/A       | 353,232,800 | 359,102,200 | 363,306,700 | 369,174,900 | 376,417,900 | 419,738,100 | 424,487,200 |  |  |
| Assessor LA-4 Total Value:             | N/A | N/A | N/A       | 548,966,953 | 555,570,946 | 563,843,928 | 573,828,362 | 590,192,376 | 658,711,208 | 665,610,230 |  |  |
| Assessor LA-4 Single Family % of Levy: | N/A | N/A | N/A       | 64.35%      | 64.64%      | 64.43%      | 64.34%      | 63.78%      | 63.72%      | 63.77%      |  |  |
| Assessor LA-4 Single Family Parcels:   | N/A | N/A | N/A       | 2,927       | 2,956       | 2,980       | 3,002       | 3,037       | 3,064       | 3,079       |  |  |
| Assessor LA-4 Total RE Parcels:        | N/A | N/A | 5,095     | 5,007       | 5,033       | 5,075       | 5,132       | 5,186       | 5,209       | 5,243       |  |  |
| FY Spending Per Single Family Parcel:  | N/A | N/A | N/A       | \$ 228.47   | \$ 234.74   | \$ 235.61   | \$ 239.94   | \$ 267.66   | \$ 260.70   | \$ 270.44   |  |  |
| FY Spending Per All RE Parcels:        | N/A | N/A | \$ 224.17 | \$ 207.56   | \$ 213.30   | \$ 214.71   | \$ 218.16   | \$ 245.76   | \$ 240.66   | \$ 249.03   |  |  |

| Annual Spending/Parcel |           |
|------------------------|-----------|
| 7 Yr Ave               | 3 Yr Ave  |
| \$ 248.22              | \$ 266.27 |
| \$ 227.03              | \$ 245.15 |

| Change from Prior Year |            |               |               |               |              |              |              |               |               |              | Annual % Change |              |
|------------------------|------------|---------------|---------------|---------------|--------------|--------------|--------------|---------------|---------------|--------------|-----------------|--------------|
|                        |            |               |               |               |              |              |              |               |               |              | 9 Yr Ave        | 3 Yr Ave     |
| Personal Services      | N/A        | 3.76%         | 1.66%         | 4.10%         | 2.39%        | 1.85%        | 2.46%        | 10.55%        | 2.33%         | 5.17%        | 3.81%           | 6.02%        |
| Purchase of Services   | N/A        | 15.88%        | 23.37%        | -7.54%        | 8.52%        | -4.78%       | -11.14%      | 21.86%        | 5.41%         | -4.36%       | 5.25%           | 7.63%        |
| Other Charges/Expend   | N/A        | -72.00%       | 1328.50%      | -100.00%      | 0.00%        | 100.00%      | -38.00%      | -100.00%      | 0.00%         | 0.00%        | 124.28%         | -33.33%      |
| Capital Outlay         | N/A        | 14538.31%     | -52.66%       | -99.93%       | 2038.83%     | 18.68%       | 1083.02%     | 119.42%       | -97.95%       | 133.69%      | 1964.60%        | 51.72%       |
| <b>Total:</b>          | <b>N/A</b> | <b>31.54%</b> | <b>-6.75%</b> | <b>-9.01%</b> | <b>3.30%</b> | <b>1.50%</b> | <b>2.75%</b> | <b>13.84%</b> | <b>-1.64%</b> | <b>4.15%</b> | <b>4.41%</b>    | <b>5.45%</b> |

**Sources:**  
South Hadley Fire District #1  
Town of South Hadley

**South Hadley Fire District #1  
10 Year Non-Water Expenditures History  
FY 1993 Through FY 2002**



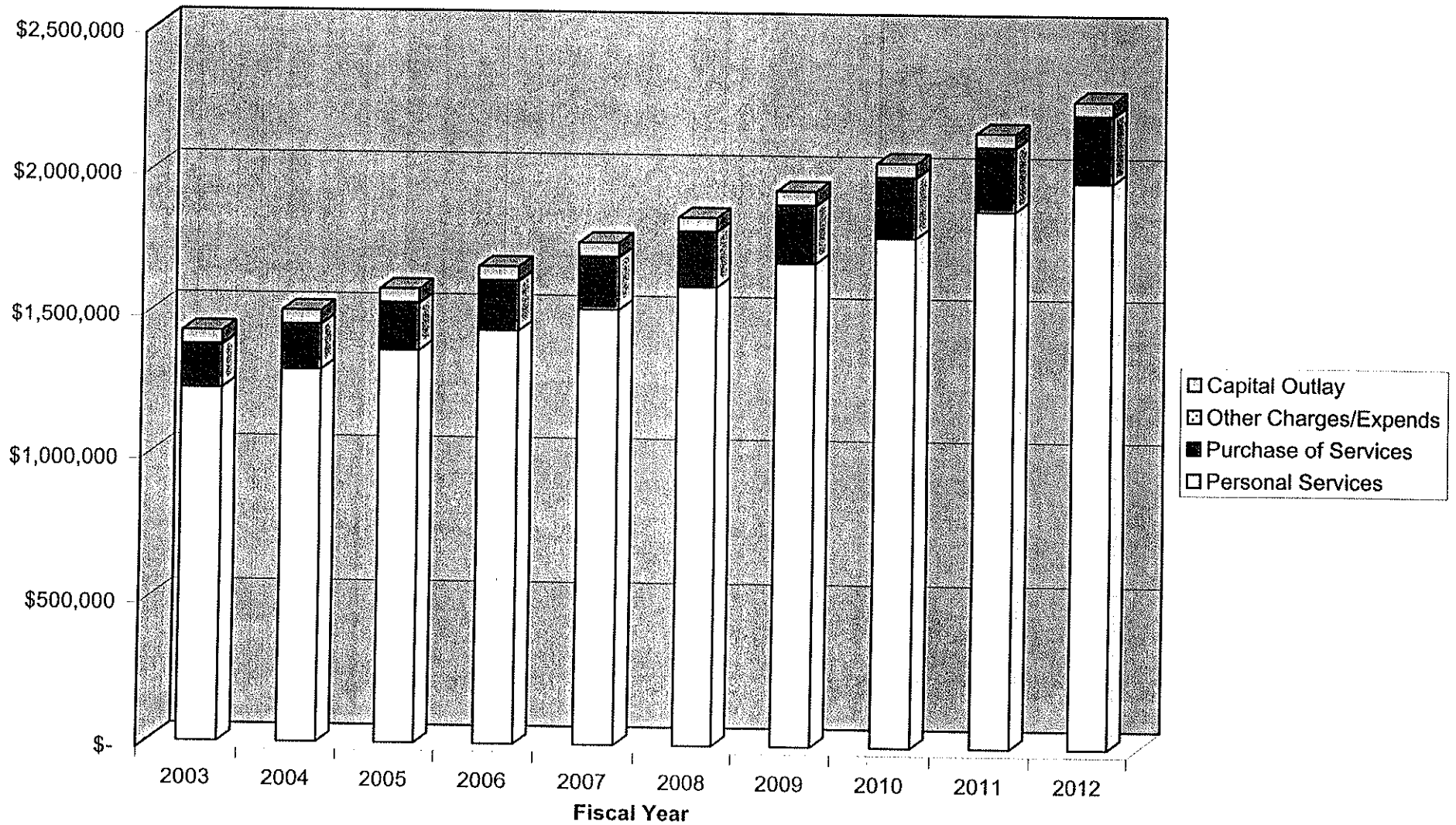
South Hadley Fire District #1  
Non-Water Expenditures Estimate  
Ten Years Ending June 30, 2012

| Expenditure Type     | 2003                | 2004                | 2005                | 2006                | 2007                | 2008                | 2009                | 2010                | 2011                | 2012                | 10 Years             | % of Budget    |
|----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|----------------|
| Personal Services    | \$ 1,224,361        | \$ 1,290,886        | \$ 1,361,061        | \$ 1,435,088        | \$ 1,513,182        | \$ 1,595,568        | \$ 1,682,484        | \$ 1,774,183        | \$ 1,870,931        | \$ 1,973,008        | \$ 15,720,750        | 86.64%         |
| Purchase of Services | 152,095             | 159,833             | 167,809             | 176,220             | 185,090             | 194,569             | 204,434             | 214,836             | 225,807             | 237,475             | 1,918,170            | 10.57%         |
| Other Charges/Expend | 2,100               | 2,100               | 2,100               | 2,100               | 2,100               | 2,100               | 2,100               | 2,100               | 2,100               | 2,100               | 21,000               | 0.12%          |
| Capital Outlay       | 48,450              | 48,450              | 48,450              | 48,450              | 48,450              | 48,450              | 48,450              | 48,450              | 48,450              | 48,450              | 484,500              | 2.67%          |
| <b>Total:</b>        | <b>\$ 1,427,006</b> | <b>\$ 1,501,269</b> | <b>\$ 1,579,420</b> | <b>\$ 1,661,859</b> | <b>\$ 1,748,822</b> | <b>\$ 1,840,687</b> | <b>\$ 1,937,468</b> | <b>\$ 2,039,569</b> | <b>\$ 2,147,287</b> | <b>\$ 2,261,034</b> | <b>\$ 18,144,421</b> | <b>100.00%</b> |

|                                                     |    |        |    |        |    |        |    |        |    |        |    |        |    |        |    |        |    |        |    |        |                        |          |    |        |
|-----------------------------------------------------|----|--------|----|--------|----|--------|----|--------|----|--------|----|--------|----|--------|----|--------|----|--------|----|--------|------------------------|----------|----|--------|
| Estimated Spending Per FY 2002 Single Family Parcel | \$ | 295.57 | \$ | 310.95 | \$ | 327.14 | \$ | 344.21 | \$ | 362.23 | \$ | 381.25 | \$ | 401.30 | \$ | 422.45 | \$ | 444.76 | \$ | 468.32 | Annual Spending/Parcel |          |    |        |
| Estimated Spending Per FY 2002 Total Parcels        | \$ | 272.17 | \$ | 286.34 | \$ | 301.24 | \$ | 316.97 | \$ | 333.55 | \$ | 351.08 | \$ | 369.53 | \$ | 389.01 | \$ | 409.55 | \$ | 431.25 | 10 Yr Ave              | 3 Yr Ave |    |        |
|                                                     |    |        |    |        |    |        |    |        |    |        |    |        |    |        |    |        |    |        |    |        | \$                     | 375.82   | \$ | 445.18 |
|                                                     |    |        |    |        |    |        |    |        |    |        |    |        |    |        |    |        |    |        |    |        | \$                     | 346.07   | \$ | 409.94 |

| Change from Prior Year |          |       |       |       |       |       |       |       |       |       | Annual % Change |          |  |
|------------------------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|----------|--|
|                        |          |       |       |       |       |       |       |       |       |       | 10 Yr Ave       | 3 Yr Ave |  |
| Personal Services      | 5.43%    | 5.43% | 5.44% | 5.44% | 5.44% | 5.44% | 5.45% | 5.45% | 5.45% | 5.46% | 5.44%           | 5.45%    |  |
| Purchase of Services   | 7.31%    | 5.09% | 4.99% | 5.01% | 5.03% | 5.12% | 5.07% | 5.09% | 5.11% | 5.17% | 5.30%           | 5.12%    |  |
| Other Charges/Expend   | 0.00%    | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00%           | 0.00%    |  |
| Capital Outlay         | 1745.58% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 174.56%         | 0.00%    |  |
| Total:                 | 9.29%    | 5.20% | 5.21% | 5.22% | 5.23% | 5.25% | 5.26% | 5.27% | 5.28% | 5.30% | 5.65%           | 5.28%    |  |

**South Hadley Fire District #1  
10 Year Non-Water Expenditures Estimate  
FY 2003 Through FY 2012**



**FIRE AND AMBULANCE**  
**South Hadley Fire District No. 2**

## **South Hadley Fire District 2**

FD#2 operates out of one fire station located at 20 Woodbridge Street.

### **Organization/Staffing**

- 2 career personnel (full-time) that includes:
  - 1 Fire Chief
  - 1 Firefighter
- 33 call (paid on call) firefighters
  - These personnel are alerted via pages and paid per call.
  - Many of the call personnel also work for the District 2 Water Department
    - The call force is made up of the following ranks:
      - 2 Assistant Chiefs
      - 6 Lieutenants
      - 22 Firefighters
      - 4 College Brigade (8 hours, M-F)
      - 8 of these personnel are Emergency Medical Technicians
- 2 Assistant Chiefs
- 6 Lieutenants
- 23 Firefighters
- 4 College Brigade

### **Services**

FD#2 provides a range of services that include:

- Fire Suppression
- First Responder Emergency Medical Services
- Fire Prevention and Code Enforcement
- Dive Team
- Hazardous Materials

### **Apparatus and Equipment**

FD#2 operates a fleet of equipment that consists of:

- Engine 2 – 1997 KME
- Engine 1 - 1991 E-ONE
- Pickup – 1993 Ford – Brush Truck
- Rescue/Utility – 2001 Chevrolet

## Incidents

FD#2 responds primarily to fire related incidents. The following figures are averages for the past 10 years:

- Fire – average 170 fires of all types.

## Finance

The non-water services portion of FD#2 includes the Fire Department and governance costs. Over the past 10 years, the costs of this portion of the district's operations have increased by about 64 percent.

The price of these operations has expanded from about \$231,000 in fiscal year 1993 to over \$378,000 in fiscal year 2002. During the past 10 years the District has expended just under \$3.2 million for these purposes.

Salaries and employee benefits comprise the bulk of the District's expenditures. Over 68 percent of the District's disbursements were for personal services. This expenditure area has increased over the 10 years at an average annual rate of 7.07 percent. This line item now comprises more than 73 percent of the District's budget.

Over the past 10 years the District has spent about 50 percent on payroll. Pension costs have been about 6 percent of the spending and other employee benefits such as insurance have made up another 8 percent of the expenditures. About 24 percent of the spending over the last 10 years has been devoted to services and supplies. The final 7.5 percent of the expenses have been for capital outlay.

We have used the District's historical data to project estimated future District budgets. We have projected operational costs for the next 10 years. Our models suggest that the District could be spending in excess of \$639,000 for non-water functions by fiscal year 2012. This is an increase of about 69 percent over a 10-year period. We estimate that the District will expend just under \$5 million to administer itself and provide fire services over the next 10 years. This can be contrasted with the \$3.18 million spent over the prior 10 years. Thus, South Hadley Fire District's total non-water spending is estimated to grow by about 55 percent during the next 10 years.

Our models indicate that the personal services portion of the District's future budgets can be expected to grow considerably larger than the average of the past 10 years. We see this category growing to become about 84 percent of the District's non-water budget. This assumes no changes in staffing levels.

We have provided detailed analysis and graphics for both the historical and projected costs. These estimates assume that the District will remain the same as it is today and there will be no changes in the organization.

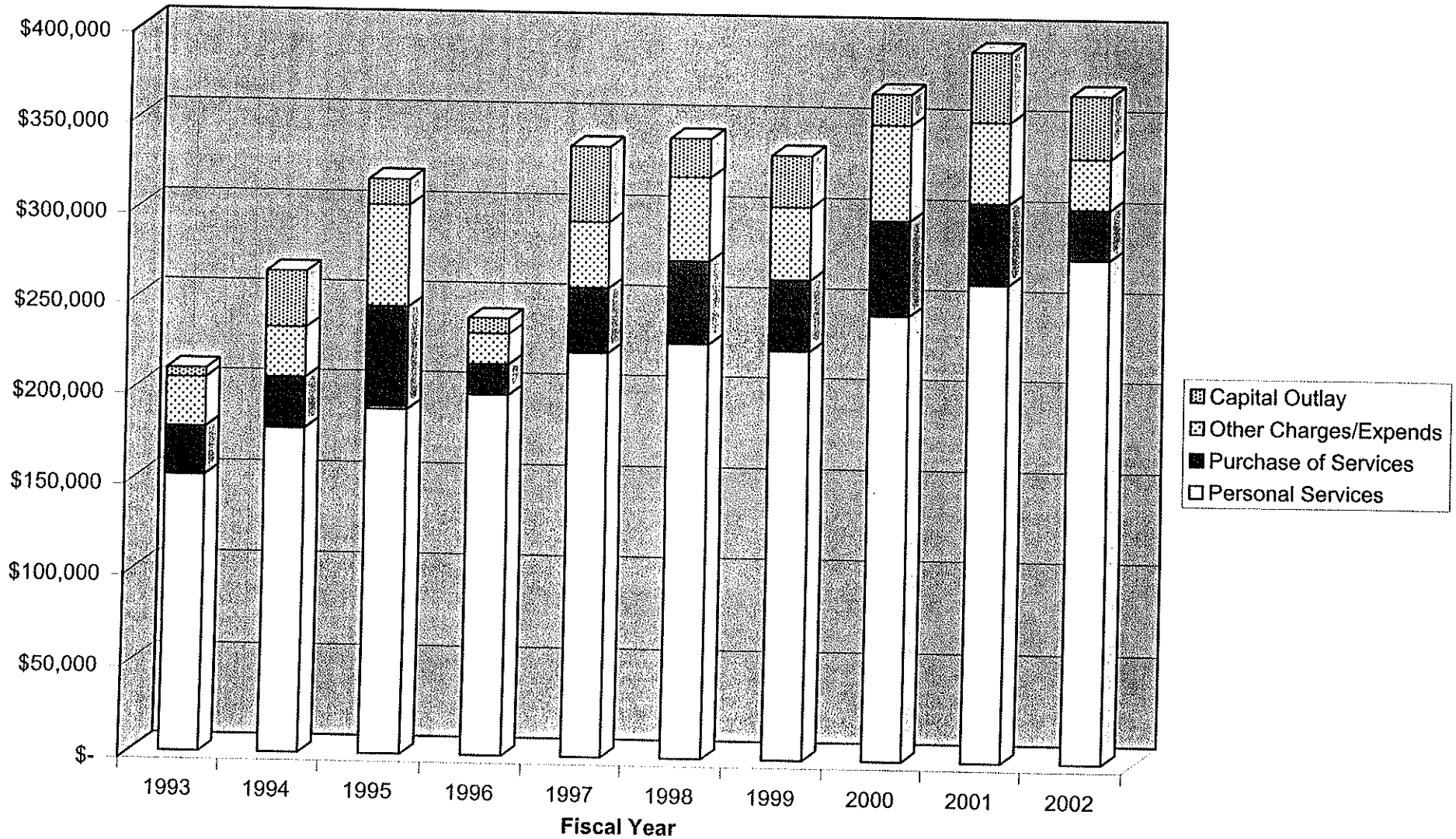
South Hadley Fire District #2  
Non-Water Expenditures Analysis  
Ten Years Ending June 30, 2002

| Expenditure Type                       | 1993       | 1994       | 1995       | 1996        | 1997        | 1998        | 1999        | 2000        | 2001        | 2002        | 10 Years     | % of Budget |
|----------------------------------------|------------|------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|-------------|
| Personal Services                      | \$ 151,584 | \$ 178,190 | \$ 189,037 | \$ 197,731  | \$ 221,589  | \$ 227,389  | \$ 224,220  | \$ 244,750  | \$ 262,879  | \$ 277,353  | \$ 2,174,722 | 68.29%      |
| Purchase of Services                   | 47,551     | 35,910     | 35,596     | 38,812      | 46,064      | 42,710      | 32,632      | 27,986      | 47,101      | 38,600      |              |             |
| Other Charges/Expend                   | 26,801     | 27,596     | 56,643     | 16,866      | 36,440      | 46,434      | 40,104      | 52,847      | 44,963      | 27,965      |              |             |
| Capital Outlay                         | 4,858      | 31,488     | 14,200     | 8,459       | 41,674      | 21,242      | 28,436      | 16,981      | 38,583      | 34,464      |              |             |
| Total:                                 | \$ 230,793 | \$ 273,183 | \$ 295,476 | \$ 261,869  | \$ 345,768  | \$ 337,776  | \$ 325,392  | \$ 342,564  | \$ 393,526  | \$ 378,383  |              |             |
|                                        |            |            |            |             |             |             |             |             |             |             | \$ 3,184,729 | 100.00%     |
| Assessor LA-4 Single Family Value:     | N/A        | N/A        | N/A        | 183,076,100 | 183,889,900 | 180,508,700 | 181,567,200 | 183,439,500 | 206,294,400 | 205,752,900 |              |             |
| Assessor LA-4 Total Value:             | N/A        | N/A        | N/A        | 221,910,944 | 222,536,541 | 221,038,229 | 221,206,860 | 221,707,523 | 250,014,453 | 250,096,590 |              |             |
| Assessor LA-4 Single Family % of Levy: | N/A        | N/A        | N/A        | 82.50%      | 82.63%      | 81.66%      | 82.08%      | 82.74%      | 82.51%      | 82.27%      |              |             |
| Assessor LA-4 Single Family Parcels:   | N/A        | N/A        | N/A        | 1,205       | 1,210       | 1,198       | 1,199       | 1,211       | 1,208       | 1,209       |              |             |
| Assessor LA-4 Total RE Parcels:        | N/A        | N/A        | 1,735      | 1,674       | 1,675       | 1,678       | 1,671       | 1,672       | 1,666       | 1,675       |              |             |
|                                        |            |            |            |             |             |             |             |             |             |             |              |             |
| FY Spending Per Single Family Parcel:  | N/A        | N/A        | N/A        | \$ 179.29   | \$ 236.13   | \$ 230.25   | \$ 222.75   | \$ 234.05   | \$ 268.80   | \$ 257.48   |              |             |
| FY Spending Per All RE Parcels:        | N/A        | N/A        | \$ 170.30  | \$ 156.43   | \$ 206.43   | \$ 201.30   | \$ 194.73   | \$ 204.88   | \$ 236.21   | \$ 225.90   |              |             |
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**Sources:**

South Hadley Fire District #1  
Town of South Hadley Board of Assessors  
Town of Granby Board of Assessors

**South Hadley Fire District #2  
10 Year Non-Water Expenditures History  
FY 1993 Through FY 2002**



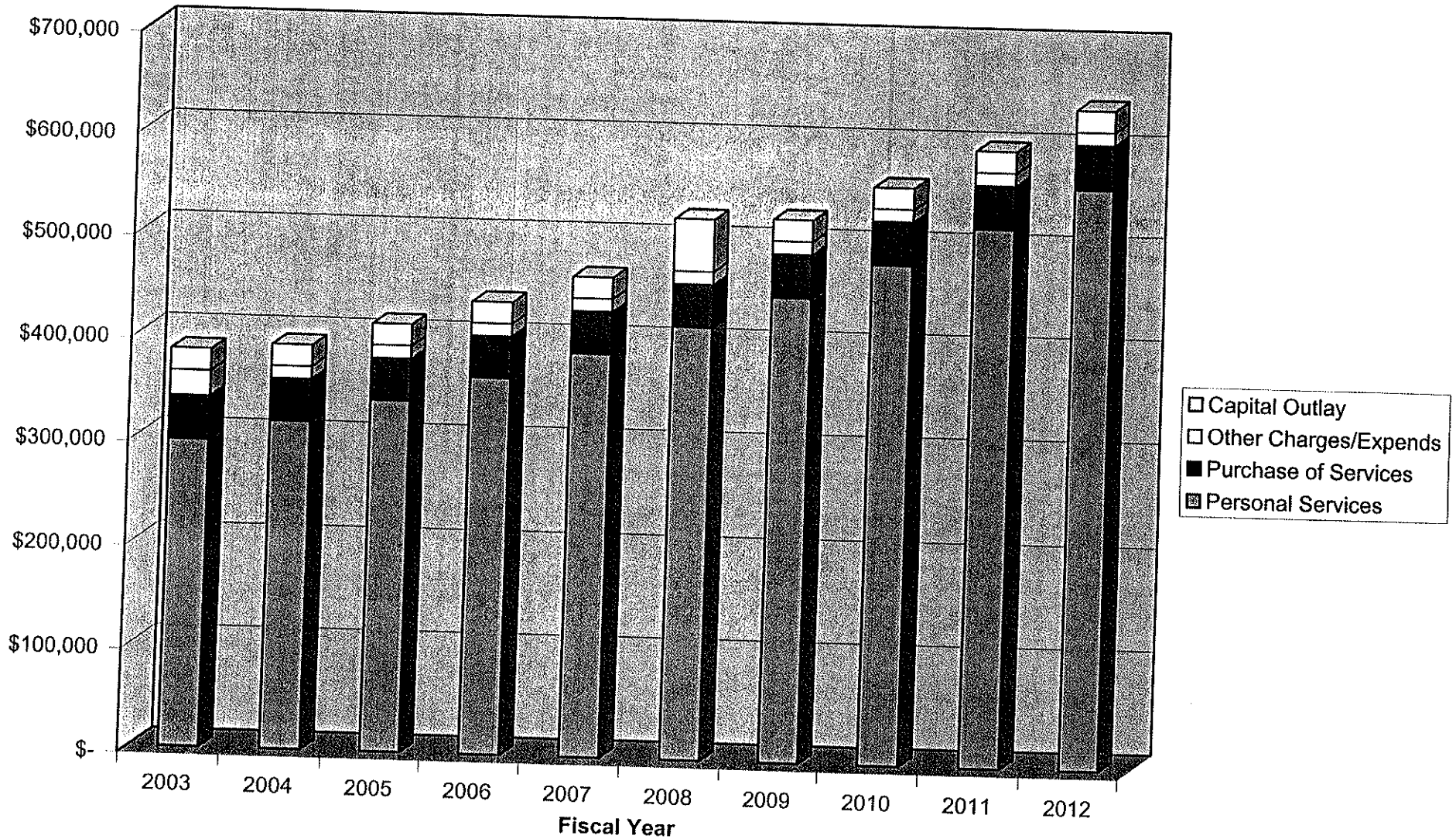
**South Hadley Fire District #2  
Non-Water Expenditures Estimate  
Ten Years Ending June 30, 2012**

| Expenditure Type     | 2003             | 2004             | 2005             | 2006             | 2007             | 2008             | 2009             | 2010             | 2011             | 2012             | 10 Years           | % of Budget    |
|----------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|--------------------|----------------|
| Personal Services    | \$296,032        | \$316,349        | \$338,471        | \$362,586        | \$388,901        | \$417,648        | \$449,082        | \$483,490        | \$521,188        | \$562,530        | \$4,136,277        | 83.85%         |
| Purchase of Services | 42,024           | 40,282           | 40,606           | 40,949           | 41,310           | 41,940           | 42,342           | 42,766           | 43,213           | 43,684           | 419,114            | 8.50%          |
| Other Charges/Expend | 24,418           | 12,293           | 12,620           | 12,417           | 12,598           | 12,524           | 12,687           | 12,334           | 12,483           | 12,555           | 136,929            | 2.78%          |
| Capital Outlay       | 21,050           | 21,050           | 21,050           | 21,050           | 21,050           | 51,050           | 21,050           | 21,050           | 21,050           | 21,050           | 240,500            | 4.88%          |
| <b>Total:</b>        | <b>\$383,525</b> | <b>\$389,973</b> | <b>\$412,747</b> | <b>\$437,001</b> | <b>\$463,859</b> | <b>\$523,162</b> | <b>\$525,162</b> | <b>\$559,640</b> | <b>\$597,934</b> | <b>\$639,819</b> | <b>\$4,932,820</b> | <b>100.00%</b> |

|                                                     |    |        |    |        |    |        |    |        |    |        | Annual Spending/Parcel |          |    |        |    |        |    |        |    |        |    |        |    |        |
|-----------------------------------------------------|----|--------|----|--------|----|--------|----|--------|----|--------|------------------------|----------|----|--------|----|--------|----|--------|----|--------|----|--------|----|--------|
|                                                     |    |        |    |        |    |        |    |        |    |        | 10 Yr Ave              | 3 Yr Ave |    |        |    |        |    |        |    |        |    |        |    |        |
| Estimated Spending Per FY 2002 Single Family Parcel | \$ | 188.37 | \$ | 191.54 | \$ | 202.72 | \$ | 214.64 | \$ | 227.83 | \$                     | 256.96   | \$ | 257.94 | \$ | 274.87 | \$ | 293.68 | \$ | 314.25 | \$ | 242.28 | \$ | 294.27 |
| Estimated Spending Per FY 2002 Total Parcels        | \$ | 228.97 | \$ | 232.82 | \$ | 246.42 | \$ | 260.90 | \$ | 276.93 | \$                     | 312.34   | \$ | 313.53 | \$ | 334.11 | \$ | 356.98 | \$ | 381.98 | \$ | 294.50 | \$ | 357.69 |

| Change from Prior Year |         |         |       |        |       |         |         |        |       |       | Annual % Change |          |
|------------------------|---------|---------|-------|--------|-------|---------|---------|--------|-------|-------|-----------------|----------|
|                        |         |         |       |        |       |         |         |        |       |       | 10 Yr Ave       | 3 Yr Ave |
| Personal Services      | 6.73%   | 6.86%   | 6.99% | 7.12%  | 7.26% | 7.39%   | 7.53%   | 7.66%  | 7.80% | 7.93% | 7.33%           | 7.80%    |
| Purchase of Services   | 8.87%   | -4.15%  | 0.81% | 0.84%  | 0.88% | 1.53%   | 0.96%   | 1.00%  | 1.04% | 1.09% | 1.29%           | 1.05%    |
| Other Charges/Expend   | -12.68% | -49.66% | 2.66% | -1.61% | 0.00% | 100.00% | 1.30%   | -2.78% | 0.00% | 0.00% | 3.72%           | -0.93%   |
| Capital Outlay         | -38.92% | 0.00%   | 0.00% | 0.00%  | 0.00% | 142.52% | -58.77% | 0.00%  | 0.00% | 0.00% | 4.48%           | 0.00%    |
| Total:                 | 1.36%   | 1.68%   | 5.84% | 5.88%  | 6.15% | 12.78%  | 0.38%   | 6.57%  | 6.84% | 7.00% | 5.45%           | 6.80%    |

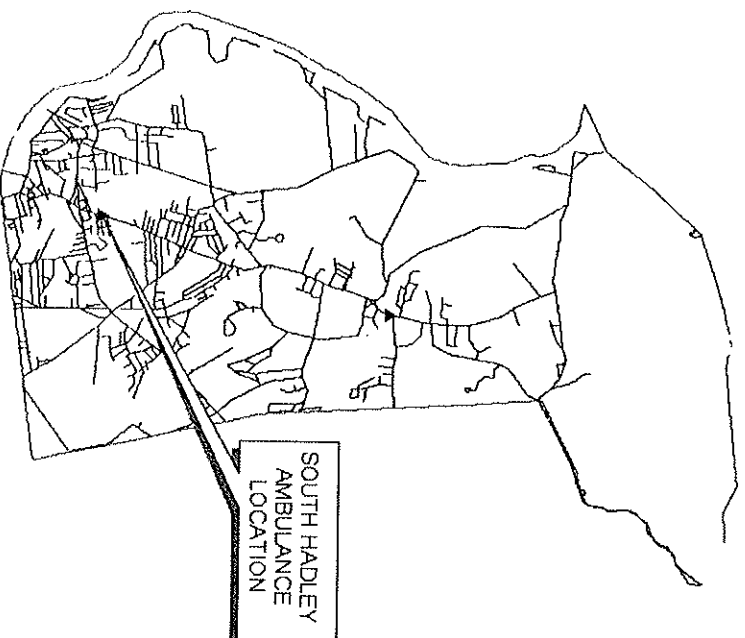
**South Hadley Fire District #2  
10 Year Non-Water Expenditures Estimate  
FY 2003 Through FY 2012**



## **AMBULANCE**

### **South Hadley Ambulance**

The Town of South Hadley is responsible for all aspects of the ambulance operation including income and expense, except for staffing. FD#1 and the Town of South Hadley Police Department jointly provide staffing for the first ambulance. Each of the organizations provides an Emergency Medical Technician. The primary ambulance and the two backup ambulances are housed in FD#1 fire station.



**SOUTH HADLEY AMBULANCE LOCATION**

## **Organization**

1 Ambulance Coordinator

## **Incidents**

Approximately 1,500 per year.

## **Finance**

Ambulance revenue is generated when the service is used. The Town of South Hadley bills all users for the services provided. All revenue is billed, collected and reserved in a special fund for appropriation by the Town.

Revenues have grown from about \$131,000 in FY 1993 to over \$333,000 in FY 2002. The increase in ambulance revenues during the past 10 years is more than 150 percent. This converts to an average revenue increase of more than 15 percent per year annually during the past 10 years.

Direct expenditures for ambulance services made from the Town's Special Revenue Fund have grown from just over \$75,000 in FY 1993 to almost \$153,000 in 2002. This converts to an increase of more than 104 percent during the 10 years. These spending levels are net of capital outlay and other town spending.

Additionally, over \$292,000 has been spent by the town from its special revenue fund on capital outlay during the past 10 years. The bulk of the capital spending took place in 1995 and 2001.

In addition, during the past 10 years, the Town has transferred over \$793,000 to support the ambulance related spending activity within their general fund. These expenditures include equipment and employee benefits.

Thus, during the past 10 years, the town has spent over \$1.8 million on ambulance services. During the same period, they have collected over \$2.3 million from ambulance billings. At the conclusion of FY 2002, the Town held \$384,865 in its ambulance fund. This balance in this fund has increased to its current level from \$145,254 at the end of FY 1992. Thus, the fund's equity position has grown by more than 165 percent during the previous 10 fiscal years.

It is difficult to perform a proper analysis of the true annual cost of ambulance services in the Town of South Hadley. While we can determine and classify the direct cost of services reported by the Town, we found it more difficult to classify the non-direct costs borne by them within their general fund. The total use of funds by the Town for ambulance services during the past 10 years is over \$2.1 million.

In addition to the annual costs of ambulance service funded by the Town, FD#2 has annually funded a portion of the District #1 ambulance service costs. FD#2 began making payments to FD#1 to assist with their portion of the costs during fiscal year 1994. The spending within FD#2 during the nine-year period is over \$153,000.

The cost of the ambulance services borne by FD#1 is not easily determined. The cost of personal services is greater in this District because of the ambulance activity. The combination of payments to FD#1 from the Town and FD#2 do not fully cover the cost of the Emergency Medical Services personnel provided by the District.

We have found that the average spending per residential property during the past three years is about 5 percent higher in FD#1 than in FD#2. The spending on a total taxable parcel basis is about 10.25 percent more in FD#1 than it is in FD#2. We attribute much of this increased cost of services to the ambulance activity provided by the District.

Our forecasting models are able to demonstrate the continued growth of this District's taxpayers' inequity. Given a continued use of the status quo Emergency Medical Services business models for each of the three governments, we estimate that in the future FD#1 taxpayers will become more seriously burdened with the cost of providing Emergency Medical Services to the entire community of South Hadley.

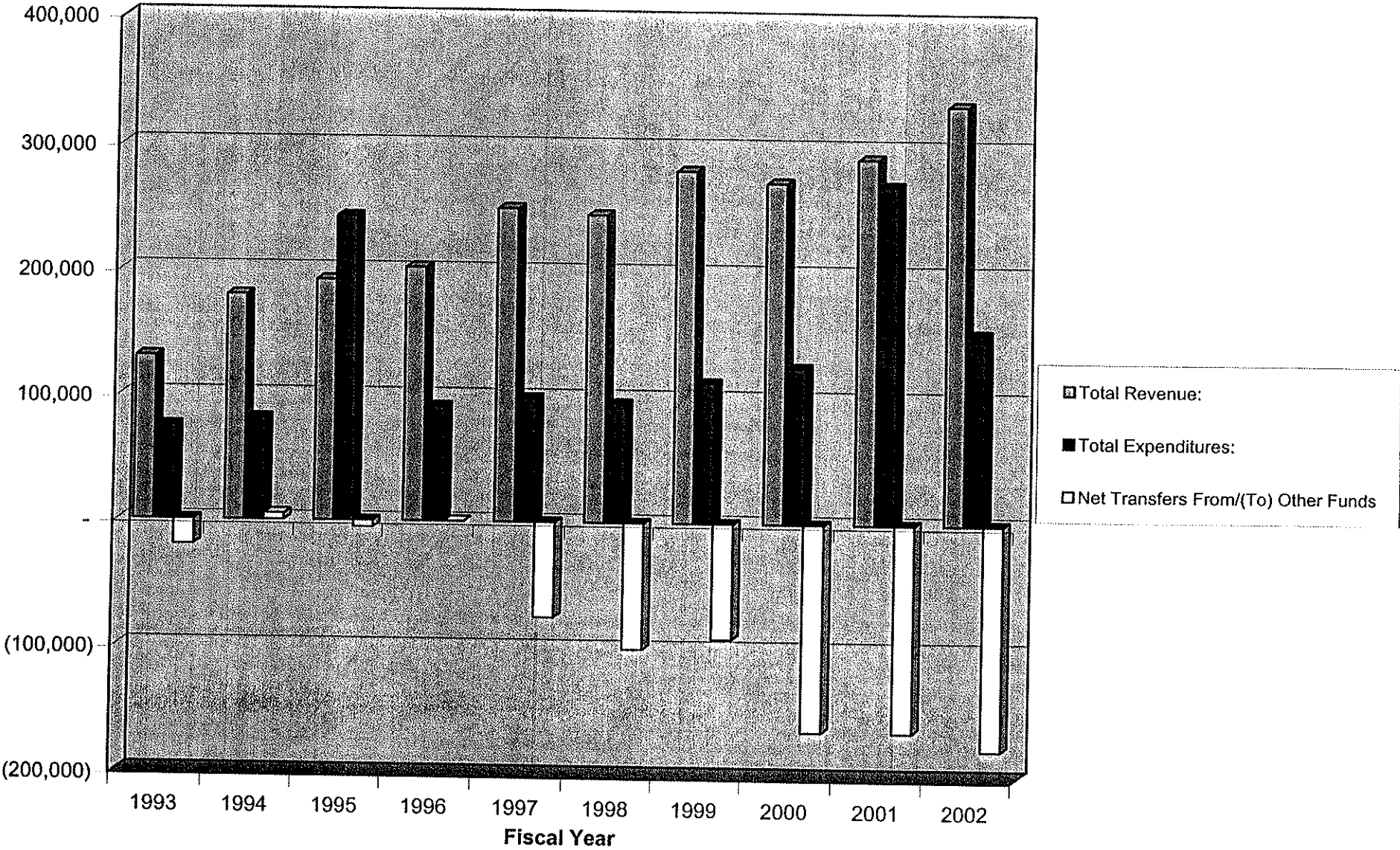
Our models predict that the non-water operations cost variance between the two Districts' residential property owners will grow from 5 percent in 2002 to almost 30 percent in 2012. We believe a complete review and revision of the Town's Emergency Medical Services delivery system would eliminate the current cost inequity realized by the residents of Fire District No. 1.

**Town of South Hadley**  
**Statement of Revenues, Expenditures and Changes in Fund Balance**  
**Ambulance Fund**

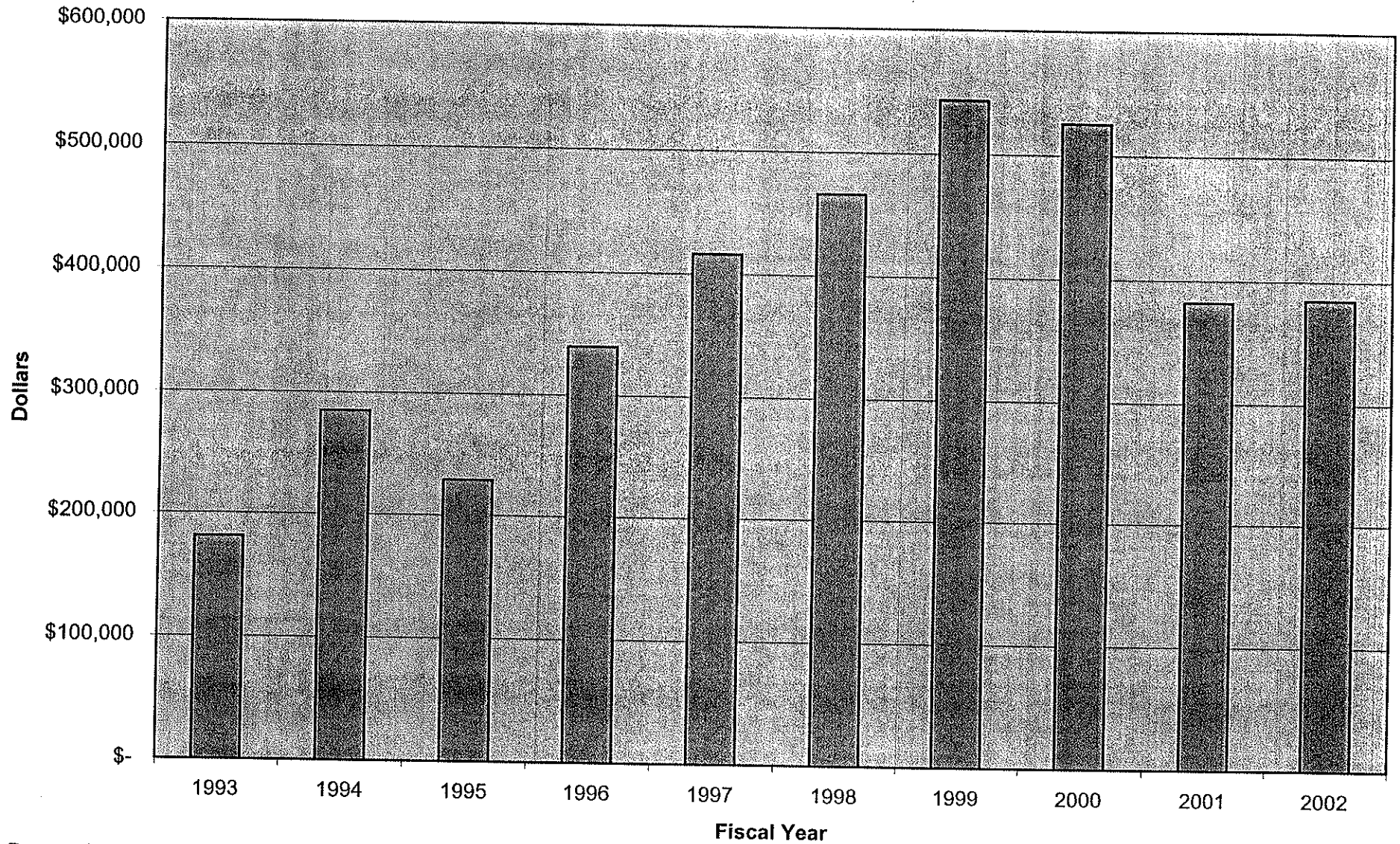
1992 Through 2002

|                                                                                                     | 1993              | 1994              | 1995              | 1996              | 1997              | 1998              | 1999              | 2000              | 2001              | 2002              | 10 Years          |
|-----------------------------------------------------------------------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| <b>Revenue:</b>                                                                                     |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |
| Charges for Services                                                                                | \$ 130,873        | \$ 180,461        | \$ 192,558        | \$ 202,913        | \$ 250,542        | \$ 245,875        | \$ 281,202        | \$ 272,204        | \$ 291,693        | \$ 333,685        | \$ 2,382,006      |
| Misc Revenue                                                                                        | 100               | 20                | 41                | -                 | -                 | -                 | -                 | -                 | -                 | -                 | 161               |
| <b>Total Revenue:</b>                                                                               | <b>130,973</b>    | <b>180,481</b>    | <b>192,599</b>    | <b>202,913</b>    | <b>250,542</b>    | <b>245,875</b>    | <b>281,202</b>    | <b>272,204</b>    | <b>291,693</b>    | <b>333,685</b>    | <b>2,382,167</b>  |
| <b>Expenditures:</b>                                                                                |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |
| Personal Services                                                                                   | 63,256            | 65,734            | 66,980            | 77,240            | 76,583            | 73,057            | 95,086            | 99,332            | 117,727           | 128,244           | 863,239           |
| Other Charges/Expenditures                                                                          | 12,045            | 16,065            | 14,461            | 14,951            | 17,655            | 22,550            | 17,755            | 26,001            | 27,457            | 24,700            | 193,640           |
| Capital Outlay                                                                                      | -                 | -                 | 162,123           | -                 | 4,995             | -                 | -                 | -                 | 124,953           | -                 | 292,071           |
| <b>Total Expenditures:</b>                                                                          | <b>75,301</b>     | <b>81,799</b>     | <b>243,564</b>    | <b>92,191</b>     | <b>99,233</b>     | <b>95,607</b>     | <b>112,841</b>    | <b>125,333</b>    | <b>270,137</b>    | <b>152,944</b>    | <b>1,348,950</b>  |
| <b>Net Revenues Over/(Under) Expenditures:</b>                                                      | <b>55,672</b>     | <b>98,682</b>     | <b>(50,965)</b>   | <b>110,722</b>    | <b>151,309</b>    | <b>150,268</b>    | <b>168,361</b>    | <b>146,871</b>    | <b>21,556</b>     | <b>180,741</b>    | <b>1,033,217</b>  |
| <b>Other Financing Sources/(Uses)</b>                                                               |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |
| Net Transfers From/(To) Other Funds                                                                 | (19,688)          | 5,069             | (5,069)           | 145               | (75,214)          | (100,048)         | (91,317)          | (164,499)         | (164,803)         | (178,182)         | (793,606)         |
| <b>Excess (deficiency) of revenues and other financing sources over expenditures and other uses</b> | <b>35,984</b>     | <b>103,751</b>    | <b>(56,034)</b>   | <b>110,867</b>    | <b>76,095</b>     | <b>50,220</b>     | <b>77,044</b>     | <b>(17,628)</b>   | <b>(143,247)</b>  | <b>2,559</b>      | <b>239,611</b>    |
| <b>Beginning fund balance</b>                                                                       | <b>145,254</b>    | <b>181,238</b>    | <b>284,989</b>    | <b>228,955</b>    | <b>339,822</b>    | <b>415,917</b>    | <b>466,137</b>    | <b>543,181</b>    | <b>525,553</b>    | <b>382,306</b>    | <b>145,254</b>    |
| <b>Ending fund balance</b>                                                                          | <b>\$ 181,238</b> | <b>\$ 284,989</b> | <b>\$ 228,955</b> | <b>\$ 339,822</b> | <b>\$ 415,917</b> | <b>\$ 466,137</b> | <b>\$ 543,181</b> | <b>\$ 525,553</b> | <b>\$ 382,306</b> | <b>\$ 384,865</b> | <b>\$ 384,865</b> |

Town of South Hadley - Ambulance Fund



**Town of South Hadley  
Ambulance Fund Ending Balance**



Prepared by Financial Advisory Associates, Inc.

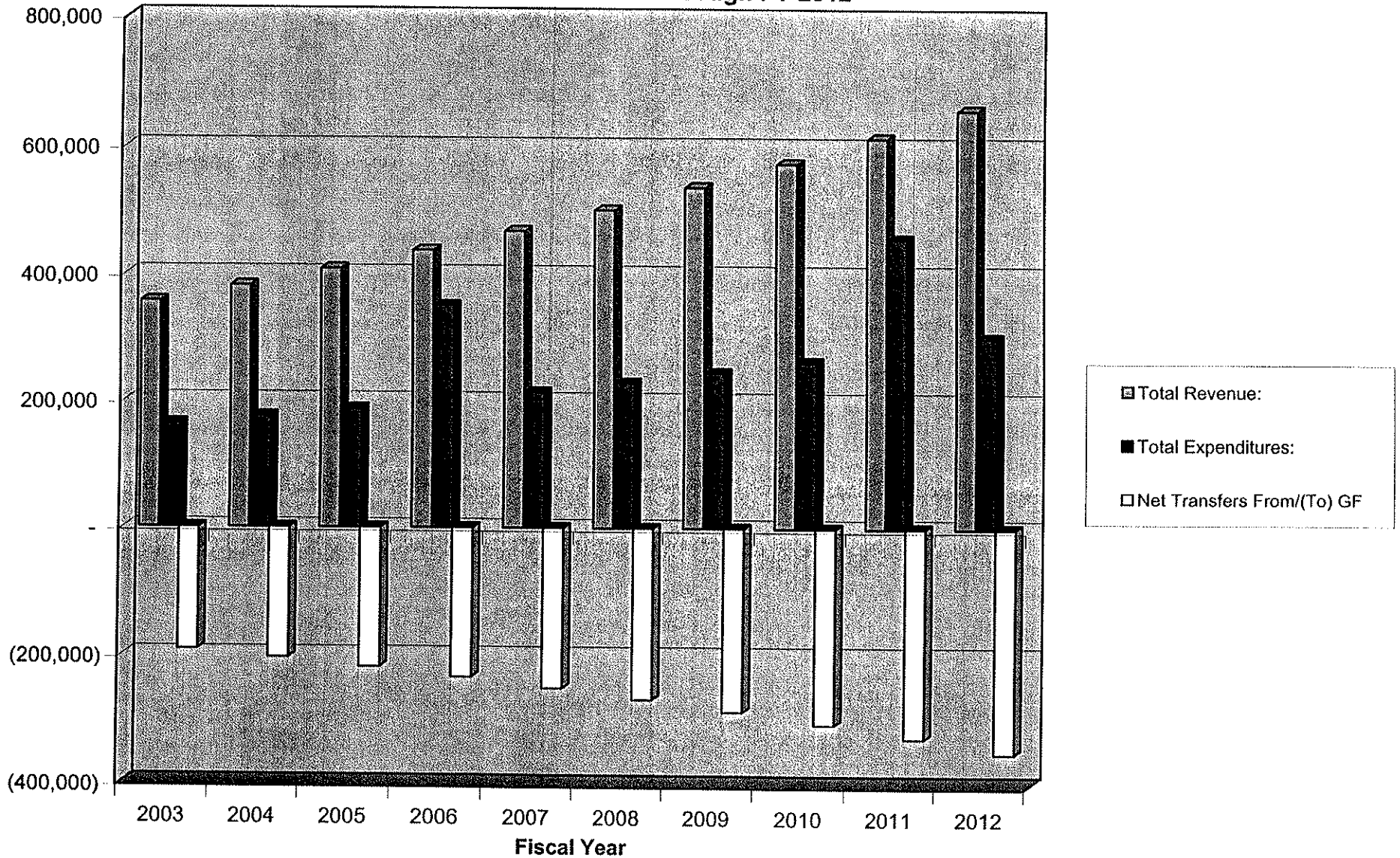
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Town of South Hadley  
Estimate of Revenues, Expenditures and Changes in Fund Balance  
Ambulance Fund

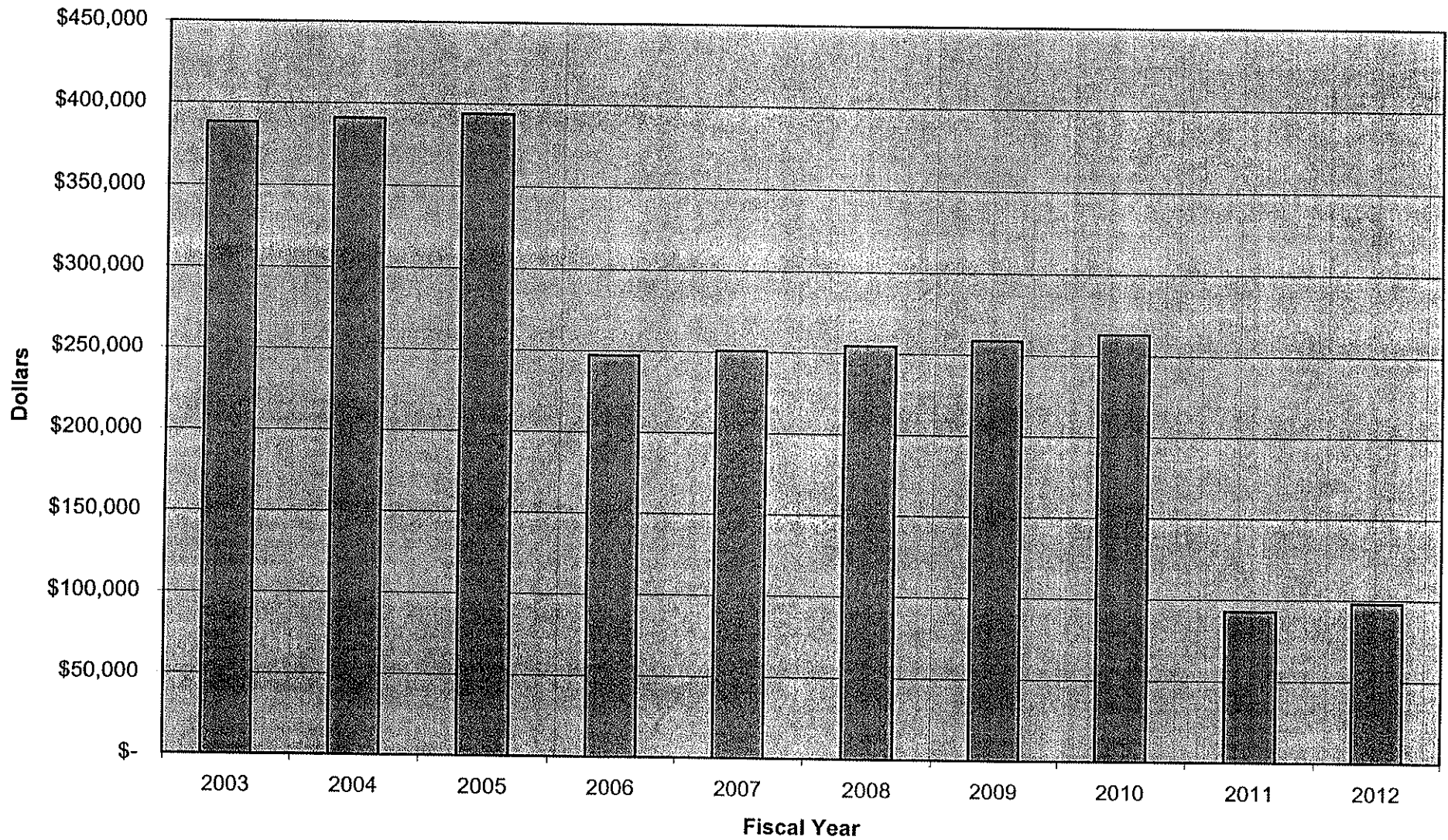
Fiscal Years 2003 Through 2012

|                                                                                                     | 2003      | 2004      | 2005      | 2006      | 2007      | 2008      | 2009      | 2010      | 2011      | 2012      | 10 Years    |
|-----------------------------------------------------------------------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------------|
| <b>Revenue:</b>                                                                                     |           |           |           |           |           |           |           |           |           |           |             |
| Charges for Services                                                                                | \$357,043 | \$382,036 | \$408,778 | \$437,393 | \$468,010 | \$500,771 | \$535,825 | \$573,333 | \$613,466 | \$656,409 | \$4,933,065 |
| Misc Revenue                                                                                        | 25        | 25        | 25        | 25        | 25        | 25        | 25        | 25        | 25        | 25        | 250         |
| <b>Total Revenue:</b>                                                                               | 357,068   | 382,061   | 408,803   | 437,418   | 468,035   | 500,796   | 535,850   | 573,358   | 613,491   | 656,434   | 4,933,315   |
| <b>Expenditures:</b>                                                                                |           |           |           |           |           |           |           |           |           |           |             |
| Personal Services                                                                                   | 137,221   | 146,827   | 157,104   | 168,102   | 179,869   | 192,460   | 205,932   | 220,347   | 235,771   | 252,275   | 1,895,908   |
| Other Charges/Expenditures                                                                          | 26,429    | 28,279    | 30,259    | 32,377    | 34,643    | 37,068    | 39,663    | 42,439    | 45,410    | 48,589    | 365,155     |
| Capital Outlay                                                                                      | -         | -         | -         | 150,000   | -         | -         | -         | -         | 175,000   | -         | 325,000     |
| <b>Total Expenditures:</b>                                                                          | 163,650   | 175,106   | 187,363   | 350,478   | 214,512   | 229,528   | 245,595   | 262,786   | 456,181   | 300,864   | 2,586,063   |
| <b>Net Revenues Over/(Under) Expenditures:</b>                                                      | 193,418   | 206,955   | 221,440   | 86,940    | 253,524   | 271,269   | 290,256   | 310,572   | 157,310   | 355,570   | 2,347,253   |
| <b>Other Financing Sources/(Uses)</b>                                                               |           |           |           |           |           |           |           |           |           |           |             |
| Net Transfers From/(To) GF                                                                          | (190,655) | (204,001) | (218,281) | (233,560) | (249,909) | (267,403) | (286,121) | (306,150) | (327,580) | (350,511) | (2,634,171) |
| <b>Excess (deficiency) of revenues and other financing sources over expenditures and other uses</b> | 2,763     | 2,955     | 3,160     | (146,621) | 3,614     | 3,865     | 4,134     | 4,422     | (170,270) | 5,059     | (286,919)   |
| <b>Beginning fund balance</b>                                                                       | 384,865   | 387,628   | 390,583   | 393,743   | 247,122   | 250,736   | 254,602   | 258,736   | 263,158   | 92,887    | 384,865     |
| <b>Ending fund balance</b>                                                                          | \$387,628 | \$390,583 | \$393,743 | \$247,122 | \$250,736 | \$254,602 | \$258,736 | \$263,158 | \$92,887  | \$97,946  | \$97,946    |

**Town of South Hadley - Ambulance Fund**  
**Estimated Revenues, Expenditures and Transfers to the General Fund**  
**FY 2003 through FY 2012**



**Town of South Hadley  
Estimated Ambulance Fund Ending Balance  
FY 2003 Through FY 2012**



Prepared by Financial Advisory Associates, Inc.

Printed 5/14/2003



## **FIRE SERVICE – AMBULANCE - EMS ORGANIZATION OPTIONS**

### **Future Services**

As part of our work, we developed a merged organization cost estimate. Given the three governmental organizations' current levels of participation in the delivery of emergency medical services, we chose to prepare a cost estimate for a merged, yet unchanged service delivery model.

This model allows for retention of the same compliment of full-time and on-call staff members. It carries the cost of the same level of elected officials, management and employees. It further allows funds for the purchase of two to three large pieces of apparatus and some smaller pieces also. We believe that this is the most costly future solution we could devise.

Our proposed service delivery model is equal in cost to the retention of the two existing service delivery models. We believe that within a merged organization these costs of services could be substantially reduced over time. We further believe that our estimated cost increases could be significantly curtailed by the end of the 10th year.

## Options

The following pages contain a presentation of the possible options for organizing the delivery of fire and emergency medical services to the Town of South Hadley. The options are presented in random order. The consultants have not assigned a "best option" to any of those presented nor do they appear in any specific order. There may be other options, however those that are presented seem to be the most logical.

### Fire

#### 1. Maintain Current Fire System

The organization and system for delivering fire and rescue services would remain exactly the same. No changes.

| Advantages                                       | Disadvantages                                                                                                                                  |
|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| No loss of service due to reorganization.        | Duplication of some functions such as two Prudential Committees, two treasurers, two tax rates, two fire chiefs, two inspection officers, etc. |
| Retains the call Firefighters in both Districts. | Continues to rely upon call Firefighters coming from a changing demographic environment.                                                       |
| Appears to work well.                            | Does not eliminate redundancies.                                                                                                               |
| Maintains the culture of each District.          | Maintains disproportionate taxation of District #1 taxpayers.                                                                                  |

## 2. Merge Fire Districts – Maintain Existing Fire Stations

The two fire Districts would be merged to operate under one committee and one fire chief and operate out of the two existing fire stations.

| <b>Advantages</b>                                                                                    | <b>Disadvantages</b>                                                                           |
|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| One organization – One Fire Chief, one Inspections Officer, one Treasurer, etc.                      | May result in the loss of some call Firefighters due to change in organization.                |
| One Governance System. One Prudential Committee, one District meeting, one audit, etc.               | Political leadership may become geographically unbalanced across the District.                 |
| One tax rate. All residents share equally in cost of fire protection and emergency medical services. | District meetings may become contentious as residents debate staffing and equipment locations. |
| May result in cost savings                                                                           | Could result in no cost savings.                                                               |

## 3. Merge Fire Districts – One Fire Station

The two fire Districts would be merged to operate under one committee and one fire chief and operate out of one of the existing fire stations.

| <b>Advantages</b>                                                                                    | <b>Disadvantages</b>                                                            |
|------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| One organization – One Fire Chief, one Inspections Officer, one Treasurer, etc.                      | May result in the loss of some call Firefighters due to change in organization. |
| One Governance System. One Prudential Committee, one District meeting, one audit, etc.               | Political leadership may become geographically unbalanced across the District.  |
| One tax rate. All residents share equally in cost of fire protection and emergency medical services. | Could increase response times to some areas.                                    |
| May result in considerable cost savings                                                              | Could result in no cost savings.                                                |

## AMBULANCE

### 1. Ambulance Operation Remains The Same

The ambulance would continue to be housed in one of the fire stations. One Firefighter/EMT would respond with the first ambulance and be met by a Police Officer/EMT. FD#1 Firefighter/EMT called to staff second ambulance, if needed. Town remains responsible for ownership, licenses and financial operation of ambulances including collection of fees.

| Advantages                                                                  | Disadvantages                                                                                                                                    |
|-----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Current system works adequately.                                            | Fire Chiefs do not have command and control. Takes Police Officer out of service.                                                                |
| All participants are familiar with operation.                               | System costs are difficult to identify and account for.                                                                                          |
| District #1 Firefighters function as Town EMT personnel.                    | District #1 taxpayers pay more for town ambulance service than District #2 taxpayers.                                                            |
| Town works to keep expenses down. Doesn't want to pay for Paramedics.       | Ambulance users receive lower level of professional treatment.                                                                                   |
| This is the way we have always done it.                                     | There are unclear levels of liability across all areas of employees and users. No written agreements exist to define roles and responsibilities. |
| Single station reduces personnel costs.                                     | Response times are longer in some town locations.                                                                                                |
| All equipment, supplies and most personnel are centrally located.           | Excess layers of multiple governments' oversight create needless bureaucracy.                                                                    |
| Police Department is seen in a positive light when responding to EMS calls. | Community policing efforts are diminished by required EMS demands.                                                                               |

### **Town Contracts For Ambulance Service**

The two fire departments would be combined and operate as one fire department. The Town would contract with a private ambulance company to provide emergency medical service.

| <b>Advantages</b>                                                                         | <b>Disadvantages</b>                                                             |
|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| Town and Districts would not be involved in daily operation of emergency medical service. | Residents using ambulances would be serviced by private sector employees         |
| Town would increase the level of police services provided to citizens.                    | Town would have to monitor to assure level of quality and service is maintained. |
| District taxpayers would escape disproportionate cost burden.                             | Town would lose ambulance service revenue.                                       |

## Findings

We have found no compelling economic reasons to justify a merger of the two non-water functions of the South Hadley Fire Districts. This does not mean there are no good reasons for such a merger. In fact, we have found no compelling economic reasons for not merging.

Our first and foremost charge from our clients was to determine if the existing South Hadley system of Fire Prevention and Protection and Emergency Medical Services is exceedingly costly and thus a ready candidate for a merger.

Given the complexity of South Hadley's Fire Services and Emergency Medical Services business model, we were required to prepare an extensive comparative analysis. Our clients really wanted to know if their community's residents were paying a premium because of the unique method of delivery.

As such we identified 15 Massachusetts communities with either no more than 1,000 less residents or no more than 1,000 more residents. With this core group of 15 comparable communities we are able to measure South Hadley's cost of service against a reasonable peer group. All of our research data and analysis is found within the appendix.

This group provided us with communities of diverse types, demographics and geographies. There are five community types in our analysis. These range from Urbanized Centers to Residential Suburbs. Populations ranged from a low of 16,246 to a high of 18,168. The size of the comparable communities ranged from 8.3 square miles to 27.9 square miles. The comparative group contained single-family residential parcels ranging from 2,481 to 6,442. Income per capita ranged from \$12,924 to \$33,441. Finally we found Equalized Values per capita ranging from \$32,955 to \$180,105.

The Massachusetts Department of Revenue (DOR) publishes municipal expenditure activity. We availed ourselves of the DOR's latest (FY 2000) fire spending data for each of the 15 communities. Since the Town of South Hadley does not expend general fund dollars for the purpose of Fire Protection, we were required to use our analysis for this South Hadley cost. We adjusted total spending in District #2 to eliminate the Granby residents' costs.

Since the comparable communities report their ambulance costs within the fire expenditures category, we also developed a town cost of ambulance from their special revenue fund spending reports to the DOR. This did not fully represent the full cost of the services delivered to South Hadley. The Police Department in South Hadley also incurs expenses for the EMS system in town. Ultimately, we developed a schedule of Police costs and Fire costs for each of the 15 comparable towns and South Hadley.

When we reviewed South Hadley against this 15-town group, we found that South Hadley's FY 2000 spending for fire and EMS was only slightly higher than the peer group. Total expenditures were \$1,838,154. This is 2.7 percent above the group's median spending level and 6.3 percent above the groups' average spending level. A similar per capita spending pattern emerged. We determined that South Hadley was 2.5 percent above the median and 7.0 percent above the average per capita spending. When we looked at the level of spending per single-family parcel, South Hadley was 1.1 percent below the median and 6.9 percent above the average. On a spending per square mile basis, the residents of South Hadley experience spending at a level of 17.78 percent above the median and 2.1 percent below the average.

Certainly this level of spending behavior is not excessive. South Hadley is more than 50 percent below the maximum fire spending within the peer group. Our clients are 44.8 percent below the highest per capita spending, 19.3 percent below the highest level of spending per single-family parcel and 147.8 percent below the highest level of spending per square mile.

Since South Hadley is unique in the use of Police personnel for EMS activity, we further developed a total public safety analysis. What emerged was a finding we were not expecting. Because we included Police spending in our analysis, we became aware of the lower levels of spending by the Town of South Hadley in this area. Only one other community in the sample group spends less on Police Services than South Hadley. South Hadley exceeds this lowest spending community by 4.2 percent. South Hadley spent \$1,667,110 for Police Services in FY 2000. This is 20.4 percent less than the peer group median spending and 22.3 percent less than the peer group average spending. South Hadley is below the peer groups' median and average police spending on a per capita (-20 percent and -22 percent), single-family parcel (-15.7 percent and -26.4 percent) and square mile (-1.8 percent and -36.8 percent) basis.

We understand that South Hadley police officers are taken away from their patrol duties to ride in an ambulance during the patient's transport. When one considers that non-measured reduction in police service it becomes evident that South Hadley residents do not enjoy anywhere near the same level of public spending for Police services as those in their peer group.

We looked into the combined police and fire spending patterns for South Hadley and the four other "Economically Developed Suburbs" in our comparative analysis. In this group South Hadley was in the middle of fire spending and next to the bottom in police spending. Fire spending was modestly above the average and median (6.26 percent and 2.73 percent) and police spending variances were much higher. Police spending was 20.4 percent below the groups' median spending and 22.29 percent below the groups' average police spending. When spending for both services was combined, South Hadley was in the middle of the group of five and was 7.1 percent below the average and 6.4 percent below the median.

**South Hadley Fire Districts #1 and #2 Merger Study**  
**Analysis of Massachusetts Communities with Comparable Populations (+/- 1,000)**

| <b>Community</b>      | <b>Population<br/>2000</b> | <b>Income PC<br/>1989</b> | <b>EQV PC<br/>2000</b> | <b>Bond<br/>Rate</b> | <b>Community<br/>Type</b>            |
|-----------------------|----------------------------|---------------------------|------------------------|----------------------|--------------------------------------|
| Amesbury              | 16,450                     | 15,423                    | 62,759                 | A3                   | Rural Economic Center                |
| Concord               | 16,993                     | 31,655                    | 180,105                | Aaa                  | Economically Developed Suburb        |
| Foxborough            | 16,246                     | 18,329                    | 82,403                 | A1                   | Economically Developed Suburb        |
| Greenfield            | 18,168                     | 13,693                    | 44,508                 | A3                   | Urbanized Center                     |
| Hudson                | 18,113                     | 18,327                    | 67,755                 | A2                   | Economically Developed Suburb        |
| Newburyport           | 17,189                     | 19,008                    | 96,390                 | A2                   | Rural Economic Center                |
| Norton                | 18,036                     | 16,023                    | 58,269                 | A2                   | Growth Community                     |
| Pembroke              | 16,927                     | 16,531                    | 72,023                 | A2                   | Growth Community                     |
| Rockland              | 17,670                     | 15,060                    | 55,462                 | A3                   | Rural Economic Center                |
| Scituate              | 17,863                     | 22,156                    | 107,843                | Aa3                  | Residential Suburb                   |
| Sharon                | 17,408                     | 24,141                    | 91,979                 | Aa2                  | Residential Suburb                   |
| <b>South Hadley</b>   | <b>17,196</b>              | <b>16,342</b>             | <b>49,190</b>          | <b>A3</b>            | <b>Economically Developed Suburb</b> |
| Southbridge           | 17,214                     | 12,924                    | 32,955                 | A2                   | Urbanized Center                     |
| Sudbury               | 16,841                     | 33,441                    | 143,417                | Aa1                  | Residential Suburb                   |
| Webster               | 16,415                     | 14,624                    | 45,595                 | A3                   | Urbanized Center                     |
| Westborough           | 17,997                     | 20,922                    | 117,985                | Aa2                  | Economically Developed Suburb        |
| <b>Average:</b>       | <b>17,295</b>              | <b>19,287</b>             | <b>81,790</b>          |                      |                                      |
| <b>Median:</b>        | <b>17,205</b>              | <b>17,429</b>             | <b>69,889</b>          |                      |                                      |
| <b>Min:</b>           | <b>16,246</b>              | <b>12,924</b>             | <b>32,955</b>          |                      |                                      |
| <b>Max:</b>           | <b>18,168</b>              | <b>33,441</b>             | <b>180,105</b>         |                      |                                      |
| <b>SH vs Average:</b> | <b>-0.58%</b>              | <b>-18.02%</b>            | <b>-66.27%</b>         |                      |                                      |
| <b>SH vs Median:</b>  | <b>-0.05%</b>              | <b>-6.65%</b>             | <b>-42.08%</b>         |                      |                                      |
| <b>SH vs Min:</b>     | <b>5.52%</b>               | <b>20.92%</b>             | <b>33.00%</b>          |                      |                                      |
| <b>SH vs Max:</b>     | <b>-5.65%</b>              | <b>-104.63%</b>           | <b>-266.14%</b>        |                      |                                      |

Source: Massachusetts Department of Revenue

**South Hadley Fire Districts #1 and #2 Merger Study**  
**Analysis Police and Fire Expenditures In Massachusetts Communities with Comparable Population**

| Community             | Population<br>2000 | Population<br>Per<br>Square Mile | Square<br>Mile<br>Area | Single<br>Family<br>Parcels | FY 2000<br>Police<br>Expenditures | FY 2000<br>Police<br>Expend/Pop | FY 2000<br>Police<br>Expend/SFP | FY 2000<br>Police<br>Expend/Sq M | FY 2000<br>Fire<br>Expenditures | FY 2000<br>Fire<br>Expend/PC | FY 2000<br>Fire<br>Expend/SFP | FY 2000<br>Fire<br>Expend/Sq M |
|-----------------------|--------------------|----------------------------------|------------------------|-----------------------------|-----------------------------------|---------------------------------|---------------------------------|----------------------------------|---------------------------------|------------------------------|-------------------------------|--------------------------------|
| Amesbury              | 16,450             | 1,300                            | 12.65                  | 3,132                       | \$ 2,637,977                      | \$ 160                          | \$ 842                          | \$ 208,472                       | \$ 1,605,124                    | \$ 98                        | \$ 512                        | \$ 126,849                     |
| Concord               | 16,993             | 681                              | 24.95                  | 4,617                       | 2,261,948                         | 133                             | 490                             | 90,648                           | 2,292,699                       | 135                          | 497                           | 91,881                         |
| Foxborough            | 16,246             | 822                              | 19.76                  | 3,930                       | 1,846,696                         | 114                             | 470                             | 93,437                           | 1,568,016                       | 97                           | 399                           | 79,337                         |
| Greenfield            | 18,168             | 846                              | 21.48                  | 3,784                       | 2,222,993                         | 122                             | 587                             | 103,515                          | 1,460,414                       | 80                           | 386                           | 68,005                         |
| Hudson                | 18,113             | 1,553                            | 11.66                  | 4,228                       | 1,944,134                         | 107                             | 460                             | 166,689                          | 1,966,815                       | 109                          | 465                           | 168,634                        |
| Newburyport           | 17,189             | 2,071                            | 8.30                   | 4,115                       | 2,428,068                         | 141                             | 590                             | 292,543                          | 2,186,173                       | 127                          | 531                           | 263,399                        |
| Norton                | 18,036             | 646                              | 27.92                  | 4,065                       | 1,596,534                         | 89                              | 393                             | 57,183                           | 2,009,049                       | 111                          | 494                           | 71,959                         |
| Pembroke              | 16,927             | 786                              | 21.54                  | 5,013                       | 2,095,771                         | 124                             | 418                             | 97,316                           | 1,785,109                       | 105                          | 356                           | 82,891                         |
| Rockland              | 17,670             | 1,763                            | 10.02                  | 3,623                       | 2,306,637                         | 131                             | 637                             | 230,142                          | 1,966,501                       | 111                          | 543                           | 196,205                        |
| Scituate              | 17,863             | 1,075                            | 16.62                  | 6,442                       | 2,391,267                         | 134                             | 371                             | 143,907                          | 2,840,909                       | 159                          | 441                           | 170,967                        |
| Sharon                | 17,408             | 738                              | 23.59                  | 5,128                       | 2,071,508                         | 119                             | 404                             | 87,820                           | 1,158,627                       | 67                           | 226                           | 49,119                         |
| <b>South Hadley</b>   | <b>17,196</b>      | <b>968</b>                       | <b>17.76</b>           | <b>4,150</b>                | <b>1,667,110</b>                  | <b>97</b>                       | <b>402</b>                      | <b>93,845</b>                    | <b>1,888,154</b>                | <b>110</b>                   | <b>455</b>                    | <b>106,288</b>                 |
| Southbridge           | 17,214             | 845                              | 20.37                  | 2,481                       | 1,774,932                         | 103                             | 715                             | 87,128                           | 1,187,789                       | 69                           | 479                           | 58,306                         |
| Sudbury               | 16,841             | 691                              | 24.37                  | 5,235                       | 1,901,644                         | 113                             | 363                             | 78,026                           | 2,518,933                       | 150                          | 481                           | 103,354                        |
| Webster               | 16,415             | 1,310                            | 12.53                  | 3,346                       | 1,823,276                         | 111                             | 545                             | 145,507                          | 299,507                         | 18                           | 90                            | 23,902                         |
| Westborough           | 17,997             | 855                              | 21.05                  | 3,754                       | 1,649,893                         | 92                              | 440                             | 78,383                           | 1,584,021                       | 88                           | 422                           | 75,254                         |
| <b>Average:</b>       | <b>17,295</b>      | <b>1,059</b>                     | <b>18.41</b>           | <b>4,190</b>                | <b>2,038,774</b>                  | <b>118</b>                      | <b>508</b>                      | <b>128,410</b>                   | <b>1,769,865</b>                | <b>102</b>                   | <b>424</b>                    | <b>108,522</b>                 |
| <b>Median:</b>        | <b>17,205</b>      | <b>851</b>                       | <b>20.07</b>           | <b>4,090</b>                | <b>2,007,821</b>                  | <b>116</b>                      | <b>465</b>                      | <b>95,581</b>                    | <b>1,836,632</b>                | <b>107</b>                   | <b>460</b>                    | <b>87,386</b>                  |
| <b>Min:</b>           | <b>16,246</b>      | <b>646</b>                       | <b>8.30</b>            | <b>2,481</b>                | <b>1,596,534</b>                  | <b>89</b>                       | <b>363</b>                      | <b>57,183</b>                    | <b>299,507</b>                  | <b>18</b>                    | <b>90</b>                     | <b>23,902</b>                  |
| <b>Max:</b>           | <b>18,168</b>      | <b>2,071</b>                     | <b>27.92</b>           | <b>6,442</b>                | <b>2,637,977</b>                  | <b>160</b>                      | <b>842</b>                      | <b>292,543</b>                   | <b>2,840,909</b>                | <b>159</b>                   | <b>543</b>                    | <b>263,399</b>                 |
| <b>SH vs Average:</b> | <b>-0.58%</b>      | <b>-9.44%</b>                    | <b>-3.64%</b>          | <b>-0.97%</b>               | <b>-22.29%</b>                    | <b>-21.82%</b>                  | <b>-26.44%</b>                  | <b>-36.83%</b>                   | <b>6.26%</b>                    | <b>7.02%</b>                 | <b>6.91%</b>                  | <b>-2.10%</b>                  |
| <b>SH vs Median:</b>  | <b>-0.05%</b>      | <b>12.14%</b>                    | <b>-12.97%</b>         | <b>1.45%</b>                | <b>-20.44%</b>                    | <b>-20.00%</b>                  | <b>-15.72%</b>                  | <b>-1.85%</b>                    | <b>2.73%</b>                    | <b>2.53%</b>                 | <b>-1.12%</b>                 | <b>17.78%</b>                  |
| <b>SH vs Min:</b>     | <b>5.52%</b>       | <b>33.26%</b>                    | <b>53.28%</b>          | <b>40.22%</b>               | <b>4.23%</b>                      | <b>8.69%</b>                    | <b>9.57%</b>                    | <b>39.07%</b>                    | <b>84.14%</b>                   | <b>83.38%</b>                | <b>80.33%</b>                 | <b>77.51%</b>                  |
| <b>SH vs Max:</b>     | <b>-5.65%</b>      | <b>-113.95%</b>                  | <b>-57.16%</b>         | <b>-55.23%</b>              | <b>-58.24%</b>                    | <b>-65.41%</b>                  | <b>-109.67%</b>                 | <b>-211.73%</b>                  | <b>-50.46%</b>                  | <b>-44.84%</b>               | <b>-19.30%</b>                | <b>-147.82%</b>                |

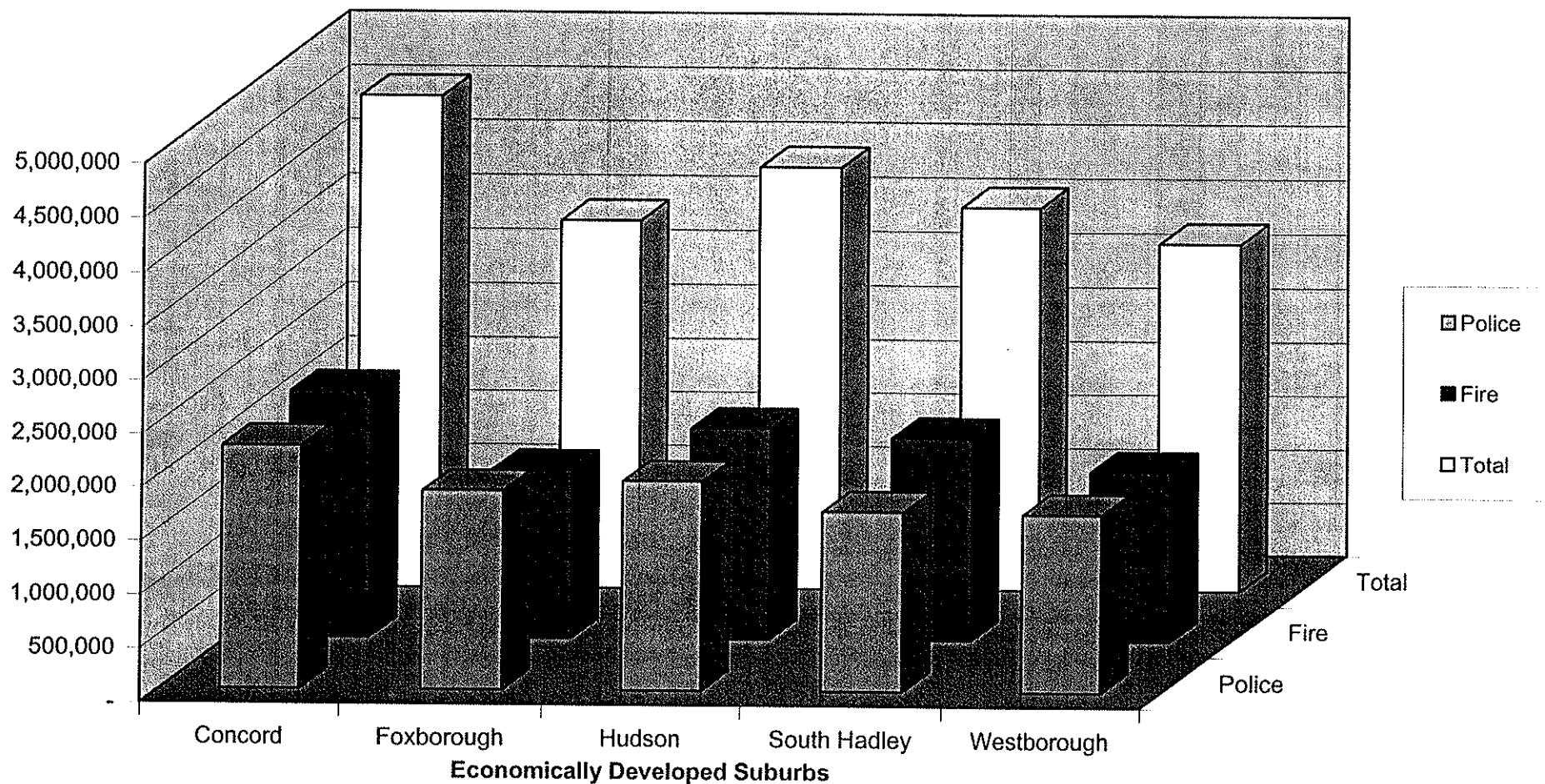
Source: Massachusetts Department of Revenue  
2000 South Hadley Fire Expenditures Data Developed by FAA, Inc.

**South Hadley Fire Districts #1 and #2 Merger Study**  
**Analysis of Police and Fire Expenditures in Massachusetts Economically Developed Suburbs with Comparable Populations**

| <b>Community</b>      | <b>Population<br/>2000</b> | <b>Population<br/>Per<br/>Square Mile</b> | <b>Square<br/>Mile<br/>Area</b> | <b>Single<br/>Family<br/>Parcels</b> | <b>FY 2000<br/>Police<br/>Expenditures</b> | <b>FY 2000<br/>Fire<br/>Expenditures</b> | <b>FY 2000<br/>Total<br/>Expenditures</b> | <b>FY 2000<br/>Total<br/>Expend PC</b> | <b>FY 2000<br/>Total<br/>Expend/SFP</b> | <b>FY 2000<br/>Total<br/>Expend/Sq M</b> |
|-----------------------|----------------------------|-------------------------------------------|---------------------------------|--------------------------------------|--------------------------------------------|------------------------------------------|-------------------------------------------|----------------------------------------|-----------------------------------------|------------------------------------------|
| Concord               | 16,993                     | 681                                       | 24.95                           | 4,617                                | 2,261,948                                  | 2,292,699                                | 4,554,647                                 | 268                                    | 986                                     | 182,529                                  |
| Foxborough            | 16,246                     | 822                                       | 19.76                           | 3,930                                | 1,846,696                                  | 1,568,016                                | 3,414,712                                 | 210                                    | 869                                     | 172,774                                  |
| Hudson                | 18,113                     | 1,553                                     | 11.66                           | 4,228                                | 1,944,134                                  | 1,966,815                                | 3,910,949                                 | 216                                    | 925                                     | 335,323                                  |
| South Hadley          | 17,196                     | 968                                       | 17.76                           | 4,150                                | 1,667,110                                  | 1,888,154                                | 3,555,264                                 | 207                                    | 857                                     | 200,134                                  |
| Westborough           | 17,997                     | 855                                       | 21.05                           | 3,754                                | 1,649,893                                  | 1,584,021                                | 3,233,914                                 | 180                                    | 861                                     | 153,637                                  |
| <b>Average:</b>       | 17,295                     | 1,059                                     | 18                              | 4,190                                | 2,038,774                                  | 1,769,865                                | 3,808,639                                 | 220                                    | 931                                     | 236,932                                  |
| <b>Median:</b>        | 17,205                     | 851                                       | 20                              | 4,090                                | 2,007,821                                  | 1,836,632                                | 3,782,144                                 | 213                                    | 878                                     | 180,794                                  |
| <b>Min:</b>           | 16,246                     | 646                                       | 8                               | 2,481                                | 1,596,534                                  | 299,507                                  | 2,122,783                                 | 129                                    | 630                                     | 129,142                                  |
| <b>Max:</b>           | 18,168                     | 2,071                                     | 28                              | 6,442                                | 2,637,977                                  | 2,840,909                                | 5,232,176                                 | 293                                    | 1,355                                   | 555,942                                  |
| <b>SH vs Average:</b> | -0.58%                     | -9.44%                                    | -3.64%                          | -0.97%                               | -22.29%                                    | 6.26%                                    | -7.13%                                    | -6.50%                                 | -8.73%                                  | -18.39%                                  |
| <b>SH vs Median:</b>  | -0.05%                     | 12.14%                                    | -12.97%                         | 1.45%                                | -20.44%                                    | 2.73%                                    | -6.38%                                    | -3.05%                                 | -2.48%                                  | 9.66%                                    |
| <b>SH vs Min:</b>     | 5.52%                      | 33.26%                                    | 53.28%                          | 40.22%                               | 4.23%                                      | 84.14%                                   | 40.29%                                    | 37.45%                                 | 26.47%                                  | 35.47%                                   |
| <b>SH vs Max:</b>     | -5.65%                     | -113.95%                                  | -57.16%                         | -55.23%                              | -58.24%                                    | -50.46%                                  | -47.17%                                   | -41.67%                                | -58.14%                                 | -177.79%                                 |

Source: Massachusetts Department of Revenue  
2000 South Hadley Fire Expenditures Data Developed by FAA, Inc.

**South Hadley Fire Districts #1 and #2 Meger Study  
FY 2000 Police & Fire Spending  
In Comparable Population Massachusetts Economically Developed Suburbs**



## Recommendations

We are advocates for the use of districts in Massachusetts. Districts are democratic governmental vehicles that allow citizens to provide themselves with high quality public services without the constraints of our state's so-called "Proposition 2 ½" law.

We do not recommend that the Fire Districts totally go out of business. Nor do we recommend that the Town of South Hadley endeavor to expand their participation beyond the present level of ambulance service. We believe that either of these actions would be disadvantageous for the citizens of South Hadley. In both cases, the town would end up providing a lower level of service at an even higher cost.

The service delivery model used in South Hadley for EMS is not broken. However, it is clearly not the most optimum method of delivering this very important public safety service. If this model were the best, South Hadley would not be the only Massachusetts community using it.

We are sensitive to the fact that the Town of South Hadley has allowed itself to become somewhat dependant upon the use of ambulance fees for departmental costs that would be borne by taxpayers. We are also sensitive to the fact that the Town has diverted some of its fiscal responsibilities for EMS away from all Town taxpayers and disproportionately onto the tax levies of the South Hadley Fire Districts' taxpayers.

We further believe that the Town and the Districts can negotiate the Town's withdrawal from the Ambulance/EMS system in such a manner that the Town is not adversely impacted financially. There are a number of activities that the Town could perform for a new single district or the two present Districts on a fee basis. We believe that the Districts' practice of directly paying Town employees for services rendered to the District should end. As is the case in the Town of Barnstable, a full cost of services recovery contract between the Town and the District(s) would be our preferred practice.

Further, given the current diminished level of resources in South Hadley for police services, we further recommend that the Districts and the Town engage in immediate discussions to eliminate the Police Department's participation in the delivery of Ambulances and EMS. Upon completion of this task, we recommend that the Fire Districts move forward with the negotiations, special legislation and public votes necessary to create a single Fire Services, Ambulance and EMS district.

Our models indicate that the two Districts can expect to spend in excess of \$23 million over the next 10 years. Without a change, the Town will spend upwards of an additional \$5 million on their portion of the ambulance services in South Hadley. With spending levels ranging close to \$28 million during the next 10 years, we believe a change from the two separate business models to a merged single business model will better serve the fire and emergency medical service needs of the residents of South Hadley.

We further believe that a single station fire service and EMS model is a viable option for the residents of South Hadley. Future costs and liabilities associated with these services can be better controlled if not diminished town-wide within this business model. We have doubts that the Fire Districts can continue to recruit and retain enough call firefighters to cover the demands of the existing dual districts business model.

We offer the following data for the Districts' consideration during their deliberations over the number of stations that are necessary to adequately protect a single Town-wide fire district.

| <b>Community</b> | <b>Population</b> | <b>Area<br/>(Sq Miles)</b> | <b>Number of<br/>Stations</b> |
|------------------|-------------------|----------------------------|-------------------------------|
| South Hadley     | 17,039            | 17.7                       | 2                             |
| Easthampton      | 15,512            | 13.3                       | 1                             |
| East Longmeadow  | 14,146            | 13.0                       | 1                             |
| Longmeadow       | 15,559            | 9.0                        | 1                             |
| Ludlow           | 19,581            | 27.1                       | 1                             |

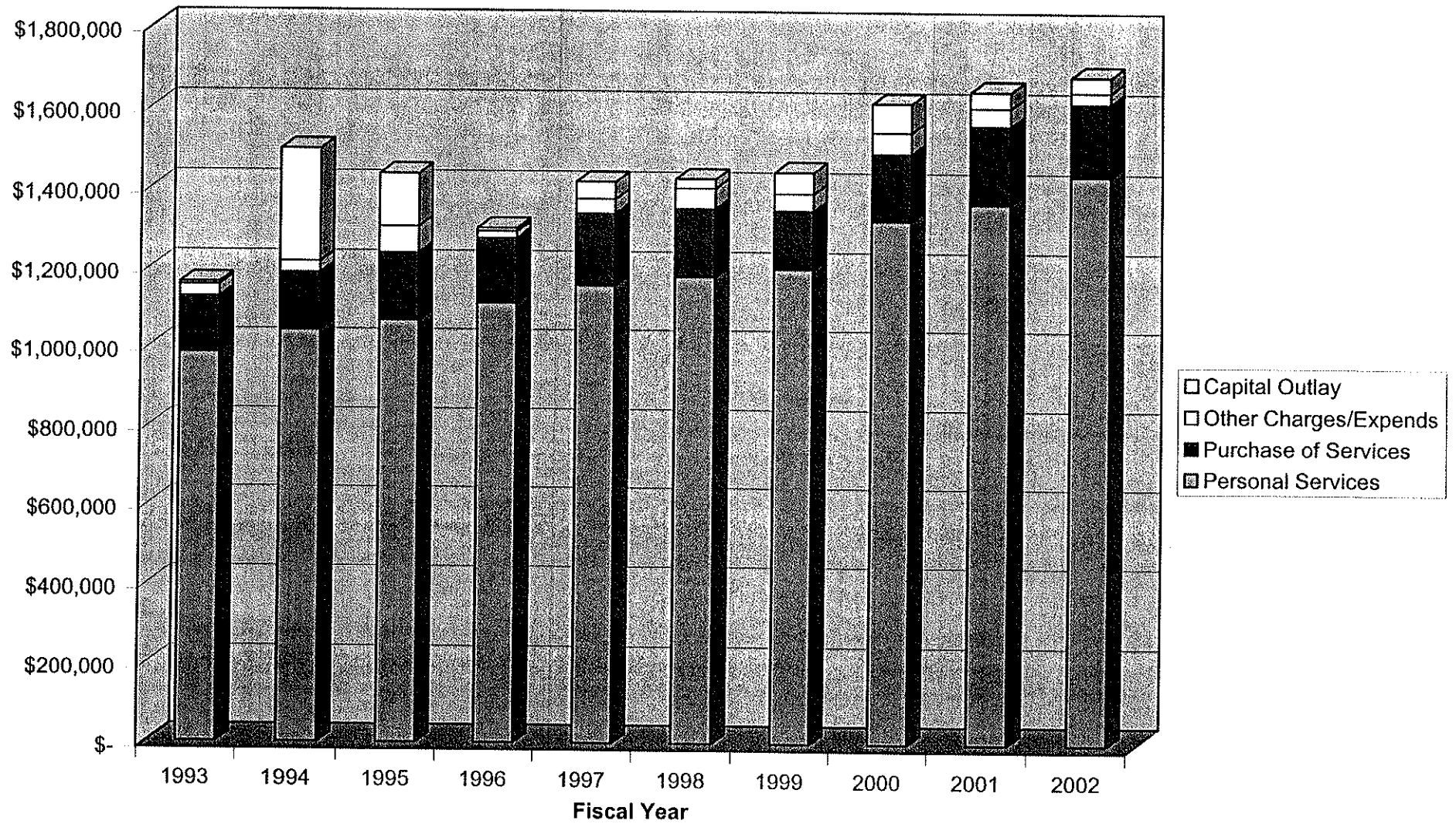
South Hadley Fire Districts #1 and #2  
Combined Non-Water Expenditures Analysis  
Ten Years Ending June 30, 2002

| Expenditure Type                       | 1993         | 1994         | 1995         | 1996         | 1997         | 1998         | 1999         | 2000         | 2001         | 2002         | 10 Years               | % of Budget |
|----------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------------------------|-------------|
| Personal Services                      | \$ 983,483   | \$ 1,041,347 | \$ 1,066,561 | \$ 1,111,274 | \$ 1,156,971 | \$ 1,180,094 | \$ 1,200,350 | \$ 1,323,835 | \$ 1,367,131 | \$ 1,438,647 | \$ 11,869,693          | 81.08%      |
| Purchase of Services                   | 142,612      | 146,066      | 171,491      | 164,455      | 182,417      | 172,545      | 148,010      | 168,581      | 195,302      | 180,338      | 1,671,817              | 11.42%      |
| Other Charges/Expend                   | 29,301       | 28,296       | 66,643       | 16,866       | 36,440       | 51,434       | 43,204       | 52,847       | 44,963       | 27,965       | 397,958                | 2.72%       |
| Capital Outlay                         | 6,571        | 282,305      | 132,926      | 8,543        | 43,454       | 23,356       | 53,436       | 71,837       | 39,707       | 37,089       | 699,224                | 4.78%       |
| Total:                                 | \$ 1,161,967 | \$ 1,498,014 | \$ 1,437,621 | \$ 1,301,137 | \$ 1,419,282 | \$ 1,427,429 | \$ 1,445,000 | \$ 1,617,099 | \$ 1,647,103 | \$ 1,684,040 | \$ 14,638,692          | 100.00%     |
| Assessor LA-4 Single Family Value:     | N/A          | N/A          | N/A          | 536,308,900  | 542,992,100  | 543,815,400  | 550,742,100  | 559,857,400  | 626,032,500  | 630,240,100  |                        |             |
| Assessor LA-4 Total Value:             | N/A          | N/A          | N/A          | 770,877,897  | 778,107,487  | 784,882,157  | 795,035,222  | 811,899,899  | 908,725,661  | 915,706,820  |                        |             |
| Assessor LA-4 Single Family % of Levy: | N/A          | N/A          | N/A          | 69.57%       | 69.78%       | 69.29%       | 69.27%       | 68.96%       | 68.89%       | 68.83%       |                        |             |
| Assessor LA-4 Single Family Parcels:   | N/A          | N/A          | N/A          | 4,132        | 4,166        | 4,178        | 4,201        | 4,248        | 4,272        | 4,288        |                        |             |
| Assessor LA-4 Total RE Parcels:        | N/A          | N/A          | 6,830        | 6,681        | 6,708        | 6,753        | 6,803        | 6,858        | 6,875        | 6,918        |                        |             |
| FY Spending Per Single Family Parcel:  | N/A          | N/A          | N/A          | \$ 219.07    | \$ 237.74    | \$ 236.72    | \$ 238.27    | \$ 262.50    | \$ 265.62    | \$ 270.30    | Annual Spending/Parcel |             |
| FY Spending Per All RE Parcels:        | N/A          | N/A          | \$ 210.49    | \$ 194.75    | \$ 211.58    | \$ 211.38    | \$ 212.41    | \$ 235.80    | \$ 239.58    | \$ 243.43    | 7 Yr Ave               | 3 Yr Ave    |
|                                        |              |              |              |              |              |              |              |              |              |              | \$ 247.17              | \$ 266.14   |
|                                        |              |              |              |              |              |              |              |              |              |              | \$ 221.27              | \$ 239.60   |
| Change from Prior Year                 |              |              |              |              |              |              |              |              |              |              |                        |             |
| Personal Services                      | N/A          |              |              |              |              |              |              |              |              |              | Annual % Change        |             |
| Purchase of Services                   | N/A          | 5.88%        | 2.42%        | 4.19%        | 4.11%        | 2.00%        | 1.72%        | 10.29%       | 3.27%        | 5.23%        | 9 Yr Ave               | 3 Yr Ave    |
| Other Charges/Expend                   | N/A          | 2.42%        | 17.41%       | -4.10%       | 10.92%       | -5.41%       | -14.22%      | 13.90%       | 15.85%       | -7.66%       | 4.35%                  | 6.26%       |
| Capital Outlay                         | N/A          | -3.43%       | 135.52%      | -74.69%      | 0.00%        | 100.00%      | -16.00%      | 22.32%       | 0.00%        | 0.00%        | 3.23%                  | 7.36%       |
| Total:                                 | N/A          | 4196.23%     | -52.91%      | -93.57%      | 408.67%      | -46.25%      | 128.79%      | 34.44%       | -44.73%      | -6.59%       | 18.19%                 | 7.44%       |
|                                        |              | 28.92%       | -4.03%       | -9.49%       | 9.08%        | 0.57%        | 1.23%        | 11.91%       | 1.86%        | 2.24%        | 502.67%                | -5.63%      |
|                                        |              |              |              |              |              |              |              |              |              |              | 4.70%                  | 5.34%       |

**Sources:**

South Hadley Fire District #1  
South Hadley Fire District #2

**South Hadley Fire Districts #1 and #2  
Combined 10 Year Non-Water Expenditures History  
FY 1993 Through FY 2002**



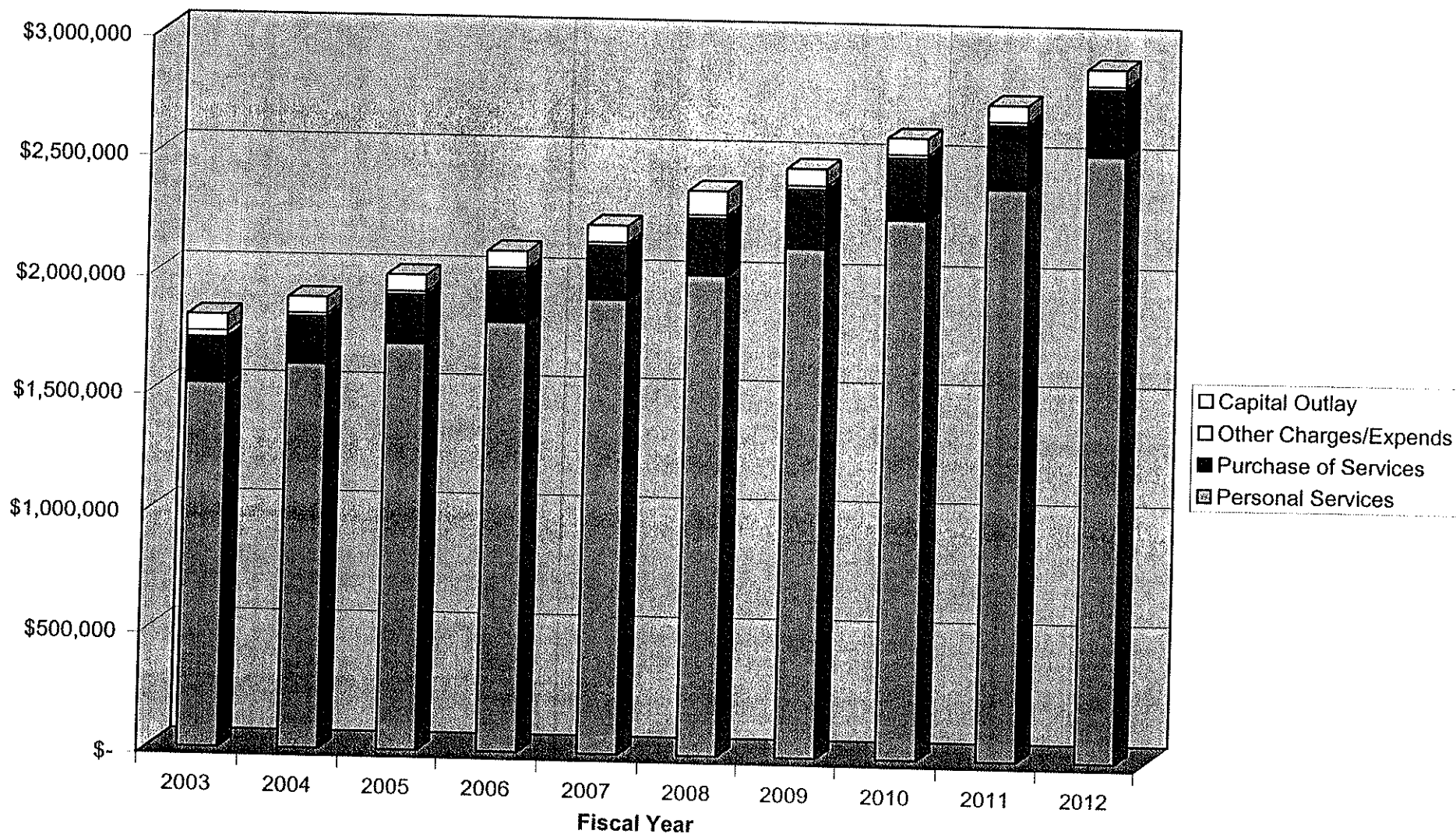
South Hadley Fire District #1 and #2  
Combined Non-Water Expenditures Estimate  
Ten Years Ending June 30, 2012

| Expenditure Type     | 2003                | 2004                | 2005                | 2006                | 2007                | 2008                | 2009                | 2010                | 2011                | 2012                | 10 Years             | % of Budget    |
|----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|----------------|
| Personal Services    | \$ 1,520,393        | \$ 1,607,234        | \$ 1,699,532        | \$ 1,797,674        | \$ 1,902,083        | \$ 2,013,215        | \$ 2,131,566        | \$ 2,257,673        | \$ 2,392,119        | \$ 2,535,538        | \$ 19,857,028        | 86.05%         |
| Purchase of Services | 194,119             | 200,115             | 208,416             | 217,169             | 226,400             | 236,510             | 246,776             | 257,602             | 269,019             | 281,159             | 2,337,285            | 10.13%         |
| Other Charges/Expend | 26,518              | 14,393              | 14,720              | 14,517              | 14,698              | 14,624              | 14,787              | 14,434              | 14,583              | 14,655              | 157,929              | 0.68%          |
| Capital Outlay       | 69,500              | 69,500              | 69,500              | 69,500              | 69,500              | 99,500              | 69,500              | 69,500              | 69,500              | 69,500              | 725,000              | 3.14%          |
| <b>Total:</b>        | <b>\$ 1,810,530</b> | <b>\$ 1,891,242</b> | <b>\$ 1,992,167</b> | <b>\$ 2,098,860</b> | <b>\$ 2,212,681</b> | <b>\$ 2,363,849</b> | <b>\$ 2,462,629</b> | <b>\$ 2,599,210</b> | <b>\$ 2,745,221</b> | <b>\$ 2,900,852</b> | <b>\$ 23,077,241</b> | <b>100.00%</b> |

|                                                   |    |        |    |        |    |        |    |        |    |        |    |        |    |        | Annual Spending/Parcel |          |    |        |    |        |    |        |    |        |
|---------------------------------------------------|----|--------|----|--------|----|--------|----|--------|----|--------|----|--------|----|--------|------------------------|----------|----|--------|----|--------|----|--------|----|--------|
|                                                   |    |        |    |        |    |        |    |        |    |        |    |        |    |        | 10 Yr Ave              | 3 Yr Ave |    |        |    |        |    |        |    |        |
| Estimated Spending Per FY 02 Single Family Parcel | \$ | 290.60 | \$ | 303.56 | \$ | 319.76 | \$ | 336.88 | \$ | 355.15 | \$ | 379.42 | \$ | 395.27 | \$                     | 417.19   | \$ | 440.63 | \$ | 465.61 | \$ | 370.41 | \$ | 441.14 |
| Estimated Spending Per FY 02 Total Parcels        | \$ | 261.71 | \$ | 273.38 | \$ | 287.97 | \$ | 303.39 | \$ | 319.84 | \$ | 341.70 | \$ | 355.97 | \$                     | 375.72   | \$ | 396.82 | \$ | 419.32 | \$ | 333.58 | \$ | 397.29 |

| Change from Prior Year |        |         |       |        |       |         |         |        |       |       | Annual % Change |          |
|------------------------|--------|---------|-------|--------|-------|---------|---------|--------|-------|-------|-----------------|----------|
|                        |        |         |       |        |       |         |         |        |       |       | 10 Yr Ave       | 3 Yr Ave |
| Personal Services      | 5.68%  | 5.71%   | 5.74% | 5.77%  | 5.81% | 5.84%   | 5.88%   | 5.92%  | 5.96% | 6.00% | 5.83%           | 5.96%    |
| Purchase of Services   | 7.64%  | 3.09%   | 4.15% | 4.20%  | 4.25% | 4.47%   | 4.34%   | 4.39%  | 4.43% | 4.51% | 4.55%           | 4.44%    |
| Other Charges/Expend   | -5.17% | -45.73% | 2.27% | -1.38% | 0.00% | 100.00% | 1.12%   | -2.39% | 0.00% | 0.00% | 4.87%           | -0.80%   |
| Capital Outlay         | 87.39% | 0.00%   | 0.00% | 0.00%  | 0.00% | 43.17%  | -30.15% | 0.00%  | 0.00% | 0.00% | 10.04%          | 0.00%    |
| Total:                 | 7.51%  | 4.46%   | 5.34% | 5.36%  | 5.42% | 6.83%   | 4.18%   | 5.55%  | 5.62% | 5.67% | 5.59%           | 5.61%    |

**South Hadley Fire Districts #1 and #2  
Combined 10 Year Non-Water Expenditures Estimate  
FY 2003 Through FY 2012**





## **WATER**

## **Water Services**

### **Current System Description**

Currently the Town of South Hadley is served by two publicly owned water utilities. The utilities are actually operated as departments within South Hadley Fire District No. 1 (FD#1) and South Hadley Fire District No. 2 (FD#2). Each department is an independent component of the Districts. They are governed by their own elected officials and supported by rates and fees levied to the users by the Districts. Both Districts service a small group of users living in the neighboring communities of Ludlow and Granby.

#### **District No. 1 Water Utility**

FD#1's water department is responsible for the management, operation and maintenance of the water system. A three-member board of water commissioners oversees the utility and provides direction to the water superintendent who manages the water department. This includes oversight of the operation and maintenance of the District's water treatment facility, and water distribution and storage systems. The primary responsibility of the department is to provide a potable, reliable water supply for residential and commercial uses as well as for fire protection.

The water system consists of two storage tanks. One is located at Alvord Street and the other is located at Industrial Drive. They have a combined finished water storage capacity of 3 million gallons. The District also owns and maintains a water treatment facility in Ludlow, 68 miles of water mains and 602 hydrants.

The District has undertaken a significant capital improvement program in recent years focusing on: well site exploration, the replacement of water mains, water tank improvements, computerized meter reading enhancements, and corrosion control efforts.

The District originally drew water from local sources. Since 1951, the District has purchased 100 percent of its water from the Massachusetts Water Resource Authority (MWRA). The District's only current source of water is the Quabbin Reservoir. This surface water is transported from the reservoir in Belchertown to South Hadley via a single transmission line known as the Chicopee Valley Aqueduct (CVA).

The CVA delivers MWRA water to FD#1 and to the neighboring communities of Wilbraham and Chicopee. The District pays an annual assessment to the MWRA for the water it uses. The District's payments to the MWRA have escalated from a former cost of \$45 per million gallons delivered (MGD) in the mid-90s to \$1,000 per MGD in FY 03. We believe that this trend of increasing water prices will continue in future years based on the escalating costs of the MWRA, new MWRA capital initiatives planned for the CVA and the loss of debt service assistance from the Commonwealth of Massachusetts to

the MWRA communities. The District is also subject to increased costs via any reduction in the annual use of MWRA water by the other two member communities of the CVA.

The MWRA is the District's only source of water. The District no longer operates any groundwater wells or owns any local sources of water supply. Over the past several years the District has focused on strategies to seek another source of water. This action was driven by a desire to reduce its dependency on the MWRA. To this end the District expended over \$683,000 from FY 1995 to FY 2002 in exploration for a local groundwater source. This effort has been consistent with the MWRA policy of encouraging member communities to develop local sources of supply in an effort to create redundant sources of supply.

During FY 2001, FD#1 water utility had 4,517 service connections using over 500 million gallons of water annually. Residential consumption represents about 70 percent of the annual usage; commercial and industrial consumption accounts for another 20 percent of the annual usage. Presently, over 9 percent of the District's consumption is "unaccounted for."

The water utility staff includes:

- 1 Superintendent (who is a 3D Grade Primary Certified Operator - Distribution System and a T2 Grade Operator – Treatment)
- 1 Foreman
- 4 Certified Operators (who are a combination of Grade 2D Certified Operators -- Distribution and one is a T1 Grade Operator – Treatment)
- 1 Office Manager
- 2 Billing Clerks (20 hours each)

The water maintenance and operations staff's principal responsibilities include:

- Monitoring the Ludlow treatment facility
- Monitoring the two water storage tanks
- Flushing of hydrants and mains
- Reading of 4,500 water meters
- Vehicle maintenance and repair (all done in-house)
- Repairing water mains (some in house installation of new mains)
- Responding to service calls from residents
- Repairing curb and water control boxes
- Reading and installing water meters
- Overseeing the cross-connection control program and
- Investigating all water bill complaints.

The office staff is responsible for:

- Preparation and mailing of quarterly water bills
- Recording of customer payments, refunds, abatements
- Assisting customers with billing issues/complaints
- Budget administration
- Accounts payable.

## **Finance**

The utility operates financially as a self-funding “enterprise.” In effect, the District’s water department recovers its total costs (direct, indirect, capital and debt service) through its water rates and various service and connection fees. The utility sends bills to its customers on a quarterly basis using a two-block rate structure. The rates also include a base quarterly charge of \$5 each quarter. The average customer in this District with usage of 12,000 cubic feet (CF) or 90,000 gallons of water currently pays \$348.80 per year.

Over the past 10 years, the water department has spent over \$15.168 million. More than \$5.2 million or 34.3 percent has been expended on capital projects and the debt service associated with capital outlay. Another \$5.18 million or 34.2 percent has been expended for payroll and employee benefits. The final 31.5 percent of the water department’s spending has been expended for supplies and services. More than \$2 million of this \$4.79 million (43%) was paid to the MWRRA for water purchases.

On a 10-year basis, water use has averaged about 555 million gallons per year. The District’s improvements to the distribution system have reduced the number and volume of leaks in the system. The average number of gallons pumped by the District during the last three years has averaged about 523 million gallons. These 32 million gallons, or 5.75 percent annual reduction, results in considerable savings when the MWRRA bills the District at \$1,000 per million gallons.

Our analysis indicated that the reduction is more likely related to users’ conservation. Leaks continue to result in additional costs to the ratepayers. While over-all consumption is down, the volume of water pumped but not billed has increased.

We have used the historical data of the department along with their current capital plan to model the District’s fiscal future. Our forecasting models indicate that this water department is expected to spend over \$20.3 million during the next 10 years. The models indicate less direct spending on capital outlay. Only about 20.3 percent of future spending is expected to go towards capital projects and debt service.

The cost of payroll and employee benefits is expected to become a larger portion of the water utility's annual spending plan. Our models assume no changes in personnel. We estimate that more than \$7.35 million will be expended on personnel services during the next 10 years. Spending over the next 10 years in this category is expected to be about 42 percent higher than the spending during the last 10 years.

The MWRRA water assessment is expected to continue to rise over the next 10 years. There are two MWRRA capital projects planned for the Chicopee Valley Aqueduct (CVA). The first project is the CVA Redundancy Project. This project will provide each of the CVA members with a second transmission pipeline system to provide a redundant source of supply. Should the Chicopee Valley Aqueduct become disabled, the District would have the ability to be supplied from the Nash Hill storage tanks via their particular pipeline. In addition to the redundant pipeline, the MWRRA will be potentially utilizing an increased level of primary disinfection. The costs of these two projects will increase the costs to the CVA, which will then be allocated to each community based upon flows/usage.

A second cause of the increased cost of water is the expected reduction of consumption by Wilbraham. This member community of the CVA is readily moving towards the development of a domestic well. With the new well on line, Wilbraham intends to reduce their use of MWRRA water by about 50 percent. This action will shift MWRRA costs away from Wilbraham to both Chicopee and South Hadley District No. 1.

The briefing document included in the appendix outlines and presents the cost estimate associated with this change. Based upon our interview with the Wilbraham Public Works Director, we have chosen to develop our cost estimates under the assumption that they will develop a new domestic well.

The actual cost of water purchased from the MWRRA in 2002 was \$476,345. Given the consumption changes expected in Wilbraham our forecasting models indicate that the payment to the MWRRA for water in 2012 is estimated to be \$734,676. Our forecasting model projects an increase in the cost of water of more than 54 percent over the next 10-year period.

The average cost for 1000 gallons of water produced by District No. 1 between 1993 and 2002 is \$2.76. This cost has averaged \$3.48 during the last three years. The current average cost of water is up 77.5 percent from a low of \$1.96 in 1993. We estimate the average cost of water to be \$4.06 per 1000 gallons during the next 10 years. Using current production figures, the annual cost to produce 1000 gallons of water is estimated to peak in 2004 with a high annual cost of \$5.42. The lowest annual cost for 1000 gallons is expected to be \$3.55 in 2007. Thus, we estimate the average cost of bulk water will increase in the District by about 47 percent during the next 10 years. This converts to a 125 percent increase in the cost of water over a 20-year period. This is an annual average cost increase of more than 6 percent per year.

In 1993 the District spent an average of \$284.21 per user. That spending indicator is expected to peak in FY 2004 at over \$600 per user. The average spending per FY 2002 user is expected to be about \$450 per year over the next 10 years.

The utility has accumulated a significant surplus balance in recent years. Surplus positions build when the water rates and fees collected during a year are in excess of the annual costs of operations, capital outlay and debt service. The water fund surplus balances as of June 30, 2002 are \$1,974,330. These various fund balances can be used to reduce future water rates or to fund capital improvements or a combination of the two options.

South Hadley Fire District #1  
Water Department Expenditure Analysis  
Ten Years Ending June 30, 2002

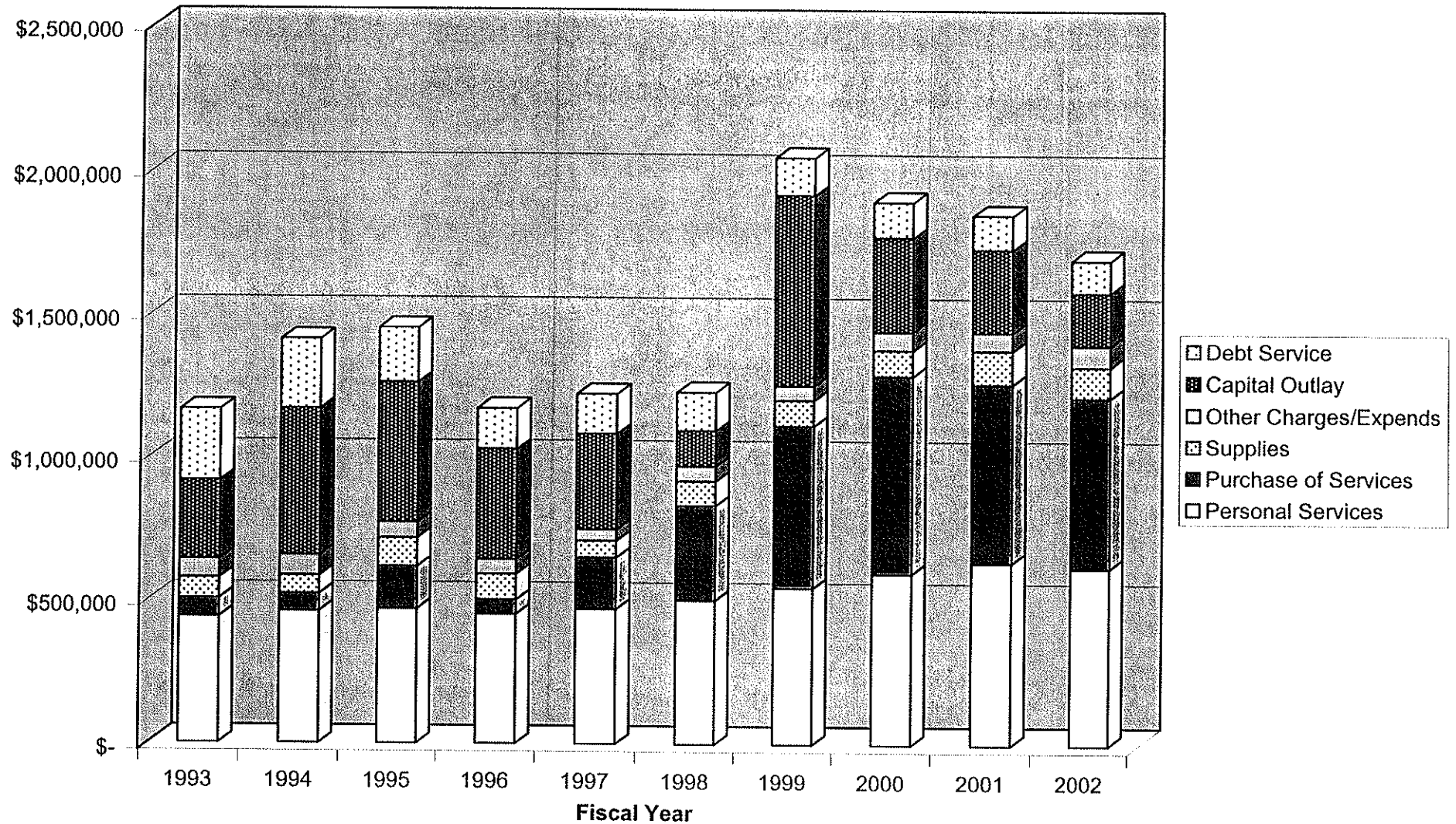
| Expenditure Type     | 1993                | 1994                | 1995                | 1996                | 1997                | 1998                | 1999                | 2000                | 2001                | 2002                | 10 Years             | % of Budget    |
|----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|----------------|
| Personal Services    | \$ 440,295          | \$ 460,474          | \$ 468,498          | \$ 450,680          | \$ 469,593          | \$ 500,718          | \$ 544,036          | \$ 595,461          | \$ 634,221          | \$ 615,695          | \$ 5,179,671         | 34.15%         |
| Purchase of Services | 63,923              | 60,310              | 148,197             | 50,686              | 180,429             | 330,458             | 571,447             | 694,602             | 628,374             | 600,029             | 3,328,456            | 21.94%         |
| Supplies             | 71,416              | 63,256              | 98,674              | 88,979              | 58,062              | 86,186              | 89,496              | 89,529              | 116,989             | 107,413             | 870,000              | 5.74%          |
| Other Charges/Expend | 65,273              | 71,699              | 54,356              | 51,061              | 39,069              | 52,752              | 50,011              | 65,092              | 63,489              | 74,930              | 587,732              | 3.87%          |
| Capital Outlay       | 274,481             | 516,176             | 493,488             | 387,550             | 338,697             | 127,746             | 666,594             | 331,194             | 292,950             | 187,858             | 3,616,733            | 23.84%         |
| Debt Service         | 253,005             | 242,010             | 190,980             | 144,340             | 139,090             | 133,840             | 128,590             | 123,400             | 118,090             | 112,840             | 1,586,185            | 10.46%         |
| <b>Total:</b>        | <b>\$ 1,168,394</b> | <b>\$ 1,413,925</b> | <b>\$ 1,454,193</b> | <b>\$ 1,173,296</b> | <b>\$ 1,224,940</b> | <b>\$ 1,231,700</b> | <b>\$ 2,050,174</b> | <b>\$ 1,899,278</b> | <b>\$ 1,864,113</b> | <b>\$ 1,698,765</b> | <b>\$ 15,168,777</b> | <b>100.00%</b> |

|                           |             |             |             |             |             |             |             |             |             |             |  | Annual Spending/User |             |
|---------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--|----------------------|-------------|
|                           |             |             |             |             |             |             |             |             |             |             |  | 10 Yr Ave            | 3 Yr Ave    |
| Total Water System Users: | 4,111       | 4,181       | 4,241       | 4,285       | 4,323       | 4,353       | 4,353       | 4,469       | 4,486       | 4,517       |  | \$ 360.92            | \$ 405.11   |
| FY Spending Per User:     | \$ 284.21   | \$ 338.18   | \$ 342.89   | \$ 273.81   | \$ 283.35   | \$ 282.95   | \$ 470.98   | \$ 425.94   | \$ 413.31   | \$ 376.08   |  |                      |             |
| Total Gallons Pumped:     | 595,531,620 | 553,075,000 | 576,428,920 | 582,273,820 | 558,692,760 | 553,320,340 | 558,449,180 | 554,823,800 | 513,194,300 | 500,932,660 |  | 554,672,240          | 522,983,587 |
| FY Cost per 1000 Gallon:  | \$ 1.96     | \$ 2.56     | \$ 2.52     | \$ 2.02     | \$ 2.19     | \$ 2.23     | \$ 3.67     | \$ 3.42     | \$ 3.61     | \$ 3.39     |  | \$ 2.76              | \$ 3.48     |

| Change from Prior Year |            |               |              |                |              |              |               |               |               |               |  | Annual % Change |               |
|------------------------|------------|---------------|--------------|----------------|--------------|--------------|---------------|---------------|---------------|---------------|--|-----------------|---------------|
|                        |            |               |              |                |              |              |               |               |               |               |  | 9 Yr Ave        | 3 Yr Ave      |
| Personal Services      | N/A        | 4.58%         | 1.74%        | -3.80%         | 4.20%        | 6.63%        | 8.65%         | 9.45%         | 6.51%         | -2.92%        |  | 3.89%           | 4.35%         |
| Purchase of Services   | N/A        | -5.65%        | 145.72%      | -65.80%        | 255.98%      | 83.15%       | 72.93%        | 21.55%        | -9.53%        | -4.51%        |  | 54.87%          | 2.50%         |
| Supplies               | N/A        | -11.43%       | 55.99%       | -9.83%         | -34.75%      | 48.44%       | 3.84%         | 0.04%         | 30.67%        | -8.19%        |  | 8.31%           | 7.51%         |
| Other Charges/Expend   | N/A        | 9.84%         | -24.19%      | -6.06%         | -23.49%      | 35.02%       | -5.20%        | 30.16%        | -2.46%        | 18.02%        |  | 3.52%           | 15.24%        |
| Capital Outlay         | N/A        | 88.06%        | -4.40%       | -21.47%        | -12.61%      | -62.28%      | 421.81%       | -50.32%       | -11.55%       | -35.87%       |  | 34.60%          | -32.58%       |
| Debt Service           | N/A        | -4.35%        | -21.09%      | -24.42%        | -3.64%       | -3.77%       | -3.92%        | -4.04%        | -4.30%        | -4.45%        |  | -8.22%          | -4.26%        |
| <b>Total:</b>          | <b>N/A</b> | <b>21.01%</b> | <b>2.85%</b> | <b>-19.32%</b> | <b>4.40%</b> | <b>0.55%</b> | <b>66.45%</b> | <b>-7.36%</b> | <b>-2.38%</b> | <b>-8.38%</b> |  | <b>6.43%</b>    | <b>-6.04%</b> |

Sources:  
South Hadley Fire District #1

**South Hadley Fire District #1  
10 Year Water Department Expenditures History  
FY 1993 Through FY 2002**



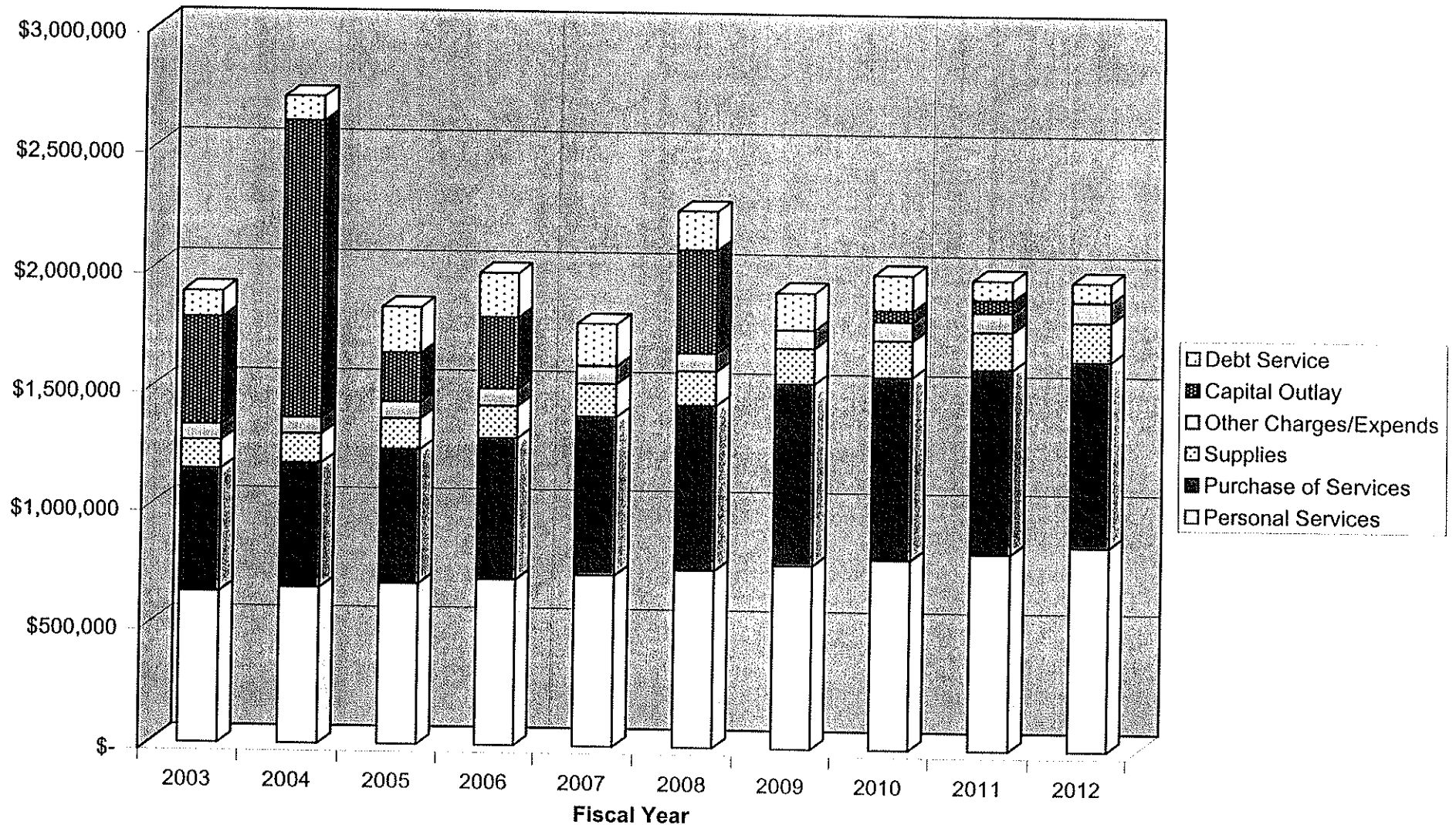
South Hadley Fire District #1  
Water Department Expenditures Estimate  
Ten Years Ending June 30, 2012

| Expenditure Type     | 2003                | 2004                | 2005                | 2006                | 2007                | 2008                | 2009                | 2010                | 2011                | 2012                | 10 Years             | % of Budget    |
|----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|----------------|
| Personal Services    | \$ 633,834          | \$ 653,017          | \$ 673,314          | \$ 694,802          | \$ 717,562          | \$ 741,680          | \$ 767,251          | \$ 794,373          | \$ 823,155          | \$ 853,710          | \$ 7,352,698         | 36.20%         |
| Purchase of Services | 516,224             | 523,376             | 565,123             | 596,311             | 667,985             | 695,953             | 766,721             | 771,470             | 777,310             | 783,573             | 6,664,046            | 32.81%         |
| Supplies             | 121,939             | 125,868             | 129,986             | 134,304             | 138,834             | 143,585             | 148,572             | 153,806             | 159,303             | 165,076             | 1,421,271            | 7.00%          |
| Other Charges/Expend | 66,931              | 68,522              | 70,175              | 71,893              | 73,677              | 75,530              | 77,456              | 79,456              | 81,535              | 83,694              | 748,868              | 3.69%          |
| Capital Outlay       | 453,500             | 1,240,500           | 207,500             | 302,500             | 2,500               | 432,500             | 2,500               | 47,500              | 52,500              | 2,500               | 2,744,000            | 13.51%         |
| Debt Service         | 107,590             | 102,340             | 192,090             | 184,573             | 177,020             | 159,815             | 152,960             | 146,075             | 81,500              | 79,250              | 1,383,213            | 6.81%          |
| <b>Total:</b>        | <b>\$ 1,900,017</b> | <b>\$ 2,713,623</b> | <b>\$ 1,838,188</b> | <b>\$ 1,984,382</b> | <b>\$ 1,777,577</b> | <b>\$ 2,249,064</b> | <b>\$ 1,915,460</b> | <b>\$ 1,992,681</b> | <b>\$ 1,975,302</b> | <b>\$ 1,967,802</b> | <b>\$ 20,314,096</b> | <b>100.00%</b> |

|                                |             |             |             |             |             |             |             |             |             |             |             | Annual Spending/User |             |
|--------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|----------------------|-------------|
|                                |             |             |             |             |             |             |             |             |             |             |             | 10 Yr Ave            | 3 Yr Ave    |
| 2002 Total Water System Users: | 4,517       | 4,517       | 4,517       | 4,517       | 4,517       | 4,517       | 4,517       | 4,517       | 4,517       | 4,517       | 4,517       | \$ 449.73            | \$ 438.03   |
| FY Spending Per 2002 Users:    | \$ 420.64   | \$ 600.76   | \$ 406.95   | \$ 439.31   | \$ 393.53   | \$ 497.91   | \$ 424.06   | \$ 441.15   | \$ 437.30   | \$ 435.64   |             |                      |             |
| 2002 Total Gallons Pumped:     | 500,932,660 | 500,932,660 | 500,932,660 | 500,932,660 | 500,932,660 | 500,932,660 | 500,932,660 | 500,932,660 | 500,932,660 | 500,932,660 | 500,932,660 | 500,932,660          | 500,932,660 |
| FY Cost per 1000 Gallon:       | \$ 3.79     | \$ 5.42     | \$ 3.67     | \$ 3.96     | \$ 3.55     | \$ 4.49     | \$ 3.82     | \$ 3.98     | \$ 3.94     | \$ 3.93     |             | \$ 4.06              | \$ 3.95     |

| Change from Prior Year |               |               |                |              |                |               |                |              |               |               |  | Annual % Change |              |
|------------------------|---------------|---------------|----------------|--------------|----------------|---------------|----------------|--------------|---------------|---------------|--|-----------------|--------------|
|                        |               |               |                |              |                |               |                |              |               |               |  | 10 Yr Ave       | 3 Yr Ave     |
| Personal Services      | 2.95%         | 3.03%         | 3.11%          | 3.19%        | 3.28%          | 3.36%         | 3.45%          | 3.54%        | 3.62%         | 3.71%         |  | 3.32%           | 3.62%        |
| Purchase of Services   | -13.97%       | 1.39%         | 7.98%          | 5.52%        | 12.02%         | 4.19%         | 10.17%         | 0.62%        | 0.76%         | 0.81%         |  | 2.95%           | 0.73%        |
| Supplies               | 13.52%        | 3.22%         | 3.27%          | 3.32%        | 3.37%          | 3.42%         | 3.47%          | 3.52%        | 3.57%         | 3.62%         |  | 4.43%           | 3.57%        |
| Other Charges/Expend   | -10.68%       | 2.38%         | 2.41%          | 2.45%        | 2.48%          | 2.52%         | 2.55%          | 2.58%        | 2.62%         | 2.65%         |  | 1.20%           | 2.62%        |
| Capital Outlay         | 141.41%       | 173.54%       | -83.27%        | 45.78%       | -99.17%        | 17200.00%     | -99.42%        | 1800.00%     | 10.53%        | -95.24%       |  | 1899.41%        | 571.76%      |
| Debt Service           | -4.65%        | -4.88%        | 87.70%         | -3.91%       | -4.09%         | -9.72%        | -4.29%         | -4.50%       | -44.21%       | -2.76%        |  | 0.47%           | -17.16%      |
| <b>Total:</b>          | <b>11.85%</b> | <b>42.82%</b> | <b>-32.26%</b> | <b>7.95%</b> | <b>-10.42%</b> | <b>26.52%</b> | <b>-14.83%</b> | <b>4.03%</b> | <b>-0.87%</b> | <b>-0.38%</b> |  | <b>3.44%</b>    | <b>0.93%</b> |

**South Hadley Fire District #1  
10 Year Water Department Expenditures Estimate  
FY 2003 Through FY 2012**



Prepared by Financial Advisory Associates, Inc.

Printed 5/14/2003



## **District No. 2's Water Utility**

FD#2's water utility is overseen by a three-member board of water commissioners that is responsible for the long range planning for the utility, approving annual budgets and setting rates. The water superintendent is responsible for the management, operation and maintenance of the water system. This includes oversight of the operation and maintenance of the District's groundwater well, and of the water distribution and storage systems. The department's objective is to provide a safe, pure and reliable water supply at the lowest possible cost.

The water system consists of two storage tanks; the Park Street tank was built in 1955 and the Skinner Lane tank was built in 1982. They have a total finished capacity of 1.75 million gallons. The distribution system runs by gravity and comprises 40 miles of water mains and 313 hydrants. The department conducts annual leak detection surveys and the staff repairs and rehabs the mains to minimize the loss of water. The Board of Water Commissioners has adopted a more ambitious capital improvement program for the next 5 to 10 years.

The District's groundwater source is the well at Dry Brook. It is a gravel-packed well 112 feet in depth. In 2002 the Dry Brook well pumped 166 million gallons (MG) as the sole source of supply for the residents of the District. Based upon preliminary testing, the Dry Brook well has been estimated to hold a total capacity of 3 million gallons per day (MGD) or possibly more. The actual final testing to determine the potential additional yield of the well is scheduled to be complete in the spring of 2003.

Presently, if something were to happen to the Dry Brook source of supply, FD#2 would have to secure water from FD#1. There are five (5) connections between FD#1 and FD#2. This system allows water to flow in either direction. Due to the elevation of the tanks, the process is suited only to emergency situations.

Located within this District is a site known as Hockanum Flats. This potential new well site was discovered in the water exploration studies conducted in recent years by FD#1. This new well site has been demonstrated to be a separate source providing water from a separate aquifer. If/when it is developed, which is a long-term process, it has the potential to provide a second significant source from a second independent aquifer. In future years it could be developed as a second and completely redundant local source.

The utility presently services 1,473 service connections using a total of about 165 MG of water annually. The system is 100 percent metered. Residential consumption represents 58 percent of the annual usage; commercial, industrial, agricultural and other consumption accounts for 33 percent of the annual usage; 9 percent is "unaccounted for."

The utility operates on a full cost recovery basis and recovers its total costs (direct, indirect, capital and debt service) through rates and fees. The utility sends bills to its customers on a quarterly basis using a two-block increasing rate structure. The average customer with usage of 12,000 CF or 90,000 gallons of water pays \$293 per year.

The water utility staff includes:

- 1 Superintendent (who is a D3 Grade Primary Certified Operator - Distribution System and a T2 Grade Operator – Treatment)
- 3 Certified Operators (a combination of Grade D2 and Grade D3 Certified Operators – Distribution and two T2 Grade Operators – Treatment)
- 1 Administrative Assistant (at 24 hours per week)

The water maintenance and operations staff's principal responsibilities include:

- Monitoring and maintaining the groundwater well
- Monitoring of the system via the SCADA system
- Monitoring the two water storage tanks
- Flushing of hydrants and mains
- Reading of 1,473 water meters
- Repairing water mains
- Responding to service calls from residents
- Repairing curb and water control boxes
- Reading and installing water meters
- Overseeing the cross-connection control program and
- Investigating all water bill complaints.

The administrative assistant is responsible for:

- Preparation and mailing of the water bills
- Recording of customer payments, refunds, abatements
- Assisting customers with billing issues/complaints
- Accounts payable

## **Finance**

The utility operates financially as a self-funding "enterprise." In effect, the District's water department recovers its total costs (direct, indirect, capital and debt service) through its water rates and various service and connection fees. The utility sends bills to its customers on a quarterly basis using a two-block rate structure. The average customer in this District with usage of 12,000 thousand cubic feet (CF) of water currently pays \$293 per year.

Over the past 10 years, the water department has spent over \$4.259 million. More than \$5.653 million or just over 15 percent has been expended on capital projects and the debt service associated with capital outlay. Another \$2.14 million or 50.2 percent has been expended for payroll and employee benefits. The final 34.7 percent of the water department's spending has been expended for supplies and services.

On a 10-year basis, water use has averaged about 185 million gallons per year. The District's improvements to the distribution system have considerably reduced the number and volume of leaks in the system. The average number of gallons pumped by the District during the last three years has averaged about 164 million gallons. This 21 million gallons (11.35 percent) annual reduction results in a considerable protection of the resource.

We have used the historical data of the department along with their current capital plan to model the District's fiscal future. Our forecasting models indicate that this water department is expected to spend almost \$6.5 million during the next 10 years. The models indicate they will utilize more direct spending on capital outlay. About 20.1 percent of future spending in the next 10 years is expected to go towards capital projects and debt service.

The cost of payroll and employee benefits is expected to become a larger portion of the water utility's annual spending plan. Our models assume no changes in personnel. We estimate that FD#2 will expend about \$3.335 million on water department personnel services during the next 10 years. Spending over the next 10 years in this category is expected to be about 56 percent higher than the actual spending on personnel services during the last 10 years.

In 1993 the District spent an average of \$248.62 per user. That spending indicator is expected to peak in FY 2004 at over \$742 per user. The average spending per FY 2002 user is expected to be about \$441 per year over the next 10 years. The increase over the next 10 years in the annual per user spending average is expected to be over 47.2 percent.

The users of the FD#2 water utility have not accumulated a significant surplus balance in recent years. The utility recovers its costs each year at the lowest possible rate and as such, this utility does recover the full cost but develops little or no surplus. This is consistent with its goal of full cost recovery and accountability to the ratepayers

The District has a fund balance (surplus) of \$97,000 as of June 30, 2002. This fund balance can be used to reduce future water rates or to fund capital improvements or a combination of the two options. During the first portion of FY 2003, the District sold a considerable portion of its land holdings to the Commonwealth of Massachusetts. Since the property sold was watershed land, within our analysis we have assumed that the proceeds from the sale will flow into the water utility's surplus account. We have assumed that the land sale generated some \$600,000 in cash for the water portion of the District.

The key issue facing FD#2's water utility is sources of supply for the future. There is an escalating risk stemming from their reliance on one source of supply for 100 percent of the water required by its customers. A single source of supply is troubling for management in light of the risk for the potential contamination of the District's only well. Management recognizes that an alternative source is necessary in order to provide redundancy of sources and to provide some level of decreased reliance on the existing resources.

**South Hadley Fire District #2**  
**Water Department Expenditure Analysis**  
**Ten Years Ending June 30, 2002**

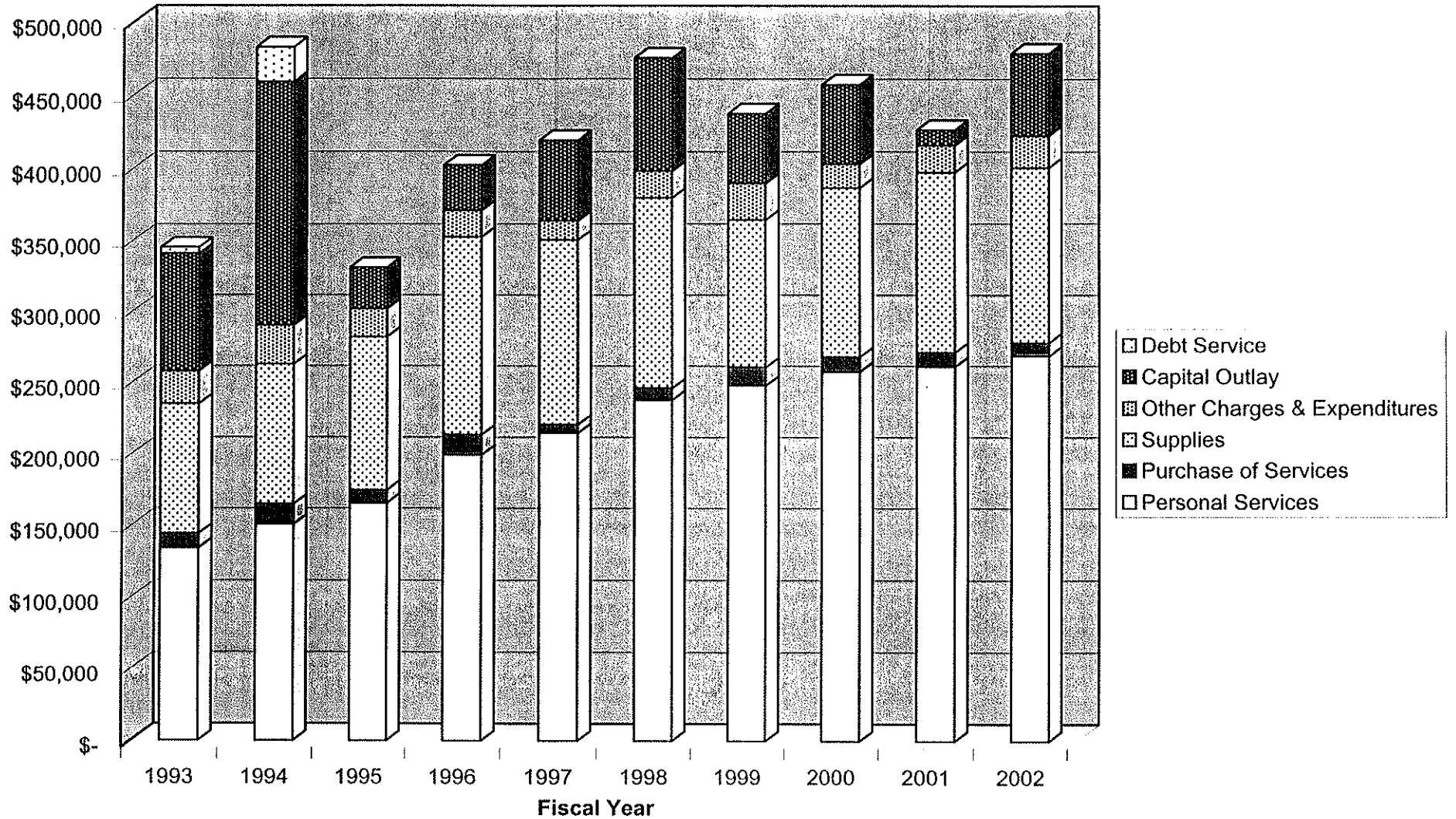
| Expenditure Type             | 1993              | 1994              | 1995              | 1996              | 1997              | 1998              | 1999              | 2000              | 2001              | 2002              | 10 Years            | % of Budget    |
|------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------|----------------|
| Personal Services            | 134,342           | 150,521           | 165,374           | 199,105           | 214,746           | 237,748           | 247,962           | 257,659           | 261,184           | 268,666           | 2,137,306           | 50.18%         |
| Purchase of Services         | 10,041            | 14,216            | 9,142             | 14,608            | 5,914             | 8,368             | 12,838            | 10,519            | 10,289            | 9,484             | 105,419             | 2.47%          |
| Supplies                     | 90,886            | 98,177            | 107,774           | 139,091           | 129,783           | 133,723           | 103,699           | 118,584           | 126,043           | 122,560           | 1,170,321           | 27.48%         |
| Other Charges & Expenditures | 22,940            | 27,430            | 19,779            | 18,204            | 13,325            | 18,434            | 25,436            | 16,548            | 18,529            | 21,961            | 202,586             | 4.76%          |
| Capital Outlay               | 83,012            | 169,364           | 29,207            | 31,505            | 55,792            | 77,583            | 47,917            | 54,629            | 10,645            | 56,430            | 616,084             | 14.46%         |
| Debt Service                 | 4,355             | 23,479            | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | 27,834              | 0.65%          |
| <b>Total:</b>                | <b>\$ 345,576</b> | <b>\$ 483,187</b> | <b>\$ 331,276</b> | <b>\$ 402,513</b> | <b>\$ 419,560</b> | <b>\$ 475,857</b> | <b>\$ 437,852</b> | <b>\$ 457,938</b> | <b>\$ 426,689</b> | <b>\$ 479,101</b> | <b>\$ 4,259,549</b> | <b>100.00%</b> |

|                                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |  | Annual Spending/User |             |
|----------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|--|----------------------|-------------|
|                                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |  | 10 Yr Ave            | 3 Yr Ave    |
| <b>Total Water System Users:</b> | 1,390            | 1,394            | 1,402            | 1,402            | 1,415            | 1,420            | 1,420            | 1,442            | 1,460            | 1,466            |  | \$ 299.52            | \$ 312.21   |
| <b>FY Spending Per User:</b>     | <b>\$ 248.62</b> | <b>\$ 346.62</b> | <b>\$ 236.29</b> | <b>\$ 287.10</b> | <b>\$ 296.51</b> | <b>\$ 335.11</b> | <b>\$ 308.35</b> | <b>\$ 317.57</b> | <b>\$ 292.25</b> | <b>\$ 326.81</b> |  |                      |             |
| <b>Total Gallons Pumped:</b>     | 198,717,000      | 219,872,000      | 219,223,000      | 194,784,000      | 180,553,380      | 175,410,620      | 173,286,000      | 161,966,000      | 164,499,000      | 164,335,000      |  | 185,264,600          | 163,600,000 |
| <b>FY Cost per 1000 Gallon:</b>  | <b>\$ 1.74</b>   | <b>\$ 2.20</b>   | <b>\$ 1.51</b>   | <b>\$ 2.07</b>   | <b>\$ 2.32</b>   | <b>\$ 2.71</b>   | <b>\$ 2.53</b>   | <b>\$ 2.83</b>   | <b>\$ 2.59</b>   | <b>\$ 2.92</b>   |  | \$ 2.34              | \$ 2.78     |

| Change from Prior Year     |            |               |                |               |              |               |               |              |               |               |  | Annual % Change |              |
|----------------------------|------------|---------------|----------------|---------------|--------------|---------------|---------------|--------------|---------------|---------------|--|-----------------|--------------|
|                            |            |               |                |               |              |               |               |              |               |               |  | 9 Yr Ave        | 3 Yr Ave     |
| Personal Services          | N/A        | 12.04%        | 9.87%          | 20.40%        | 7.86%        | 10.71%        | 4.30%         | 3.91%        | 1.37%         | 2.86%         |  | 8.15%           | 2.71%        |
| Purchase of Services       | N/A        | 41.57%        | -35.69%        | 59.80%        | -59.52%      | 41.51%        | 53.41%        | -18.07%      | -2.19%        | -7.82%        |  | 8.11%           | -9.36%       |
| Supplies                   | N/A        | 8.02%         | 9.78%          | 29.06%        | -6.69%       | 3.04%         | -22.45%       | 14.35%       | 6.29%         | -2.76%        |  | 4.29%           | 5.96%        |
| Other Charges/Expenditures | N/A        | 19.57%        | -27.89%        | -7.96%        | -26.80%      | 38.34%        | 37.98%        | -34.94%      | 11.97%        | 18.52%        |  | 3.20%           | -1.48%       |
| Capital Outlay             | N/A        | 104.02%       | -82.76%        | 7.87%         | 77.09%       | 39.06%        | -38.24%       | 14.01%       | -80.51%       | 430.09%       |  | 52.29%          | 121.20%      |
| Debt Service               | N/A        | 439.08%       | -100.00%       | 0.00%         | 0.00%        | 0.00%         | 0.00%         | 0.00%        | 0.00%         | 0.00%         |  | N/A             | N/A          |
| <b>Total:</b>              | <b>N/A</b> | <b>39.82%</b> | <b>-31.44%</b> | <b>21.50%</b> | <b>4.24%</b> | <b>13.42%</b> | <b>-7.99%</b> | <b>4.59%</b> | <b>-6.82%</b> | <b>12.28%</b> |  | <b>5.51%</b>    | <b>3.35%</b> |

**Sources:**  
South Hadley Fire District #2

**South Hadley Fire District #2**  
**10 Year Water Department Expenditures History**  
**FY 1993 Through FY 2002**



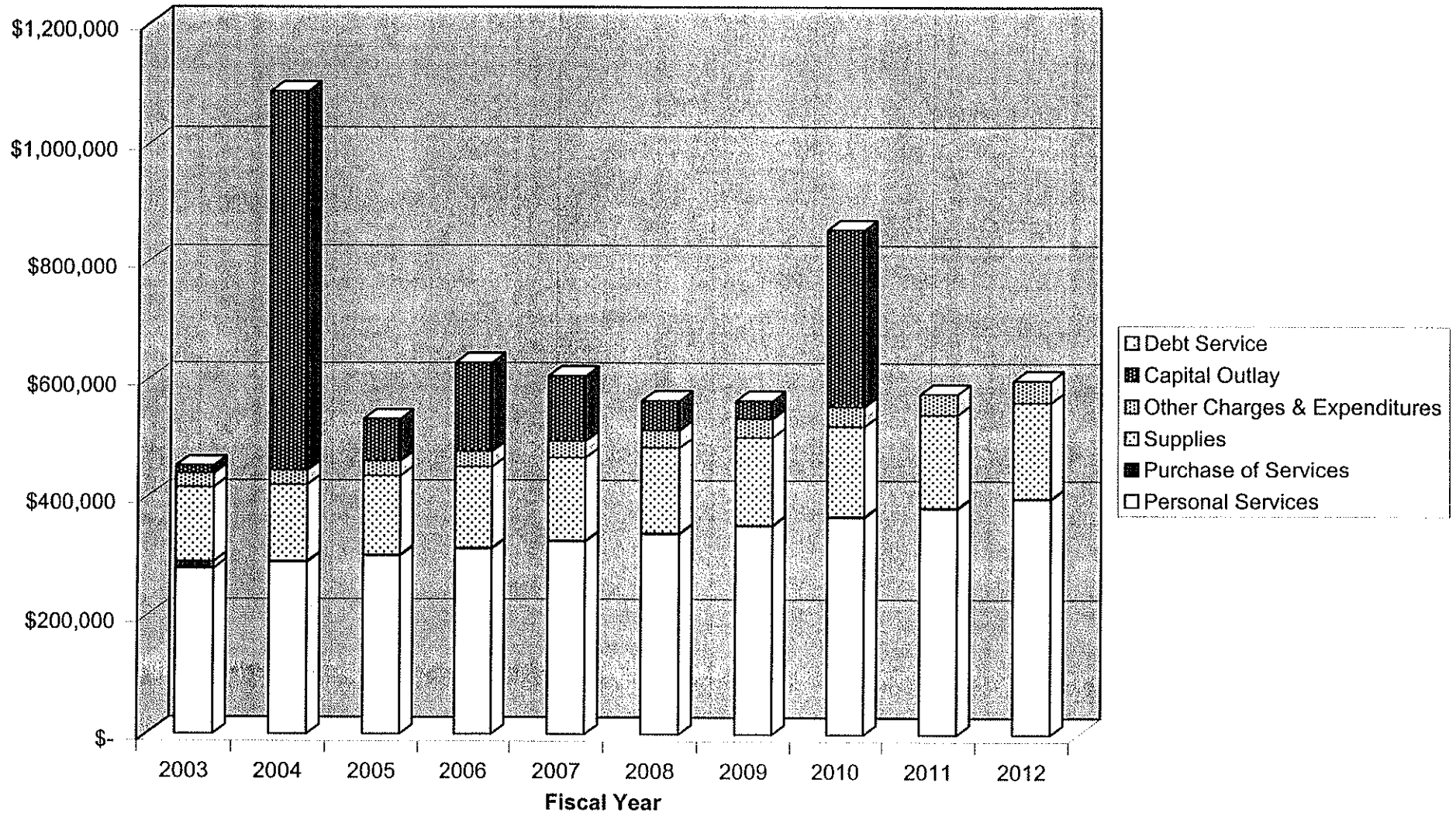
**South Hadley Fire District #2  
Water Department Expenditures Estimate  
Ten Years Ending June 30, 2002**

| Expenditure Type             | 2003              | 2004                | 2005              | 2006              | 2007              | 2008              | 2009              | 2010              | 2011              | 2012              | 10 Years            | % of Budget    |
|------------------------------|-------------------|---------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------|----------------|
| Personal Services            | 278,731           | 289,299             | 300,403           | 312,075           | 324,354           | 337,279           | 350,892           | 365,240           | 380,370           | 396,337           | 3,334,981           | 51.56%         |
| Purchase of Services         | 11,800            | 1,800               | 1,800             | 1,800             | 1,800             | 1,800             | 1,800             | 1,800             | 1,800             | 1,800             | 28,000              | 0.43%          |
| Supplies                     | 125,638           | 129,407             | 133,289           | 137,288           | 141,407           | 145,649           | 150,018           | 154,519           | 159,154           | 163,929           | 1,440,299           | 22.27%         |
| Other Charges & Expenditures | 23,126            | 24,352              | 25,643            | 27,002            | 28,434            | 29,941            | 31,529            | 33,200            | 34,960            | 36,814            | 295,000             | 4.56%          |
| Capital Outlay               | 14,000            | 643,000             | 72,500            | 150,000           | 110,000           | 50,000            | 30,000            | 300,000           | -                 | -                 | 1,369,500           | 21.17%         |
| Debt Service                 | -                 | -                   | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                   | 0.00%          |
| <b>Total:</b>                | <b>\$ 453,295</b> | <b>\$ 1,087,858</b> | <b>\$ 533,635</b> | <b>\$ 628,165</b> | <b>\$ 605,995</b> | <b>\$ 564,669</b> | <b>\$ 564,239</b> | <b>\$ 854,759</b> | <b>\$ 576,285</b> | <b>\$ 598,880</b> | <b>\$ 6,467,780</b> | <b>100.00%</b> |

|                                |             |             |             |             |             |             |             |             |             |             | Annual Spending/User |             |
|--------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|----------------------|-------------|
|                                |             |             |             |             |             |             |             |             |             |             | 10 Yr Ave            | 3 Yr Ave    |
| 2002 Total Water System Users: | 1,466       | 1,466       | 1,466       | 1,466       | 1,466       | 1,466       | 1,466       | 1,466       | 1,466       | 1,466       |                      |             |
| FY Spending Per 2002 Users: \$ | 309.21      | \$ 742.06   | \$ 364.01   | \$ 428.49   | \$ 413.37   | \$ 385.18   | \$ 384.88   | \$ 583.06   | \$ 393.10   | \$ 408.51   | \$ 441.19            | \$ 461.56   |
| 2002 Total Gallons Pumped:     | 164,335,000 | 164,335,000 | 164,335,000 | 164,335,000 | 164,335,000 | 164,335,000 | 164,335,000 | 164,335,000 | 164,335,000 | 164,335,000 | 164,335,000          | 164,335,000 |
| FY Cost per 1000 Gallon: \$    | 2.76        | \$ 6.62     | \$ 3.25     | \$ 3.82     | \$ 3.69     | \$ 3.44     | \$ 3.43     | \$ 5.20     | \$ 3.51     | \$ 3.64     | \$ 3.94              | \$ 4.12     |

|                               |               |                |                |               |               |               |               |               |                |              | Annual % Change |              |
|-------------------------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|---------------|----------------|--------------|-----------------|--------------|
|                               |               |                |                |               |               |               |               |               |                |              | 10 Yr Ave       | 3 Yr Ave     |
| <b>Change from Prior Year</b> |               |                |                |               |               |               |               |               |                |              |                 |              |
| Personal Services             | 3.75%         | 3.79%          | 3.84%          | 3.89%         | 3.93%         | 3.98%         | 4.04%         | 4.09%         | 4.14%          | 4.20%        | 3.96%           | 4.14%        |
| Purchase of Services          | 24.42%        | -84.75%        | 0.00%          | 0.00%         | 0.00%         | 0.00%         | 0.00%         | 0.00%         | 0.00%          | 0.00%        | -6.03%          | 0.00%        |
| Supplies                      | 2.51%         | 3.00%          | 3.00%          | 3.00%         | 3.00%         | 3.00%         | 3.00%         | 3.00%         | 3.00%          | 3.00%        | 2.95%           | 3.00%        |
| Other Charges/Expend          | 5.30%         | 5.30%          | 5.30%          | 5.30%         | 5.30%         | 5.30%         | 5.30%         | 5.30%         | 5.30%          | 5.30%        | 5.30%           | 5.30%        |
| Capital Outlay                | -75.19%       | 4492.86%       | -88.72%        | 106.90%       | -26.67%       | -54.55%       | -40.00%       | 900.00%       | -100.00%       | 0.00%        | 511.46%         | 266.67%      |
| Debt Service                  | 0.00%         | 0.00%          | 0.00%          | 0.00%         | 0.00%         | 0.00%         | 0.00%         | 0.00%         | 0.00%          | 0.00%        | 0.00%           | 0.00%        |
| <b>Total:</b>                 | <b>-5.39%</b> | <b>139.99%</b> | <b>-50.95%</b> | <b>17.71%</b> | <b>-3.53%</b> | <b>-6.82%</b> | <b>-0.08%</b> | <b>51.49%</b> | <b>-32.58%</b> | <b>3.92%</b> | <b>11.38%</b>   | <b>7.61%</b> |

**South Hadley Fire District #2  
10 Year Water Department Expenditures Estimate  
FY 2003 Through FY 2012**



## Findings

We have found no compelling economic reasons to justify a merger of the two water functions of the South Hadley Fire Districts. This does not mean there are no good reasons for such a merger. We strongly believe that reduced use of MWRA water by District #1 will allow significant savings that can be used to finance the capital outlay necessary to create a single town-wide system. In fact we have found no compelling economic reason for not merging the two water departments.

Neither District has a long-term source of water to supply their demand should their current single sources of water become unavailable. The two South Hadley water utilities are similar in that they both rely on a single source of water with agreements between each other as a back-up source during an emergency situation. This is a more advantageous relationship for FD#1 because FD#2 can only obtain water from FD#1 in an emergency situation for a limited time as determined by the MWRA. FD#2 is only limited in its ability to provide water to FD#1 by the capacity of its well.

During the past 10 years, the two Districts have expended over \$19.425 million to provide water to some 5,983 customers located in three towns. The combined annual average of water consumed over the last 10 years was about 781 million gallons per year. Recent usage has averaged about 760 million gallons pumped per year.

Over the past three years, FD#1 has spent just over \$405 per user while FD#2 has expended about \$312 per user to provide them with water. Our models indicate that future spending within the Districts will become remarkably similar. Over the next 10 years, we estimate that the combined expenditures for water services in both Districts will exceed \$26.7 million.

The average spending per user estimated over the next 10 years based upon the Districts' 2002 user counts is expected to be remarkably similar. Users in FD#1 are expected to see average annual spending of about \$450 per user per year. Users in FD#2 can expect an annual spending level of \$441 per year. These estimated spending patterns are within two percent of each other. This spending level assumes no alternative sources of water are developed within either District. It also assumes no reduction or growth in the levels of personnel.

It is this equal level of per user spending coupled with virtually no reduction in the level of loss of supply risk that captures our attention. We believe that a merged water district creates a synergy that cannot be replicated by the two stand-alone Districts.

Neither District has much potential to achieve an alternative source of supply while delivering a competitively priced product if they continue to stand as independent systems. FD#1 has spent hundreds of thousands of dollars looking for a new water supply. The only source they found is located in FD#2. In FD#1, the average annual spending per user is expected to increase by about 25 percent over the next 10 years.

This increase does not include the pursuit and development of an alternative source of supply.

FD#2 is looking at an increase in their users' average annual spending of almost 50 percent during the next 10 years. Even with that increased level of spending, the District will continue to only own and operate a single well.

The citizens of South Hadley will be better served in the future if they use a single water utility business model. Our combined cost of spending during the next 10 years indicates that the users will experience similar costs if the merger moves forward.

Even if the newly merged single district operated as two separate status quo organizations, the merger would provide the two former individual systems with the dual sources of supply that the Districts separately will either never achieve or at best, can only achieve at enormous expense to their users. We believe that the merger will build the required water supply redundancy into the merged system at no additional cost to the users.

We have reviewed the analysis previously prepared by the Districts' engineers relative to merging the two systems. We agree with their findings that the two systems can become one. Our research with the MWRRA and the Town of Wellesley indicates that such a "blending" action is viable. We have identified twelve Massachusetts communities including the Towns of Wellesley and Northborough as examples of local municipal water producers using the MWRRA as an additional source of supply.

## **Recommendations**

We recommend merging the two water utilities into a single venture.

Given a merger, the newly formed District could reduce its CVA draw while increasing production from the existing well in District #2. The new District would then also have a reduced cost to the MWRA. The cost reduction could provide much of the financial resources necessary to allow the new single utility to acquire and develop a second domestic well on the Hockanum Flats site. At that point, there would be two domestic sources of water within South Hadley and in 2007 the MWRA relationship could be renewed to provide all of the users in South Hadley with an abundant third source of water in emergencies.

This potential organization with three sources of supply is viable and that it offers a vast improvement over the current and potentially future system of two single source providers indefinitely serving the future water needs of the citizens of South Hadley.

We have every reason to believe that the merger of these two water companies into one will positively impact the future quality of life in South Hadley. We further believe that the merger of these two water companies will also provide the future users with an economic advantage as economies of scale take hold. A five percent (5%) savings created within the water utilities via efficiency over the next 10 years results in an estimated savings to the ratepayers of more than \$1.3 million.

Considering the pending cost increases resulting from their reduced use of the CVA by Wilbraham which will result from the pending MWRA transmission redundancy project, and the pending MWRA ultraviolet treatment project, we believe that the Districts' previous engineering report makes an economic case for merging. There could continue to be staunch opponents to this recommendation until an independent consulting engineer develops and contrasts the costs of operating a conceptually designed single water utility to that of the future status quo water systems.

If our judgment is correct and such an effort is required, then we recommend that during FY 2004 the Districts jointly retain the services of an independent engineering firm to evaluate and recommend a future business strategy for the two Districts.

South Hadley Fire Districts #1 and #2  
Combined Water Departments Expenditures Analysis  
Ten Years Ending June 30, 2002

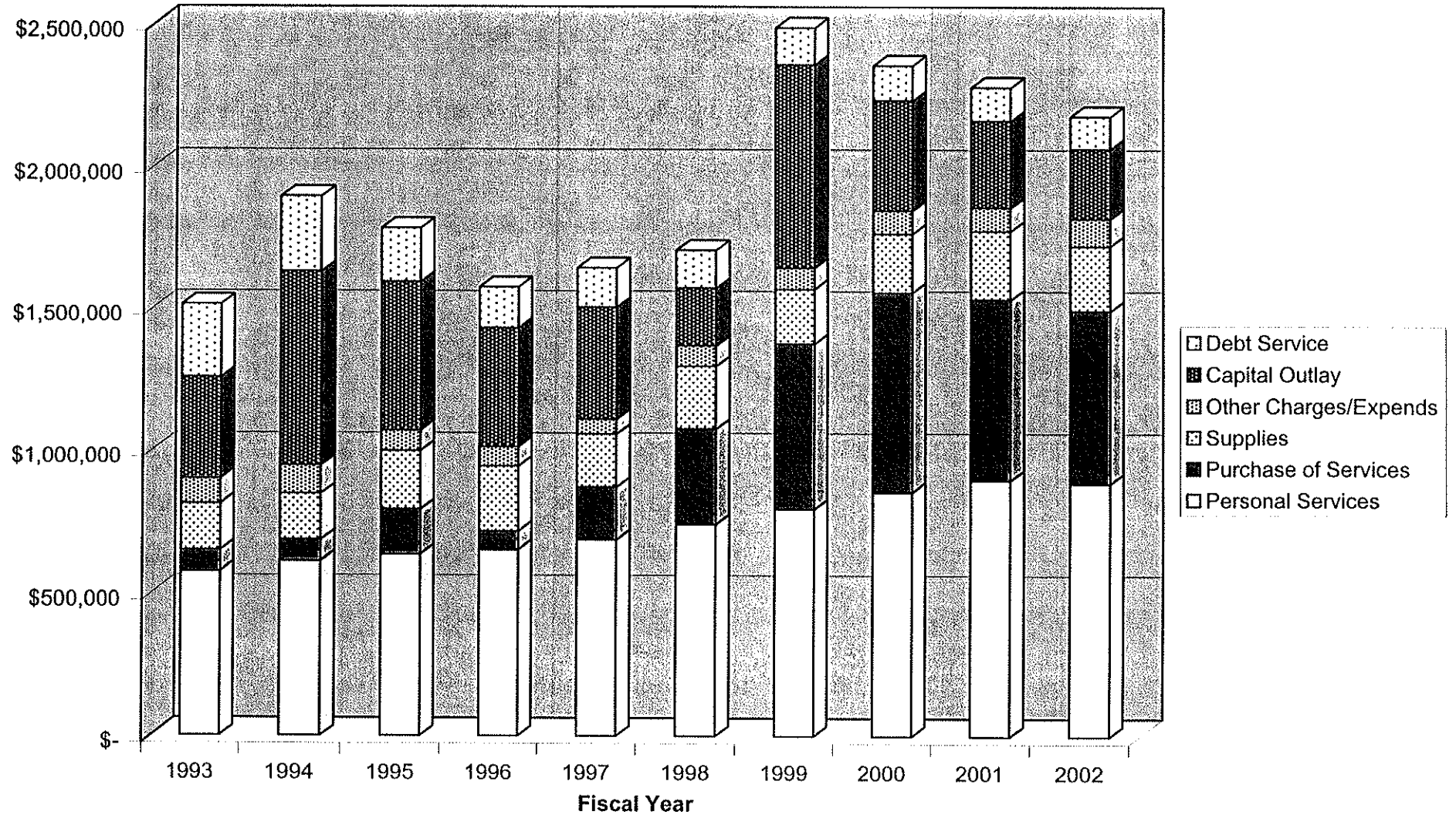
| Expenditure Type     | 1993                | 1994                | 1995                | 1996                | 1997                | 1998                | 1999                | 2000                | 2001                | 2002                | 10 Years             | % of Budget    |
|----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|----------------|
| Personal Services    | \$ 574,637          | \$ 610,995          | \$ 633,872          | \$ 649,785          | \$ 684,339          | \$ 738,466          | \$ 791,998          | \$ 853,120          | \$ 895,405          | \$ 884,361          | \$ 7,316,977         | 37.66%         |
| Purchase of Services | 73,965              | 74,526              | 157,339             | 65,294              | 186,343             | 338,826             | 584,285             | 705,121             | 638,663             | 609,513             | 3,433,874            | 17.67%         |
| Supplies             | 162,302             | 161,433             | 206,448             | 228,070             | 187,845             | 219,909             | 193,195             | 208,113             | 243,032             | 229,973             | 2,040,321            | 10.50%         |
| Other Charges/Expend | 88,213              | 99,129              | 74,135              | 69,265              | 52,394              | 71,186              | 75,447              | 81,640              | 82,018              | 96,891              | 790,318              | 4.07%          |
| Capital Outlay       | 357,492             | 685,540             | 522,695             | 419,055             | 394,489             | 205,329             | 714,511             | 385,823             | 303,595             | 244,288             | 4,232,818            | 21.79%         |
| Debt Service         | 257,360             | 265,489             | 190,980             | 144,340             | 139,090             | 133,840             | 128,590             | 123,400             | 118,090             | 112,840             | 1,614,019            | 8.31%          |
| <b>Total:</b>        | <b>\$ 1,513,970</b> | <b>\$ 1,897,112</b> | <b>\$ 1,785,469</b> | <b>\$ 1,575,809</b> | <b>\$ 1,644,500</b> | <b>\$ 1,707,557</b> | <b>\$ 2,488,026</b> | <b>\$ 2,357,216</b> | <b>\$ 2,280,802</b> | <b>\$ 2,177,866</b> | <b>\$ 19,428,327</b> | <b>100.00%</b> |

|                           |             |             |             |             |             |             |             |             |             |             |    | Annual Spending/User |             |
|---------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|----|----------------------|-------------|
|                           |             |             |             |             |             |             |             |             |             |             |    | 10 Yr Ave            | 3 Yr Ave    |
| Total Water System Users: | 5,501       | 5,575       | 5,643       | 5,687       | 5,738       | 5,773       | 5,773       | 5,901       | 5,946       | 5,983       |    |                      |             |
| FY Spending Per User:     | \$ 275.22   | \$ 340.29   | \$ 316.40   | \$ 277.09   | \$ 286.60   | \$ 295.78   | \$ 430.98   | \$ 399.46   | \$ 383.59   | \$ 364.01   | \$ | 336.94               | \$ 382.35   |
| Total Gallons Pumped:     | 794,248,620 | 815,403,620 | 814,754,620 | 790,315,620 | 776,085,000 | 770,942,240 | 768,817,620 | 757,497,620 | 760,030,620 | 759,866,620 |    | 780,796,220          | 759,131,620 |
| FY Cost per 1000 Gallon:  | \$ 1.91     | \$ 2.33     | \$ 2.19     | \$ 1.99     | \$ 2.12     | \$ 2.21     | \$ 3.24     | \$ 3.11     | \$ 3.00     | \$ 2.87     | \$ | 2.50                 | \$ 2.99     |

| Change from Prior Year |            |               |               |                |              |              |               |               |               |               |  | Annual % Change |               |
|------------------------|------------|---------------|---------------|----------------|--------------|--------------|---------------|---------------|---------------|---------------|--|-----------------|---------------|
|                        |            |               |               |                |              |              |               |               |               |               |  | 9 Yr Ave        | 3 Yr Ave      |
| Personal Services      | N/A        | 6.33%         | 3.74%         | 2.51%          | 5.32%        | 7.91%        | 7.25%         | 7.72%         | 4.96%         | -1.23%        |  | 4.94%           | 3.81%         |
| Purchase of Services   | N/A        | 0.76%         | 111.12%       | -58.60%        | 185.39%      | 81.83%       | 72.44%        | 20.68%        | -9.43%        | -4.56%        |  | 44.41%          | 2.23%         |
| Supplies               | N/A        | -0.54%        | 27.88%        | 10.47%         | -17.64%      | 17.07%       | -12.15%       | 7.72%         | 16.78%        | -5.37%        |  | 4.91%           | 6.38%         |
| Other Charges/Expend   | N/A        | 12.37%        | -25.21%       | -6.57%         | -24.36%      | 35.87%       | 5.98%         | 8.21%         | 0.46%         | 18.13%        |  | 2.77%           | 8.94%         |
| Capital Outlay         | N/A        | 91.76%        | -23.75%       | -19.83%        | -5.86%       | -47.95%      | 247.98%       | -46.00%       | -21.31%       | -19.53%       |  | 17.28%          | -28.95%       |
| Debt Service           | N/A        | 3.16%         | -28.06%       | -24.42%        | -3.64%       | -3.77%       | -3.92%        | -4.04%        | -4.30%        | -4.45%        |  | -8.16%          | -4.26%        |
| <b>Total:</b>          | <b>N/A</b> | <b>25.31%</b> | <b>-5.88%</b> | <b>-11.74%</b> | <b>4.36%</b> | <b>3.83%</b> | <b>45.71%</b> | <b>-5.26%</b> | <b>-3.24%</b> | <b>-4.51%</b> |  | <b>5.40%</b>    | <b>-4.34%</b> |

Sources:  
South Hadley Fire District #1  
South Hadley Fire District #2

**South Hadley Fire Districts #1 and #2  
Combined 10 Year Water Department Expenditures History  
FY 1993 Through FY 2002**



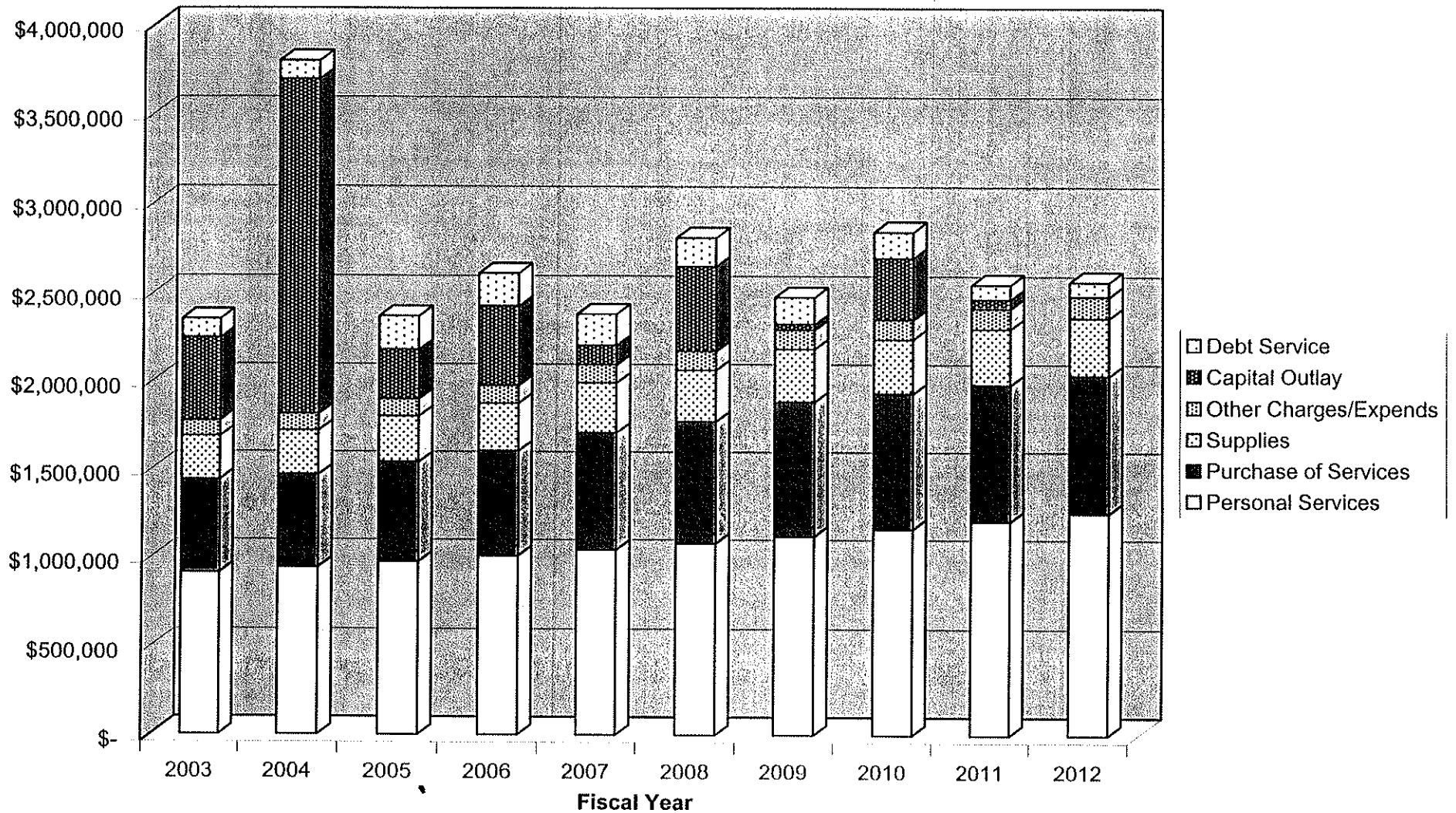
South Hadley Fire Districts #1 and #2  
Combined Water Departments Expenditures Estimate  
Ten Years Ending June 30, 2012

| Expenditure Type     | 2003                | 2004                | 2005                | 2006                | 2007                | 2008                | 2009                | 2010                | 2011                | 2012                | 10 Years             | % of Budget    |
|----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|----------------|
| Personal Services    | \$ 912,565          | \$ 942,316          | \$ 973,717          | \$ 1,006,877        | \$ 1,041,916        | \$ 1,078,959        | \$ 1,118,143        | \$ 1,159,613        | \$ 1,203,525        | \$ 1,250,047        | \$ 10,687,679        | 39.91%         |
| Purchase of Services | 528,024             | 525,176             | 566,923             | 598,111             | 669,785             | 697,753             | 768,521             | 773,270             | 779,110             | 785,373             | 6,692,046            | 24.99%         |
| Supplies             | 247,577             | 255,275             | 263,276             | 271,592             | 280,240             | 289,234             | 298,590             | 308,325             | 318,457             | 329,005             | 2,861,570            | 10.68%         |
| Other Charges/Expend | 90,056              | 92,874              | 95,818              | 98,895              | 102,110             | 105,472             | 108,985             | 112,657             | 116,495             | 120,507             | 1,043,868            | 3.90%          |
| Capital Outlay       | 467,500             | 1,883,500           | 280,000             | 452,500             | 112,500             | 482,500             | 32,500              | 347,500             | 52,500              | 2,500               | 4,113,500            | 15.36%         |
| Debt Service         | 107,590             | 102,340             | 192,090             | 184,573             | 177,020             | 159,815             | 152,960             | 146,075             | 81,500              | 79,250              | 1,383,213            | 5.16%          |
| <b>Total:</b>        | <b>\$ 2,353,312</b> | <b>\$ 3,801,481</b> | <b>\$ 2,371,823</b> | <b>\$ 2,612,548</b> | <b>\$ 2,383,571</b> | <b>\$ 2,813,733</b> | <b>\$ 2,479,699</b> | <b>\$ 2,847,439</b> | <b>\$ 2,551,587</b> | <b>\$ 2,566,682</b> | <b>\$ 26,781,876</b> | <b>100.00%</b> |

|                                |             |             |             |             |             |             |             |             |             |             | Annual Spending/User |             |
|--------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|----------------------|-------------|
|                                |             |             |             |             |             |             |             |             |             |             | 10 Yr Ave            | 3 Yr Ave    |
| 2002 Total Water System Users: | 5,983       | 5,983       | 5,983       | 5,983       | 5,983       | 5,983       | 5,983       | 5,983       | 5,983       | 5,983       | \$ 447.63            | \$ 443.80   |
| FY Spending Per 2002 Users:    | \$ 393.33   | \$ 635.38   | \$ 396.43   | \$ 436.66   | \$ 398.39   | \$ 470.29   | \$ 414.46   | \$ 475.92   | \$ 426.47   | \$ 429.00   |                      |             |
| 2002 Total Gallons Pumped:     | 665,267,660 | 665,267,660 | 665,267,660 | 665,267,660 | 665,267,660 | 665,267,660 | 665,267,660 | 665,267,660 | 665,267,660 | 665,267,660 | 665,267,660          | 665,267,660 |
| FY Cost per 1000 Gallon:       | \$ 3.54     | \$ 5.71     | \$ 3.57     | \$ 3.93     | \$ 3.58     | \$ 4.23     | \$ 3.73     | \$ 4.28     | \$ 3.84     | \$ 3.86     | \$ 4.03              | \$ 3.99     |

| Change from Prior Year |              |               |                |               |               |               |                |               |                |              | Annual % Change |              |
|------------------------|--------------|---------------|----------------|---------------|---------------|---------------|----------------|---------------|----------------|--------------|-----------------|--------------|
|                        |              |               |                |               |               |               |                |               |                |              | 10 Yr Ave       | 3 Yr Ave     |
| Personal Services      | 3.19%        | 3.26%         | 3.33%          | 3.41%         | 3.48%         | 3.56%         | 3.63%          | 3.71%         | 3.79%          | 3.87%        | 3.52%           | 3.79%        |
| Purchase of Services   | -13.37%      | -0.54%        | 7.95%          | 5.50%         | 11.98%        | 4.18%         | 10.14%         | 0.62%         | 0.76%          | 0.80%        | 2.80%           | 0.73%        |
| Supplies               | 7.65%        | 3.11%         | 3.13%          | 3.16%         | 3.18%         | 3.21%         | 3.23%          | 3.26%         | 3.29%          | 3.31%        | 3.65%           | 3.29%        |
| Other Charges/Expend   | -7.05%       | 3.13%         | 3.17%          | 3.21%         | 3.25%         | 3.29%         | 3.33%          | 3.37%         | 3.41%          | 3.44%        | 2.26%           | 3.41%        |
| Capital Outlay         | 91.37%       | 302.89%       | -85.13%        | 61.61%        | -75.14%       | 328.89%       | -93.26%        | 969.23%       | -84.89%        | -95.24%      | 132.03%         | 263.03%      |
| Debt Service           | -4.65%       | -4.88%        | 87.70%         | -3.91%        | -4.09%        | -9.72%        | -4.29%         | -4.50%        | -44.21%        | -2.76%       | 0.47%           | -17.16%      |
| <b>Total:</b>          | <b>8.06%</b> | <b>61.54%</b> | <b>-37.61%</b> | <b>10.15%</b> | <b>-8.76%</b> | <b>18.05%</b> | <b>-11.87%</b> | <b>14.83%</b> | <b>-10.39%</b> | <b>0.59%</b> | <b>4.46%</b>    | <b>1.68%</b> |

**South Hadley Fire Districts #1 and #2  
Combined 10 Year Water Department Expenditures Estimate  
FY 2003 Through FY 2012**





## ASSETS, LIABILITIES AND EQUITY

## Assets, Liabilities and Equity

Our contract with the Districts included a requirement to review the assets, liabilities and equity positions of both fire districts. We were further required to develop a solution to accommodate any equity inequities resulting from a merger.

As such, we have reviewed the semi-annual audited financial statements of both districts for the past 10 years. We have also reviewed the annual district reports. In addition, we have obtained the South Hadley Board of Assessors property cards for each parcel of real estate owned by the two districts.

Contained within this section is a 10-year balance sheet analysis for each of the districts. In addition, we have developed a schedule of real property holdings and valued them using the Town Assessor's opinion of value as of 12/31/2001. Finally, we have developed an equity position analysis for both of the water systems and both of the non-water portions of the two organizations.

With our analysis completed, it became clear to us that the equity positions of the taxpayers and ratepayers of South Hadley Fire District #2 (FD#2) are superior to those of the taxpayers and ratepayers of South Hadley Fire District #1 (FD#1). It is our opinion, that the variances between the two governments are not an impediment to a merger at this time.

Our research and analysis determined that the taxpayers in FD#2 have established an additional \$600,000 cash position since the end of FY 2002. This is the result of the sale of a substantial portion of the District's real estate holdings during FY 2003. We have established this fund balance as one belonging to the water portion of the government. Our real estate analysis also reflects the reduction of real estate assets held after the completed sale.

Our analysis determined water system participants in FD#1 are estimated to hold an equity position of approximately \$817 per user. This is contrasted to the equity position of about \$1,159 per user in FD#2. The net variance is about \$342.

Taxpayers in FD#2 are estimated to hold an equity position of approximately \$503 per parcel. The property owners in FD#1 are estimated to hold an equity position of about \$304 per parcel. The net variance is about \$199.

In both cases, there is no reason to believe that these equity matters cannot be resolved should the residents of South Hadley wish to move either or both of these individual district operations into a merged entity.

Our recommended solution to resolve the issue of equity in such a merger would be to provide a one-time property tax or water rate credit to the parties entering the relationship with an unfavorable equity imbalance.

Thus, if the water companies were merged under the equity structure that we have determined presently exists, each of the water ratepayers in FD#2 would be granted a one-time \$342 credit on their account at the start of the new district. This action would be accomplished by reducing the original combined surplus account of the new venture by the \$501,372 that would be necessary to equalize the users' equity. The \$501,372 reserve would then be used in lieu of first year revenue to operate the system. At the close of the first year, the users would have achieved an equal level of ownership equitably across all of the owners of the two former water systems.

The same approach would be used should the residents of South Hadley wish to merge the fire services and governance portions of the two districts. In this case, the taxpayers are then deemed to be the owners. Thus we would recommend that the taxpayers of the former FD#2 would each receive a one-time tax credit of \$199 for each parcel of property owned. (An equity adjustment could also be developed if the residents wished to base the credit on property values.)

The credit would be applied to the first year tax bill issued by the new government. In this case, \$333,325 would be reserved out of the new government's beginning cash surplus for the purpose of providing equity to taxpayers. At the end of the first fiscal year, all taxpayers living within the new fire district would be full and equal owners.

We recommend that this process (which is designed to achieve taxpayer and/or ratepayer equity within any proposed merger) be included within the language of any special legislation that is submitted to accomplish any merger(s). Such legislation would then make this unusual governmental start-up financing action lawful.

Thus, in our opinion, there are no equity or parity issues that would inhibit or prevent the residents of South Hadley from merging any or all of the services currently provided by the fire districts.

*Make Bond available  
Make reserve for new  
bond amount is also  
how much cash must  
the bond amount*

**South Hadley Fire District #1**  
**Balance Sheet Analysis**  
**Ten Years Ending June 30, 2002**

|                                                       | 1993                   | 1994                   | 1995                   | 1996                   | 1997                   | 1998                   | 1999                   | 2000                   | 2001                   | 2002                   |
|-------------------------------------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| <b>Assets</b>                                         |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |
| Cash - Unrestricted                                   | \$ 1,448,112.82        | \$ 1,027,325.26        | \$ 1,294,166.50        | \$ 2,051,466.19        | \$ 2,729,325.69        | \$ 3,409,262.68        | \$ 3,403,053.04        | \$ 3,613,345.95        | \$ 3,760,088.24        | \$ 4,241,906.64        |
| A/R - RE Taxes                                        | 50,912.41              | 71,080.27              | 587,396.45             | 614,638.69             | 627,866.56             | 83,828.38              | 36,010.79              | 29,839.96              | 49,397.62              | 39,118.42              |
| A/R - PP Taxes                                        | 6,450.75               | 2,133.99               | 1,548.03               | 3,558.49               | 3,063.81               | 2,971.53               | 2,582.85               | 2,931.60               | 3,066.44               | 3,201.37               |
| Rollback Taxes (Omitted)                              | (331.13)               | 3,963.46               | 3,834.54               | 3,834.54               | 2,544.03               | 2,544.03               | 2,378.36               | 2,378.36               | 2,544.03               | 1,962.14               |
| Water A/R                                             | 82,038.81              | 3,671.50               | 16,090.97              | 12,758.13              | 17,486.72              | 21,629.56              | 19,762.38              | 46,378.33              | 1,819.72               | 10,545.96              |
| Tax Title                                             | 10,645.25              | 10,645.25              | 37,304.38              | 35,657.70              | 16,328.24              | 8,512.81               | 46,560.34              | 52,873.04              | 52,517.78              | 47,366.48              |
| Tax Possessions                                       | 2,408.88               | 2,408.88               | 3,851.75               | 3,851.75               | 3,851.75               | 3,851.75               | 3,851.75               | 3,851.75               | 3,851.75               | 3,851.75               |
| Tax Title Redemption Due From Town                    | 156.97                 | 156.97                 | 156.97                 | 156.97                 | 156.97                 | 156.97                 | 156.97                 | 156.97                 | 156.97                 | 156.97                 |
| Fixed Assets                                          | -                      | -                      | -                      | -                      | -                      | -                      | -                      | -                      | -                      | -                      |
| Amounts to Be Provided for Employee Benefits          | -                      | -                      | -                      | -                      | -                      | -                      | -                      | -                      | -                      | -                      |
| Loans Authorized                                      | 110,000.00             | 110,000.00             | -                      | -                      | -                      | -                      | -                      | -                      | -                      | -                      |
| Amounts to be provided for Debt                       | 1,280,000.00           | 1,130,000.00           | 1,130,000.00           | 1,038,000.00           | 946,000.00             | 854,000.00             | 762,000.00             | 670,000.00             | 600,000.00             | 530,000.00             |
| <b>Total Assets:</b>                                  | <b>2,990,394.76</b>    | <b>2,361,385.58</b>    | <b>3,074,349.59</b>    | <b>3,763,922.46</b>    | <b>4,346,623.77</b>    | <b>4,386,757.71</b>    | <b>4,276,356.48</b>    | <b>4,421,755.96</b>    | <b>4,473,442.55</b>    | <b>4,878,109.73</b>    |
| <b>Liabilities</b>                                    |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |
| Tailings                                              | -                      | -                      | -                      | -                      | -                      | -                      | -                      | -                      | -                      | -                      |
| Employee W/H                                          | -                      | -                      | -                      | -                      | -                      | -                      | -                      | -                      | -                      | -                      |
| Accrued Compensated Absences                          | -                      | -                      | -                      | -                      | -                      | -                      | -                      | -                      | -                      | -                      |
| Accrued Employee Benefits                             | -                      | -                      | -                      | -                      | -                      | -                      | -                      | -                      | -                      | -                      |
| Allowance For Abatements & Exemptions (Overlay)       | 30,945.12              | 36,545.05              | 40,124.60              | 45,638.71              | 53,259.21              | 33,470.64              | 19,087.86              | 21,770.32              | 31,968.77              | 34,687.10              |
| Notes Payable                                         | -                      | -                      | -                      | -                      | -                      | -                      | -                      | -                      | -                      | -                      |
| Warrants Payable                                      | -                      | -                      | -                      | -                      | -                      | -                      | -                      | -                      | -                      | -                      |
| Deferred Revenue - RE/PP Taxes                        | -                      | -                      | 531,929.34             | 542,461.21             | 551,319.78             | -                      | -                      | -                      | -                      | -                      |
| Deferred Revenue - Tax Title                          | 13,369.13              | 15,677.02              | 41,440.34              | 43,405.87              | 25,037.74              | 20,427.11              | 50,569.06              | 56,881.76              | 56,526.50              | 51,375.20              |
| Deferred Revenue - Water A/R                          | 398.51                 | 3,671.50               | 16,090.97              | 12,758.13              | 17,486.72              | 21,629.56              | 19,762.38              | 46,378.33              | 1,819.72               | 10,545.96              |
| Loans Authorized and Unissued                         | 110,000.00             | 110,000.00             | -                      | -                      | -                      | -                      | -                      | -                      | -                      | -                      |
| Bonds Payable                                         | 1,280,000.00           | 1,130,000.00           | 1,130,000.00           | 1,038,000.00           | 946,000.00             | 854,000.00             | 762,000.00             | 670,000.00             | 600,000.00             | 530,000.00             |
| <b>Total Liabilities:</b>                             | <b>1,434,712.76</b>    | <b>1,295,893.57</b>    | <b>1,759,585.25</b>    | <b>1,682,263.92</b>    | <b>1,593,103.45</b>    | <b>929,527.31</b>      | <b>851,419.30</b>      | <b>795,030.41</b>      | <b>690,314.99</b>      | <b>626,608.26</b>      |
| <b>Fund Equity</b>                                    |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |
| Investment In General Fixed Assets                    | -                      | -                      | -                      | -                      | -                      | -                      | -                      | -                      | -                      | -                      |
| FB Reserved - Continued Appropriations (Water)        | 682,156.22             | 296,371.38             | 470,200.04             | 448,124.44             | 628,408.71             | 998,964.87             | 992,211.08             | 1,229,480.35           | 553,993.70             | 396,735.84             |
| FB Reserved - Continued Appropriations (General Fund) | 49,518.55              | 62,825.26              | 37,515.22              | 34,918.47              | 20,939.89              | 31,384.12              | 40,899.54              | 46,161.23              | 37,829.35              | 167,280.83             |
| FB Reserved - Expenditures (Water)                    | -                      | 10,000.00              | -                      | -                      | 268,000.00             | -                      | -                      | 30,000.00              | 100,000.00             | 335,000.00             |
| FB Reserved - Expenditures (General Fund)             | 338,259.00             | 60,000.00              | 60,000.00              | 65,000.00              | 130,000.00             | 220,000.00             | 298,000.00             | 358,000.00             | 405,000.00             | 419,000.00             |
| FB Designated - Gifts/Donations                       | -                      | -                      | -                      | 2,300.00               | 540.00                 | 847.00                 | 847.00                 | 847.00                 | 847.00                 | 862.00                 |
| FB Designated - Grants                                | -                      | -                      | -                      | 2,500.00               | -                      | 676.46                 | 3,693.50               | 5,628.36               | 2,337.54               | 2,977.41               |
| FB Designated - Medical Fund                          | 45,000.00              | 50,500.00              | 54,500.00              | 58,500.00              | 62,500.00              | 66,500.00              | 70,500.00              | 74,500.00              | 78,500.00              | 82,500.00              |
| FB Designated - Stabilization Fund                    | 3,074.79               | 8,265.97               | 13,265.97              | 18,774.92              | 26,010.34              | 32,717.32              | 39,617.98              | 47,122.26              | 55,222.18              | 61,730.35              |
| FB Designated - Insurance Fund                        | 15,719.12              | 17,370.44              | 19,370.44              | 21,370.44              | 23,370.44              | 25,370.44              | 27,370.44              | 29,370.44              | 31,370.44              | 33,370.44              |
| FB Designated - Pension Fund                          | 30,311.13              | 41,515.49              | 51,515.49              | 63,491.85              | 80,726.51              | 95,753.44              | 111,132.03             | 127,996.26             | 146,219.87             | 160,146.05             |
| FB Designated - Group Health Insurance Fund           | -                      | 28,258.90              | 10,509.16              | 50,065.20              | 37,821.96              | 29,561.11              | 19,839.49              | 9,763.11               | -                      | -                      |
| FB Designated - Impact Study Fund                     | 2,084.19               | 2,267.62               | 2,049.80               | 2,311.56               | 1,879.38               | 1,089.58               | 663.19                 | 433.33                 | 1,214.44               | 1,258.05               |
| FB Designated - Water Improvements Fund               | 12,200.00              | 6,200.00               | 35,000.00              | 117,800.00             | 45,000.00              | 42,600.00              | 12,800.00              | 7,200.00               | 2,000.00               | 7,200.00               |
| FB Designated - Water Dept Stabilization Fund         | 116,936.51             | 208,984.19             | 22,642.41              | 129,453.90             | 281,317.56             | 459,876.54             | 584,297.61             | 628,390.70             | 833,587.89             | 709,709.55             |
| FB Designated - Water Tanks Maintenance Fund          | -                      | 2,000.00               | 24,131.99              | 50,639.13              | 22,167.45              | 24,340.93              | 26,854.83              | 31,122.73              | 345,299.00             | 479,425.07             |
| Undesignated Fund Balance - Water Surplus             | 111,489.78             | 89,550.44              | 224,567.47             | 643,838.08             | 690,570.23             | 910,424.99             | 646,796.42             | 396,246.46             | 497,531.84             | 785,195.90             |
| Undesignated Fund Balance - General Fund Surplus      | 148,932.71             | 181,382.32             | 289,496.35             | 372,570.55             | 434,267.85             | 517,123.60             | 549,414.07             | 604,463.32             | 692,174.31             | 609,109.98             |
| <b>Total Fund Equity:</b>                             | <b>1,555,682.00</b>    | <b>1,065,492.01</b>    | <b>1,314,764.34</b>    | <b>2,081,658.54</b>    | <b>2,753,520.32</b>    | <b>3,457,230.40</b>    | <b>3,424,937.18</b>    | <b>3,626,725.55</b>    | <b>3,783,127.56</b>    | <b>4,251,501.47</b>    |
| <b>Total Liabilities and Fund Equity:</b>             | <b>\$ 2,990,394.76</b> | <b>\$ 2,361,385.58</b> | <b>\$ 3,074,349.59</b> | <b>\$ 3,763,922.46</b> | <b>\$ 4,346,623.77</b> | <b>\$ 4,386,757.71</b> | <b>\$ 4,276,356.48</b> | <b>\$ 4,421,755.96</b> | <b>\$ 4,473,442.55</b> | <b>\$ 4,878,109.73</b> |

**South Hadley Fire District #2**  
**Balance Sheet Analysis**  
**Ten Years Ending June 30, 2002**

|                                                       | 1993                 | 1994                 | 1995                 | 1996                 | 1997                   | 1998                   | 1999                   | 2000                   | 2001                   | 2002                   |
|-------------------------------------------------------|----------------------|----------------------|----------------------|----------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| <b>Assets</b>                                         |                      |                      |                      |                      |                        |                        |                        |                        |                        |                        |
| Cash - Unrestricted                                   | \$ 359,543.97        | \$ 304,991.04        | \$ 364,916.19        | \$ 371,222.57        | \$ 344,931.32          | \$ 268,978.65          | \$ 395,553.66          | \$ 485,709.56          | \$ 568,801.46          | \$ 648,031.60          |
| A/R - RE Taxes                                        | 27,928.12            | 11,948.05            | 22,500.28            | 40,807.99            | 18,892.08              | 21,327.51              | 58,258.48              | 241,639.61             | 51,861.84              | 38,769.31              |
| A/R - PP Taxes                                        | 1,200.80             | 755.86               | 4,349.91             | 5,548.44             | 1,403.00               | 1,471.69               | 1,844.48               | 1,441.61               | 1,319.63               | 1,263.11               |
| Rollback Taxes (Omitted)                              | -                    | -                    | -                    | -                    | -                      | -                      | -                      | -                      | -                      | -                      |
| Water A/R                                             | 4,927.20             | 3,711.53             | 6,080.69             | 5,638.71             | 19,792.11              | 9,107.32               | 6,540.92               | 7,794.23               | 11,907.99              | 7,651.05               |
| Tax Title                                             | 513.80               | 1,299.97             | 669.15               | 654.15               | 1,642.09               | 2,328.81               | 6,289.14               | 9,301.49               | 11,271.36              | 10,157.00              |
| Tax Possessions                                       | -                    | -                    | -                    | -                    | -                      | -                      | -                      | -                      | -                      | -                      |
| Tax Title Redemption Due From Town                    | 2,732.25             | -                    | -                    | -                    | -                      | -                      | -                      | -                      | -                      | -                      |
| Fixed Assets                                          | -                    | -                    | -                    | -                    | 2,213,482.12           | 2,214,358.43           | 2,214,358.43           | 2,214,358.43           | 2,214,358.43           | 2,214,358.43           |
| Amounts to Be Provided for Employee Benefits          | 29,136.08            | 38,610.43            | 39,215.23            | 62,424.48            | 88,905.85              | 123,241.28             | 152,281.74             | 182,304.73             | 186,745.60             | 195,373.40             |
| Loans Authorized                                      | 160,000.00           | 195,000.00           | 131,000.00           | 106,000.00           | 183,000.00             | 140,090.00             | 90,090.00              | 51,090.00              | 21,090.00              | -                      |
| Amounts to be provided for Debt                       | -                    | -                    | -                    | -                    | -                      | -                      | -                      | -                      | -                      | -                      |
| <b>Total Assets:</b>                                  | <b>585,982.22</b>    | <b>556,316.88</b>    | <b>568,731.45</b>    | <b>592,296.34</b>    | <b>2,872,048.57</b>    | <b>2,780,903.69</b>    | <b>2,925,216.85</b>    | <b>3,193,639.66</b>    | <b>3,068,976.45</b>    | <b>3,115,603.90</b>    |
| <b>Liabilities</b>                                    |                      |                      |                      |                      |                        |                        |                        |                        |                        |                        |
| Tailings                                              | 582.01               | 582.01               | 582.01               | 582.01               | 582.01                 | 633.01                 | 795.88                 | 977.01                 | 977.01                 | 977.01                 |
| Employee W/H                                          | 189.78               | (73.63)              | 203.75               | 0.82                 | (5,481.92)             | 53.65                  | (245.19)               | 3,729.92               | (379.81)               | (576.26)               |
| Accrued Compensated Absences                          | 29,136.08            | 38,610.43            | 21,588.93            | 49,163.93            | 58,692.68              | 70,839.81              | 74,714.39              | 70,046.13              | 88,245.58              | 96,460.65              |
| Accrued Employee Benefits                             | -                    | -                    | -                    | 12,346.17            | 30,213.16              | 52,401.47              | 77,567.35              | 111,554.20             | 98,500.02              | 98,912.75              |
| Allowance For Abatements & Exemptions (Overlay)       | 11,219.84            | 10,648.21            | 13,381.16            | 15,749.25            | 17,058.50              | 13,739.62              | 13,572.07              | 14,587.90              | 17,990.48              | 22,162.58              |
| Notes Payable                                         | 137,734.00           | 195,000.00           | 131,000.00           | 81,000.00            | 183,000.00             | 140,090.00             | 90,090.00              | 51,090.00              | 21,090.00              | -                      |
| Warrants Payable                                      | -                    | -                    | 46,545.78            | 51,063.35            | 74,307.79              | 30,579.44              | 41,139.03              | 59,952.08              | 58,224.23              | 28,391.49              |
| Deferred Revenue - RE/PP Taxes                        | -                    | -                    | -                    | -                    | -                      | -                      | -                      | -                      | 1,620.14               | -                      |
| Deferred Revenue - Tax Title                          | 513.80               | 1,299.97             | 669.15               | 654.15               | 1,642.09               | 2,328.81               | 6,289.14               | 9,301.49               | 11,271.36              | 10,157.00              |
| Deferred Revenue - Water A/R                          | 3,770.28             | 3,711.53             | 6,080.69             | 5,638.71             | 19,671.72              | 8,203.70               | 14,643.86              | 15,783.45              | 13,203.88              | 7,651.05               |
| Loans Authorized and Unissued                         | 45,000.00            | -                    | -                    | 25,000.00            | -                      | -                      | -                      | -                      | -                      | -                      |
| Bonds Payable                                         | -                    | -                    | -                    | -                    | -                      | -                      | -                      | -                      | -                      | -                      |
| <b>Total Liabilities:</b>                             | <b>228,145.79</b>    | <b>249,778.52</b>    | <b>220,051.47</b>    | <b>241,198.39</b>    | <b>379,686.03</b>      | <b>318,869.51</b>      | <b>318,566.53</b>      | <b>337,022.18</b>      | <b>310,742.89</b>      | <b>264,136.27</b>      |
| <b>Fund Equity</b>                                    |                      |                      |                      |                      |                        |                        |                        |                        |                        |                        |
| Investment in General Fixed Assets                    | -                    | -                    | -                    | -                    | 2,213,482.12           | 2,214,358.43           | 2,214,358.43           | 2,214,358.43           | 2,214,358.43           | 2,214,358.43           |
| FB Reserved - Continued Appropriations (Water)        | 67,499.46            | 22,885.11            | 18,825.08            | 66,973.58            | 65,919.61              | 45,689.57              | 54,322.78              | 45,893.52              | 93,773.22              | 61,704.31              |
| FB Reserved - Continued Appropriations (General Fund) | 12,902.55            | 56,750.00            | 15,000.00            | 36,139.20            | 36,614.20              | 15,625.00              | 16,000.00              | 29,383.35              | 54,728.25              | 50,018.88              |
| FB Reserved - Expenditures (Water)                    | -                    | -                    | 7,038.41             | -                    | -                      | -                      | -                      | -                      | -                      | -                      |
| FB Reserved - Expenditures (General Fund)             | -                    | -                    | 4,187.00             | -                    | -                      | -                      | -                      | -                      | -                      | -                      |
| FB Designated - Gifts/Donations                       | -                    | 1,050.00             | -                    | -                    | -                      | -                      | -                      | -                      | -                      | -                      |
| FB Designated - Grants                                | -                    | -                    | -                    | -                    | -                      | -                      | -                      | -                      | -                      | -                      |
| FB Designated - Medical Fund                          | -                    | -                    | -                    | -                    | -                      | -                      | -                      | -                      | 2,224.19               | -                      |
| FB Designated - Stabilization Fund                    | 86,773.70            | 59,227.81            | 81,085.65            | 64,357.38            | 15,927.08              | 33,999.32              | 59,501.24              | 87,052.12              | 115,937.08             | 142,210.46             |
| FB Designated - Insurance Fund                        | -                    | -                    | -                    | -                    | -                      | -                      | 28,898.33              | 898.33                 | 898.33                 | 898.33                 |
| FB Designated - Pension Fund                          | 29,093.12            | 35,142.91            | 42,257.64            | 49,829.87            | 57,785.04              | 64,791.73              | 72,353.17              | 76,863.34              | 85,676.76              | 91,778.02              |
| FB Designated - Group Health Insurance Fund           | -                    | 4,001.00             | 2,368.87             | 4,151.86             | 828.98                 | 348.76                 | -                      | -                      | -                      | -                      |
| FB Designated - Impact Study Fund                     | -                    | -                    | -                    | -                    | -                      | -                      | -                      | -                      | -                      | -                      |
| FB Designated - Water Improvements Fund               | 6,255.43             | 4,216.77             | 5,478.51             | 6,791.26             | 3,690.14               | 3,208.79               | 3,377.60               | 6,677.33               | 3,868.83               | 7,998.58               |
| FB Designated - Water Dept Stabilization Fund         | -                    | -                    | -                    | -                    | -                      | -                      | -                      | -                      | -                      | -                      |
| FB Designated - Water Tanks Maintenance Fund          | -                    | -                    | -                    | -                    | -                      | -                      | -                      | -                      | -                      | -                      |
| Undesignated Fund Balance - Water Surplus             | 24,847.41            | 30,248.90            | 52,563.23            | 45,289.23            | 8,706.36               | (1,900.68)             | (948.71)               | 15,584.83              | 44,186.21              | 89,142.44              |
| Undesignated Fund Balance - General Fund Surplus      | 130,664.76           | 93,017.86            | 119,875.59           | 77,565.57            | 89,409.00              | 85,913.26              | 158,787.48             | 379,906.23             | 142,582.26             | 193,358.18             |
| <b>Total Fund Equity:</b>                             | <b>357,836.43</b>    | <b>306,538.36</b>    | <b>348,679.98</b>    | <b>351,097.95</b>    | <b>2,492,362.54</b>    | <b>2,462,034.18</b>    | <b>2,606,650.32</b>    | <b>2,856,617.48</b>    | <b>2,758,233.56</b>    | <b>2,851,467.63</b>    |
| <b>Total Liabilities and Fund Equity:</b>             | <b>\$ 585,982.22</b> | <b>\$ 556,316.88</b> | <b>\$ 568,731.45</b> | <b>\$ 592,296.34</b> | <b>\$ 2,872,048.57</b> | <b>\$ 2,780,903.69</b> | <b>\$ 2,925,216.85</b> | <b>\$ 3,193,639.66</b> | <b>\$ 3,068,976.45</b> | <b>\$ 3,115,603.90</b> |

**Schedule of Real Property**  
**South Hadley Fire District #1 and South Hadley Fire District #2**  
**As of 12/31/2002**

| FAA<br>Schedule # | Assessor<br>Vision ID: | Assessor<br>Map ID | Property<br>Address  | Property<br>Description | Land<br>Size (Acre) | Land<br>Value | Building<br>Size (SF) | Building<br>Value | Total<br>Assessed Value |
|-------------------|------------------------|--------------------|----------------------|-------------------------|---------------------|---------------|-----------------------|-------------------|-------------------------|
| <b>SHFD #1</b>    |                        |                    |                      |                         |                     |               |                       |                   |                         |
| FD01-01           | 1038                   | 8/ 103/ / /        | Industrial Drive     | Water Tower             | 1.00                | \$ 28,000     |                       | \$ 1,500,000      | \$ 1,528,000            |
| FD01-02           | 2151                   | 19/ 86/ / /        | Newton Street        | Fire Station            | 0.86                | 78,300        | 16,334                | 428,700           | 507,000                 |
| FD01-03           | 4128                   | 31/ 31/ / /        | Granby Road          | Vacant Land             | 0.39                | 11,000        |                       | -                 | 11,000                  |
| FD01-04           | 4185                   | 31/ 88/ / /        | 438 Granby Road      | Water Department        | 31.00               | 114,100       | 5,716                 | 225,700           | 339,800                 |
| FD01-05           | 4197                   | 31/ 100/ / /       | Ridge Road           | Vacant Land             | 0.29                | 5,800         |                       | -                 | 5,800                   |
| FD01-06           | 5360                   | 42/ 11/ / /        | Alvord Street        | Water Tower             | 1.06                | 4,800         |                       | 333,000           | 337,800                 |
| FD01-07           | 5363                   | 42/ 12/A/ /        | Alvord Street        | Vacant Land             | 0.23                | 4,600         |                       | -                 | 4,600                   |
|                   |                        |                    |                      |                         |                     |               |                       |                   | \$ 2,734,000            |
| <b>SHFD #2</b>    |                        |                    |                      |                         |                     |               |                       |                   |                         |
| FD02-01           | 5930                   | 48/ 19/ / /        | Park Street          | Vacant Land             | 0.28                | \$ 7,400      |                       | \$ -              | \$ 7,400                |
| FD02-02           | 5993                   | 49/ 35/ / /        | 20 Woodbridge Street | Fire Station            | 3.50                | 118,800       | 7,992                 | 215,400           | 334,200                 |
| FD02-03           | 6286                   | 52/ 75/ / /        | Amherst Road         | Water Tower             | 1.40                | 56,300        |                       | 550,000           | 606,300                 |
| FD02-04           | 6546                   | 54/ 8/ / /         | Hadley Street        | Vacant Land             | 3.80                | 54,500        |                       |                   | 54,500                  |
| FD02-05           | 6548                   | 54/ 10/ / /        | Hadley Street        | Vacant Land/Shed        | 0.24                | 3,600         |                       | 1,600             | 5,200                   |
| FD02-06           | 6559                   | 54/ 21/ / /        | 444 Hadley Street    | Vacant Land/Shed        | 10.20               | 37,000        |                       | 800               | 37,800                  |
| FD02-08           | 6722                   | 58/ 10/ / /        | Pearl Street         | Vacant Land             | 56.67               | 79,300        |                       |                   | 79,300                  |
| FD02-10           | 6731                   | 58/ 19/ / /        | Amherst Road         | Vacant Land             | 29.80               | 89,000        |                       |                   | 89,000                  |
| FD02-11           | 6732                   | 58/ 20/ / /        | Amherst Road         | Vacant Land             | 35.00               | 96,900        |                       |                   | 96,900                  |
| FD02-14           | 6838                   | 59/ 3/ / /         | Hadley Street        | Vacant Land             | 37.00               | 100           |                       |                   | 100                     |
| FD02-18           | 6852                   | 59/ 17/ / /        | Hadley Street        | Vacant Land             | 0.46                | 2,000         |                       |                   | 2,000                   |
| FD02-31           | 6926                   | 63/ 4/ / /         | Hadley Street        | Vacant Land             | 23.80               | 18,300        |                       |                   | 18,300                  |
|                   |                        |                    |                      |                         |                     |               |                       |                   | \$ 1,331,000            |

Source: Town of South Hadley Board of Assessors Office

**South Hadley Fire District #1 and #2  
Individual Equity Analysis  
6/30/2002 (Adjusted)**

| <b>Service<br/>Function</b>                              | <b>Number of<br/>Participants</b> | <b>Asset<br/>Type</b> | <b>Asset<br/>Description</b>                  | <b>Asset<br/>Value</b> | <b>Value Per<br/>Participant</b> |
|----------------------------------------------------------|-----------------------------------|-----------------------|-----------------------------------------------|------------------------|----------------------------------|
| <b>Fire District # 1</b>                                 |                                   |                       |                                               |                        |                                  |
| Water                                                    | 4,517                             | Cash                  | Undesignated Fund Balance - Water Surplus     | \$ 785,196             | \$ 174                           |
| Water                                                    | 4,517                             | Cash                  | FB Designated - Water Tanks Maintenance Fund  | 479,425                | 106                              |
| Water                                                    | 4,517                             | Cash                  | FB Designated - Water Dept Stabilization Fund | 709,710                | 157                              |
| Water                                                    | 4,517                             | Cash                  | FB Designated - Water Improvements Fund       | 7,200                  | 2                                |
| Water                                                    | 4,517                             | A/R                   | Water A/R                                     | 10,546                 | 2                                |
| Water                                                    | 4,517                             | Real Estate           | Land/Water Tower - Industrial Drive           | 1,528,000              | 338                              |
| Water                                                    | 4,517                             | Real Estate           | Land/Water Tower - Alvord Street              | 337,800                | 75                               |
| Water                                                    | 4,517                             | Real Estate           | Land - Alvord Street                          | 4,600                  | 1                                |
| Water                                                    | 4,517                             | Real Estate           | Land/Buildings - Granby Road                  | 339,800                | 75                               |
| Water                                                    | 4,517                             | Real Estate           | Land - Granby Road                            | 11,000                 | 2                                |
| Water                                                    | 4,517                             | Real Estate           | Land - Ridge Road                             | 5,800                  | 1                                |
| <b>Total Water Assets:</b>                               |                                   |                       |                                               | <b>\$ 4,219,076</b>    | <b>\$ 934</b>                    |
| <b>Less:</b>                                             |                                   |                       |                                               |                        |                                  |
| Water                                                    | 4,517                             | Debt                  | Bonds Payable - Water Tank                    | \$ (530,000)           | \$ (117)                         |
| <b>Total Water Equity:</b>                               |                                   |                       |                                               | <b>\$ 3,689,076</b>    | <b>\$ 817</b>                    |
| <b>Fire District # 2</b>                                 |                                   |                       |                                               |                        |                                  |
| Water                                                    | 1,466                             | Cash                  | FB Designated - 2002 Sale of Real Estate      | \$ 600,000             | \$ 409                           |
| Water                                                    | 1,466                             | Cash                  | FB Designated - Water Improvements Fund       | 7,999                  | 5                                |
| Water                                                    | 1,466                             | Cash                  | FB Designated - Water Dept Stabilization Fund | -                      | -                                |
| Water                                                    | 1,466                             | Cash                  | FB Designated - Water Tanks Maintenance Fund  | -                      | -                                |
| Water                                                    | 1,466                             | Cash                  | Undesignated Fund Balance - Water Surplus     | 89,142                 | 61                               |
| Water                                                    | 1,466                             | A/R                   | Water A/R                                     | 7,651                  | 5                                |
| Water                                                    | 1,466                             | Real Estate           | Land/Water Tower - Amherst Road               | 606,300                | 414                              |
| Water                                                    | 1,466                             | Real Estate           | Land - Park Street                            | 7,400                  | 5                                |
| Water                                                    | 1,466                             | Real Estate           | Land - Hadley Street                          | 54,500                 | 37                               |
| Water                                                    | 1,466                             | Real Estate           | Land - Hadley Street                          | 3,600                  | 2                                |
| Water                                                    | 1,466                             | Real Estate           | Land - Hadley Street                          | 37,000                 | 25                               |
| Water                                                    | 1,466                             | Real Estate           | Land - Pearl Street                           | 79,300                 | 54                               |
| Water                                                    | 1,466                             | Real Estate           | Land - Amherst Road                           | 89,000                 | 61                               |
| Water                                                    | 1,466                             | Real Estate           | Land - Amherst Road                           | 96,900                 | 66                               |
| Water                                                    | 1,466                             | Real Estate           | Land - Hadley Street                          | 100                    | 0                                |
| Water                                                    | 1,466                             | Real Estate           | Land - Hadley Street                          | 2,000                  | 1                                |
| Water                                                    | 1,466                             | Real Estate           | Land - Hadley Street                          | 18,300                 | 12                               |
| <b>Total Water Equity:</b>                               |                                   |                       |                                               | <b>\$ 1,699,192</b>    | <b>\$ 1,159</b>                  |
| <b>FD #1 vs FD #2 Water System User Equity Variance:</b> |                                   |                       |                                               |                        | <b>\$ (342)</b>                  |

**South Hadley Fire District #1 and #2  
Individual Equity Analysis  
6/30/2002 (Adjusted)**

| <b>Service Function</b>                         | <b>Number of Participants</b> | <b>Asset Type</b> | <b>Asset Description</b>                         | <b>Asset Value</b>  | <b>Value Per Participant</b> |
|-------------------------------------------------|-------------------------------|-------------------|--------------------------------------------------|---------------------|------------------------------|
| <b>Fire District #1</b>                         |                               |                   |                                                  |                     |                              |
| Non-Water                                       | 5,243                         | Cash              | FB Designated - Medical Fund                     | \$ 82,500           | \$ 16                        |
| Non-Water                                       | 5,243                         | Cash              | FB Designated - Stabilization Fund               | 61,730              | 12                           |
| Non-Water                                       | 5,243                         | Cash              | FB Designated - Insurance Fund                   | 33,370              | 6                            |
| Non-Water                                       | 5,243                         | Cash              | FB Designated - Pension Fund                     | 160,146             | 31                           |
| Non-Water                                       | 5,243                         | Cash              | Undesignated Fund Balance - General Fund Surplus | 609,110             | 116                          |
| Non-Water                                       | 5,243                         | Cash              | Allowance For Abatements & Exemptions (Overlay)  | 34,687              | 7                            |
| Non-Water                                       | 5,243                         | A/R               | A/R - RE Taxes                                   | 39,118              | 7                            |
| Non-Water                                       | 5,243                         | A/R               | A/R - PP Taxes                                   | 3,201               | 1                            |
| Non-Water                                       | 5,243                         | A/R               | Rollback Taxes (Omitted)                         | 1,962               | 0                            |
| Non-Water                                       | 5,243                         | A/R               | Water A/R                                        | 10,546              | 2                            |
| Non-Water                                       | 5,243                         | A/R               | Tax Title                                        | 47,366              | 9                            |
| Non-Water                                       | 5,243                         | A/R               | Tax Possessions                                  | 3,852               | 1                            |
| Non-Water                                       | 5,243                         | A/R               | Tax Title Redemption Due From Town               | 157                 | 0                            |
| Non-Water                                       | 5,243                         | Real Estate       | Land/Buildings - Newton Street                   | 507,000             | 97                           |
| <b>Total Tax Equity:</b>                        |                               |                   |                                                  | <b>\$ 1,594,747</b> | <b>\$ 304</b>                |
| <b>Fire District #2</b>                         |                               |                   |                                                  |                     |                              |
| Non-Water                                       | 1,675                         | Cash              | Undesignated Fund Balance - General Fund Surplus | \$ 193,358          | \$ 115                       |
| Non-Water                                       | 1,675                         | Cash              | FB Designated - Medical Fund                     | -                   | -                            |
| Non-Water                                       | 1,675                         | Cash              | FB Designated - Stabilization Fund               | 142,210             | 85                           |
| Non-Water                                       | 1,675                         | Cash              | FB Designated - Insurance Fund                   | 898                 | 1                            |
| Non-Water                                       | 1,675                         | Cash              | FB Designated - Pension Fund                     | 91,778              | 55                           |
| Non-Water                                       | 1,675                         | Cash              | Allowance For Abatements & Exemptions (Overlay)  | 22,163              | 13                           |
| Non-Water                                       | 1,675                         | A/R               | A/R - RE Taxes                                   | 38,769              | 23                           |
| Non-Water                                       | 1,675                         | A/R               | A/R - PP Taxes                                   | 1,263               | 1                            |
| Non-Water                                       | 1,675                         | A/R               | Water A/R                                        | 7,651               | 5                            |
| Non-Water                                       | 1,675                         | A/R               | Tax Title                                        | 10,157              | 6                            |
| Non-Water                                       | 1,675                         | Real Estate       | Land/Buildings - Woodbridge Street               | 334,200             | 200                          |
| <b>Total Tax Equity:</b>                        |                               |                   |                                                  | <b>\$ 842,448</b>   | <b>\$ 503</b>                |
| <b>FD #1 vs FD #2 Taxpayer Equity Variance:</b> |                               |                   |                                                  |                     | <b>\$ (199)</b>              |

**Sources:** Town of South Hadley Board of Assessors - Real Estate Values (12/31/02)  
South Hadley Fire District #1 - Balance Sheet (June 30, 2002)  
South Hadley Fire District #2 - Balance Sheet (June 30, 2002 - FAA Adjusted for FY '03 Sale of RE)



## APPENDIX

## **Water Systems Analyst's Mid-Project Client Briefing Document**

FAA had scheduled a meeting with the clients for December 16, 2002. The purpose of this meeting was to enable FAA to disclose and discuss our preliminary findings. Of special note was our finding that the Town of Wilbraham was vigilantly moving towards the development of a domestic well.

This action is significant when forecasting the future cost of water purchased by the three Chicopee Valley Aqueduct (CVA) member communities.

Immediately following is the briefing document prepared by our water systems analyst for use at the December meeting. Unfortunately, the meeting was cancelled because of inclement weather. The time of the year and the various schedules of the members and staff associated with FAA and each of the four public multiple-member bodies involved in the project resulted in the permanent cancellation of this meeting.

Within the following document, our analyst presents alternative cost estimates for future water purchases from the MWRRA by District Number 1.

When preparing our estimate of future expenditures for Water District #1, we used the assumption identified as Scenario 2 within this document. This approach results in a higher estimated future cost of water for the status quo district. The higher cost is the derivative of Wilbraham reducing their CVA consumption. The Wilbraham consumption reduction shifts CVA costs onto the South Hadley Water District #1 and the City of Chicopee.

This client-briefing document also identifies the CVA cost savings that are expected to accrue to Wilbraham. FAA notes the considerable savings that Wilbraham plans to use to underwrite the debt service and operational costs associated with the development of their domestic well.

The Town of Wilbraham's current business strategy is the same one that FAA proposes in our recommendations for residents of the Town of South Hadley. This business model suggests that multiple sources of water supply are very important for a robust public water system.

Each of South Hadley's water districts presently has only one source of water supply. A merger instantly creates a single district with two sources of water supply. Like Wilbraham, the merger provides the new town-wide district with an opportunity to create savings through a shift in consumption from the MWRRA to a local supply.

In addition, we agree with Wilbraham's approach to apply the substantial savings resulting from reduced MWRRA water purchases towards funding the development of the local source of supply. We believe that much of the cost of a second local well could be covered with the savings resulting from minimized use of the MWRRA as a source of water supply. We believe that a merger enables the residents of South Hadley to achieve a town-wide water system with three distinct sources. We further believe that this enhanced public water system can be achieved with minimal financial stress.

## Water Utilities Background and Facts

### District No. 1's Water Utility

#### I. Utility Facts and Trends

- District's annual operational expenditures (non capital) have increased significantly in past decade.

|                    | <u>FY 93</u> | <u>FY 97</u> | <u>FY 02</u> | <u>% Change<br/>FY 93 to FY 02</u> |
|--------------------|--------------|--------------|--------------|------------------------------------|
| Salaries and Wages | \$320,023    | \$338,001    | \$363,345    | 13.5%                              |
| O * M              | 152,302      | 119,914      | 209,469      | 37.5%                              |
| Purchase of Water  | 27,307       | 24,982       | 476,345      | 1,644.4%                           |
| Indirects          | 122,497      | 133,817      | 252,350      | 106.0%                             |

**Total O & M                    \$622,129                    \$616,714                    \$1,301,509                    109%**

- Purchase of Water in FY 02 represented 37 percent of annual operating expenditures.
- District has undertaken significant capital improvement program over course of past decade funded by current year rates and/or prior year reserves/surplus; average capital expenditures of \$568,800 per year (over past 10 years).
- District has expended a total of \$610,000 between FY 95 and FY 02 in order to locate a local source of groundwater supply, in order to reduce dependence/reliance on MWRRA.
- District has significant fund balances as of June 30, 2002:

|                             |                    |
|-----------------------------|--------------------|
| Water Surplus               | \$ 785,196         |
| Water Stabilization         | 709,709            |
| Water Tank Maintenance Fund | 479,425            |
| <b>Total</b>                | <b>\$1,974,330</b> |

*Note: Total FY 02 Water Utility Expenditures (for O & M and all capital/debt) were \$1,698,765 so reserves of \$1.9 million represent more than 100% of annual full costs of utility.*

- Average annual payment for water services in District No. 1 for household using 12,000 Cubic Feet is \$348.80.

Based on 12,000 cubic feet at \$2.74 per CCF plus \$5.00 per quarter fee/\$20 annual fee. This results in an effective water rate of \$2.91 per CCF.

## II. Relationship with MWRA – Facts

### A. Development of Local Sources

- Both MWRA's *Enabling Act* and the MWRA's *Regulations for Continuation of Contract Water Supply* strongly encourage the development of local sources of supply that promotes conservation in the MWRA system (2/11/00 letter from MWRA and 11/12 meeting with MWRA official).
- MWRA states that South Hadley/District No. 1 may develop a local source, such as the Hockanum Flats Well and also continue as a contract customer of MWRA. MWRA indicates that neither the specific inclusion of District 1 as a Section 8(d) member of MWRA nor the District 1's historic reliance on the system as a contract customer precludes the District from developing and using local sources. MWRA also believes that if use of Hockanum Flats Well results in reductions of water purchased from the MWRA system, this is also allowable (2/11/00 letter from MWRA and 11/12/02 meeting with MWRA officials).

### B. Actions Required to Modify Relationship with MWRA

- If District 1 and District 2 join together it would require legislation to amend Section 8(d) to include the additional service area, this is considered a fairly straightforward action (2/11/00 letter from MWRA and 11/12/02 meeting with MWRA officials).
- Approvals under MWRA's Policy 10 should be "straight forward unless the merger will bring significant new demands onto the MWRA system. This policy and approval process would most likely only be used if MWRA water were transferred into the areas covered currently by District 2 (which appears unlikely) (November 22, 1999 letter from MWRA and 11/12/02 meeting with MWRA officials).

### C. Total Withdrawal for MWRA

- If District No. 1 totally withdrew from MWRA (*F44 is not recommending this*) the factual information is District 1 would have to pay a special charge for the proportional charge of debt service costs of the storage and treatment facilities constructed by MWRA or the district could enter into a negotiated "buy out" agreement with MWRA. Under the current contract the development and use of Hockanum Flats Wells is not an event that triggers imposition of additional charges, even if use of the local source reduces the volume of water purchased from MWRA's sources (2/11/00 letter from MWRA).

### D. Water Sales between Districts

- Selling of Water (if no merger); Water District 1 cannot sell to District No. 2 but District 2 can sell water to District 1 (November 22, 1999 letter from MWRA).

#### **E. Full Customer of MWRRA vs. Partial Customer of MWRRA**

- District 1 is allowed to develop a new local source of supply and decrease/eliminate its demand on the MWRRA. There would need to be changes to the existing agreement to state that District is a partial customer. Agreement would allow use of same upset limit of water and continue same upset limit. It would be an agreement that would parallel those of other partial MWRRA customers, like the Town of Wellesley. District 1 could have benefit to use same water than today but would have the additional benefit to use less (only what it needs to supplement the local source). MWRRA assessment would be based on reduced use (MWRRA Meeting of November 2002).
- If District 1 secures water from Hockanum Flats Wells, the MWRRA would retain the same prevailing charges for the foreseeable future for the actual water used. If water used was less, then assessment would be reduced based on decreased dependence on MWRRA water (*2/11/00 letter from MWRRA and Meeting of November 2002*).

#### **F. CVA Redundancy Project**

- MWRRA is not mandating the Redundancy portion of the Redundancy project for South Hadley If District No. 1 decided (with or without merger) to develop or procure water from a local source (which would then be an alternative redundant source) then MWRRA if directed by District No. 1 would exclude South Hadley from the project and related costs. (MWRRA Meeting of November 2002).

## District 1 Assumptions – Scenario 1

### Pro forma Future as a Free Standing Independent Entity for Next 10 Years

Personal Services: Same staffing/number of positions with annual increases of 3%

O and M Expenses: Current expenditures with annual increases of 3 %

Capital Improvements: Per 10-Year Plan of Water Board as provided to FAA

MWRA: Based on future costs and assessments anticipated for South Hadley based on current proportional water use continuing as compared with other CVA members.

Include MWRA's CIP projects including full implementation of Redundancy Project (so assumes free standing District 1 needs full benefits of redundancy, as No. 1 will have no redundant local source). Projections exclude debt assistance based on Acting Governor's actions on December 10<sup>th</sup>.

## District 1 Assumptions – Scenario 2

**Pro forma Future as a Free Standing Independent Entity for Next 10 Years but showing impact of Initiative by the Town of Wilbraham to develop and utilize its Permitted Local Source by 2007 and addition of UV project.**

Same Assumptions as above except:

1. Reduces Wilbraham's flows in the MWRA model by 50% of current flows. So flows are modified as follows:

|                   |       |                 |       |
|-------------------|-------|-----------------|-------|
| Wilbraham Current | 13.7% | Wilbraham FY 07 | 7.4%  |
| Chicopee Current  | 71.2% | Chicopee FY 07  | 76.4% |
| So Hadley Current | 15.1% | So Hadley FY 07 | 16.2% |

2. Adds the cost impact of the @ \$5,000,000 UV Project for the CVA in FY 09. It is the intent of MWRA officials as explained to FAA to request approval of this project in upcoming MWRA CIP.

## District 1's Projected MWRA Assessment

|                                                                                                                                                                                                          | FY 04               | FY 05              | FY 06              | FY 07               | FY 08              | FY 09               | FY 10              | FY 11              | FY 12              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------------|--------------------|---------------------|--------------------|---------------------|--------------------|--------------------|--------------------|
| I. Projected for FY 04 to FY 12<br>based on MWRA's published<br>schedule, current allocation of flows<br>(No Debt Service Assistance)                                                                    | \$ 488,283<br>11.6% | \$ 528,629<br>8.3% | \$ 533,341<br>0.9% | \$ 562,504<br>5.5%  | \$ 586,504<br>4.3% | \$ 590,375<br>0.7%  | \$ 596,116<br>1.0% | \$ 602,027<br>1.0% | \$ 608,138<br>1.0% |
| II. Projected for FY 04 to FY 12<br>based on MWRA's published<br>schedule and reduction of<br>Wilbraham's flows by 50% in FY 07;<br>and inclusion of UV Project in FY 09<br>(No Debt Service Assistance) | \$ 488,283<br>11.6% | \$ 528,629<br>8.3% | \$ 533,341<br>0.9% | \$ 603,460<br>13.1% | \$ 629,664<br>4.3% | \$ 723,703<br>14.9% | \$ 726,628<br>0.4% | \$ 730,544<br>0.5% | \$ 734,676<br>0.6% |

## Wilbraham's Future MWRA Assessment Savings

|                                                                                        | FY 04      | FY 05      | FY 06      | FY 07      | FY 08      | FY 09      | FY 10      | FY 11      | FY 12      |
|----------------------------------------------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Continues thru FY 12 at Current Flows                                                  | \$ 443,737 | \$ 480,403 | \$ 484,685 | \$ 510,817 | \$ 532,998 | \$ 536,516 | \$ 541,733 | \$ 547,104 | \$ 552,658 |
| Reduces Flows in FY 07 by 50%                                                          |            |            |            | 274,204    | 286,110    | 328,840    | 330,169    | 331,949    | 333,826    |
| Savings for Investment In Well<br>and Payment of Debt Service for<br>Local Source/Well |            |            |            | \$ 236,613 | \$ 246,888 | \$ 207,676 | \$ 211,564 | \$ 215,155 | \$ 218,832 |

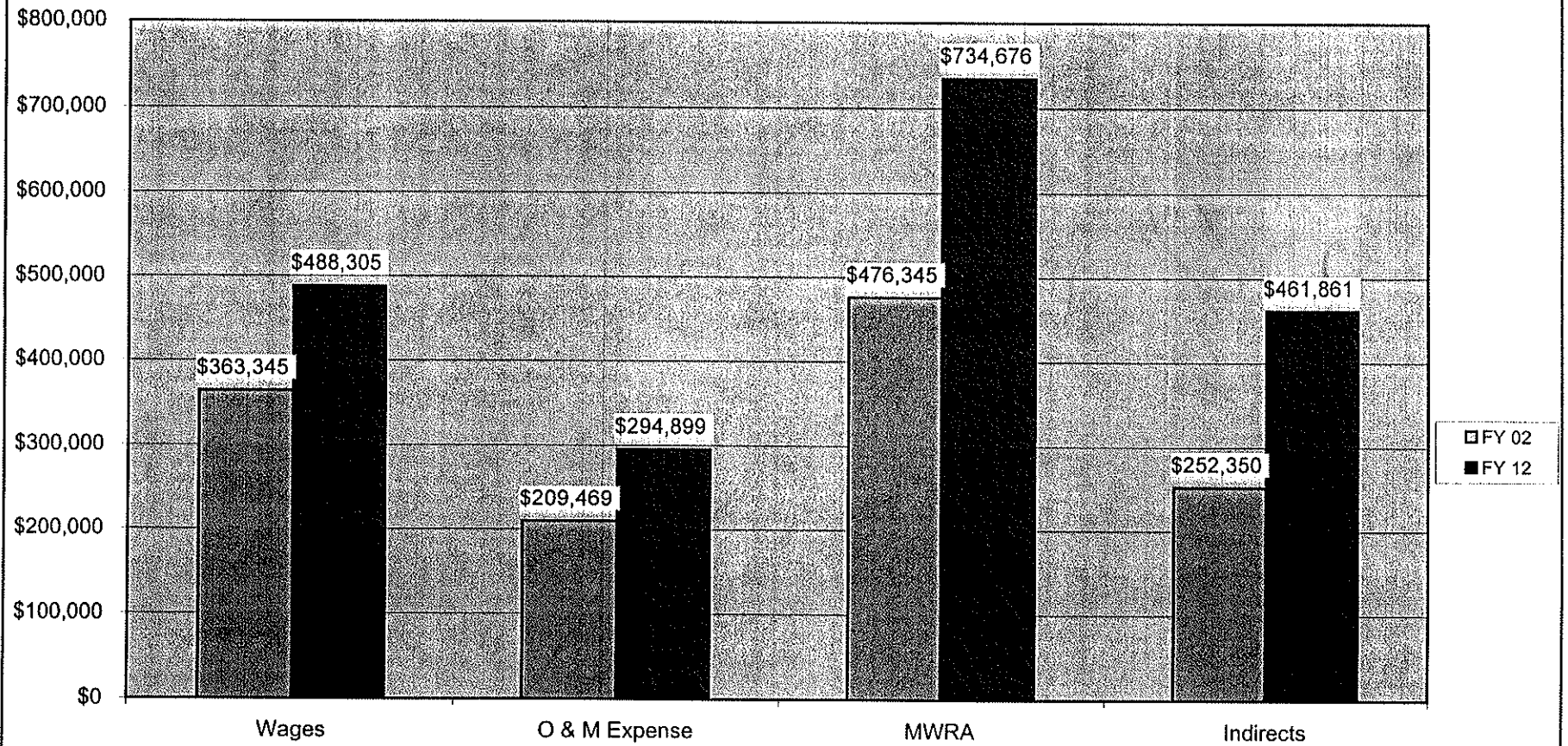
Wilbraham has been permitted to operate a new well/local groundwater source yielding 800,000 GPD.

For planning purposes the town (per Ed Miga, DPW Director) expects to authorize bonds by May 2003, pending vote of town meeting and to bring the permitted well on line in FY 2007. At that time, the plan as best known is to reduce use of MWRA water by 50% and to supply well water to residents (50%).

Reasons for Wilbraham's actions per Director Miga:

1. Separate, redundant groundwater source in event of terrorism activity;
2. Paying \$ 45 per MGD in 1997, now paying \$1,000 per MGD;
3. Town can utilize the annual savings in MWRA Assessment to pay debt service to bring new well on line.

**Preliminary Forecast:  
District 1 Water Utility FY 02 vs FY 12 (excludes capital)**



## District 2's Water Utility

- District's annual operational expenditures (non capital) have increased by 2/3 over the past ten years:

|                         | <u>FY 93</u>     | <u>FY 97</u>     | <u>FY 02</u>     | <u>% Change</u><br><u>FY 93 to 02</u> |
|-------------------------|------------------|------------------|------------------|---------------------------------------|
| Salaries and Wages      | \$ 97,992        | \$157,685        | \$195,384        | 99%                                   |
| O * M (includes Supply) | 91,267           | 130,109          | 122,754          | 34%                                   |
| <u>Indirects</u>        | <u>59,281</u>    | <u>70,384</u>    | <u>96,655</u>    | <u>63%</u>                            |
| <b>Total O &amp; M</b>  | <b>\$248,540</b> | <b>\$358,178</b> | <b>\$414,793</b> | <b>67%</b>                            |

- District 2's groundwater source is the Dry Brook Well which has been estimated to have a total Capacity of 3 MGD. This is written estimate of consulting engineer but the actual testing has not been done and is scheduled to be done in 3 to 4 months and capacity will be known in Spring 2003. This increased capacity would provide opportunities for delivery/distribution of water to District 1.
- Distribution system improvements for District 1 and District 2 to allow transport of water from District 2 to District Number 1 were developed by the consulting engineers in 2001 and a final letter of conceptual system needs and costs and even rate impact analysis was issued. District No 1's consulting engineering firm does not want this information used in any Proforma Planning Analysis.
- The new well site discovered in District 2 (Hockanum Flats) has been demonstrated to be a separate source from a separate aquifer. If/when developed, which is a long term process, it has the potential to provide a second significant local source from an independent aquifer that in future years could be developed as a second and redundant local source for District 2, for both free standing District's, or for the merged entity.
- District 2's water utility is a "*Pay as you Go*" utility meaning rate payers are paying the costs operating and funding some utility improvements with minimal surplus but the utility operates at break even and recovers the costs of the utility.
- District 2's utility costs are principally the costs of management of the utility and distribution of the water. District 2's costs of supply are extremely moderate/low each year (electricity, minimal required well improvements).
- The district has done an average of \$ 76,750 of capital improvements to the system over the past then years. The district's intent and plan of the water board is to accelerate improvements over the next ten years, including land acquisition for new well, if no merger or interest from District No. 1.

- The Districts fund balances as of June 30, 2002 are:

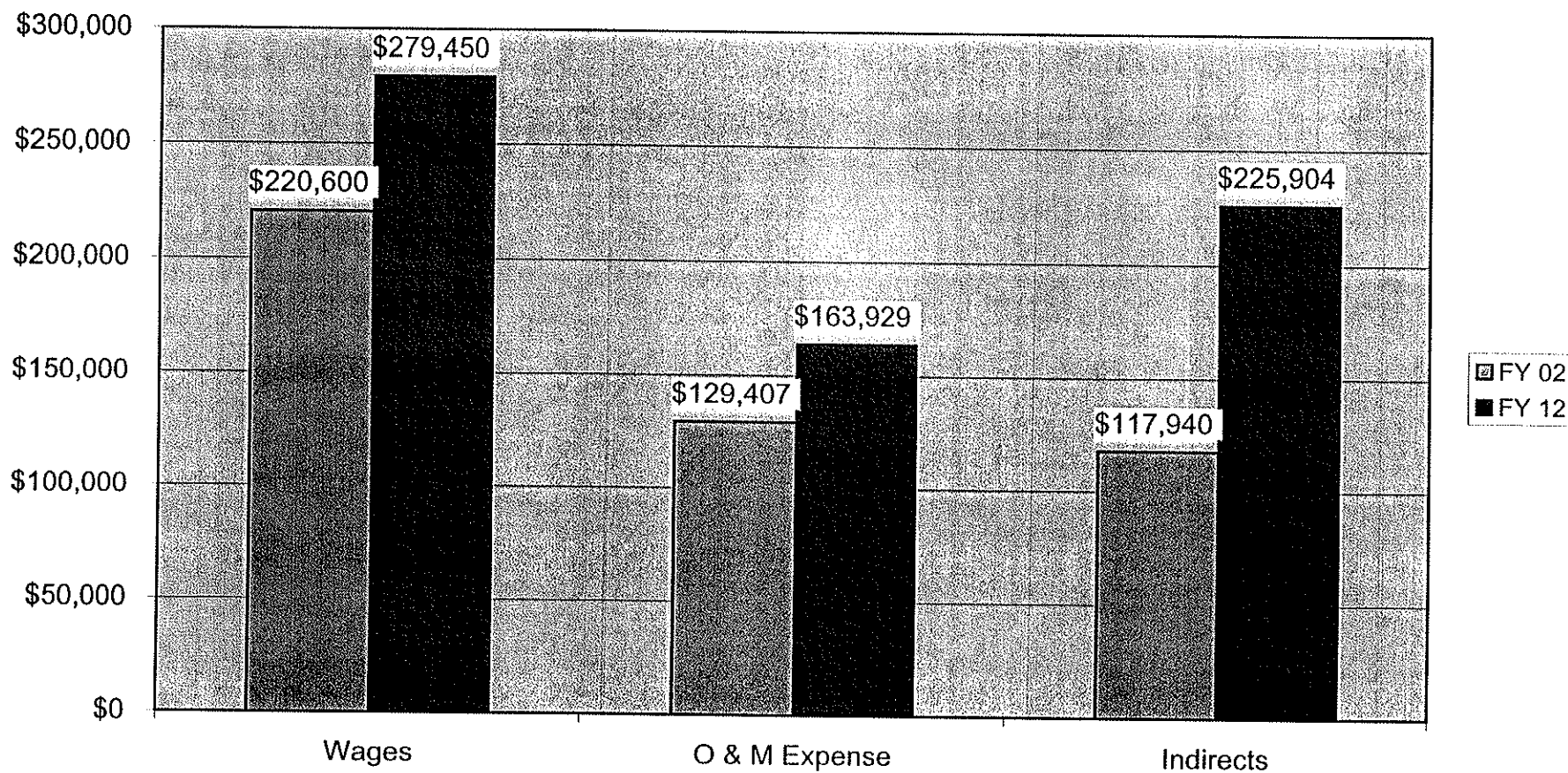
|                    |              |
|--------------------|--------------|
| Water Surplus      | \$89,142     |
| Water Improv. Fund | <u>7,998</u> |
|                    | \$97,140     |

- Average annual payment for water services in District No. 2 for household using 12,000 Cubic Feet is \$ 293.00 based on 12,000 cubic feet at \$2.57 per CCF and payment on time, which provides for a \$15.40 annual discount. If payments for same usage are late then customer pays \$ 308.4 per year for 12,000 cubic feet.

## **District 2 Assumptions – Pro forma Future as a Free Standing Independent Entity for Next 10 Years**

|                       |                                                                                                                        |
|-----------------------|------------------------------------------------------------------------------------------------------------------------|
| Personal Services:    | Same staffing/number of positions with annual increases of 3 percent.                                                  |
| O and M Expenses:     | Current Expenditures with Annual Increases of 2 percent.                                                               |
| Capital Improvements: | Per 10-Year Plan of Water Board as provided to FAA;<br>Includes purchase of Hockanum Flats land if there is no merger. |

**Preliminary Forecast:  
District 2 Water Utility FY 02 vs. FY 12 (excludes capital)**



## **Client Comments Provided Regarding February 2003 First Draft (V1.0) Report**

In February 2003, FAA delivered copies of the first draft of our final report to the clients.

Some of the client participants did not respond to the draft at all. Others responded orally with minimal comments and/or proposed edits while others took a great deal of time and effort to offer their thoughts in writing.

We have included all of the written comments we received within the following tables.

In addition, we have indicated which of these suggestions we included and which ones we considered but did not include.

We thank these contributors for their special efforts.

**Comments from South Hadley Fire District No. 1**  
**– Chief David Daly and Margaret St. Martin, Treasurer**

|                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Page 2 –<br>Last paragraph                                            | Findings: Please add what percent of the town is covered by District No. 1 and by District No. 2.<br><i>FAA Response: We were not provided with the GIS data necessary to define the actual size of each district.</i>                                                                                                                                                                                                                                                                                                                                                                               |
| Page 17 –<br>Paragraph 2                                              | In place of sentence 3 (It is for this reason etc.) please insert the following: The cost to achieve this goal and give equal protection to both districts will amount to an estimated \$275,000 yearly.<br><i>FAA Response: Considered – Not included in final report.</i>                                                                                                                                                                                                                                                                                                                          |
| Page 37 – 39<br>Last paragraph                                        | Under miscellaneous, we believe that the last paragraph on page 37 thru 38 should be deleted.<br><i>FAA Response: Considered – Not included in final report.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Page 41 –<br>Four Changes<br>are highlighted<br><br><i>considered</i> | South Hadley Fire District No. 1: FD#1 operates out of one fire station located at 144 Newton St.<br>Organization/Staffing: 15 career personnel (full-time) that include- 1 Fire Chief, EMT; 2 assistant Chiefs; 2 Lieutenants, EMT; 8 Firefighter/EMT. The 2 lieutenants and 10 firefighters/EMTs are divided into four groups with a minimum of 3 personnel on duty 24/7. 20 Call personnel (paid on call) firefighters. These personnel are alerted via pagers and paid per call. Within the entire department 4 are EMT-1 and 2 are paramedics.<br><i>FAA Response: Included in final report</i> |
| Page 42 – 43<br>Last paragraph                                        | We would like the following sentence added to the end of that paragraph: which includes the cost of \$2 million to provide ambulance service for the town.<br><i>FAA Response: Considered – Not included in final report.</i>                                                                                                                                                                                                                                                                                                                                                                        |
| Page 43 – 44<br>Last paragraph                                        | Please remove (policy decisions by management) and add: an increase in ambulance calls.<br><i>FAA Response: Considered – Not included in final report.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Page 60-<br>Paragraph 3 /<br><i>considered</i>                        | Delete (to help defray their costs) and add to assist in their portion of the cost.<br><i>FAA Response: Included in final report.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Page 60-<br>Paragraph 4                                               | Insert and change first sentence (The cost of the ambulance services borne by FD#1 is not easily determined but estimated to be \$2 million over the same nine-year period).<br><i>FAA Response: Considered – Not included in final report.</i>                                                                                                                                                                                                                                                                                                                                                      |

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| Page <del>68</del> <sup>69</sup><br>Last paragraph                      | We believe this paragraph should be deleted.<br><i>F44 Response: Considered – Not included in final report.</i>                                                                                                                                                                                                                                                                                              |
| Page <del>70</del> <sup>69</sup>                                        | Fire: Maintain current fire system – Disadvantages, delete produces no cost savings.<br><i>F44 Response: Considered – Not included in final report.</i>                                                                                                                                                                                                                                                      |
| Page <del>71</del> <sup>70</sup>                                        | Merge Fire Districts – Maintain existing fire station:<br>Advantages: Please remove (May result in cost savings).<br>Disadvantages: Please remove (May result in loss of some call fire etc.). Please remove (Could result in no cost savings) and replace with (May cost an additional \$275,000 to give equal protection to Districts).<br><i>F44 Response: Considered – Not included in final report.</i> |
| Page <del>74</del> <sup>70</sup>                                        | Merge Districts one existing station:<br>Advantages: Please remove (May result in considerable cost savings).<br>Disadvantages: Please add (will cost an additional \$275,000 to give equal protection to both districts).<br><i>F44 Response: Considered – Not included in final report.</i>                                                                                                                |
| Page <del>75</del> <sup>74</sup><br>Paragraph 1                         | Please eliminate sentence 2 and 3 and add (The cost of merging will be \$275,000 in order to give equal protection to both).<br><i>F44 Response: Considered – Not included in final report.</i>                                                                                                                                                                                                              |
| Page <del>78</del> <sup>74</sup><br>Paragraph 2 <sup>added</sup>        | Please eliminate last sentence.<br><i>F44 Response: Included in final report.</i>                                                                                                                                                                                                                                                                                                                            |
| Page <del>82</del> <sup>80</sup><br>Paragraph <del>1</del> <sup>2</sup> | Please delete.<br><i>F44 Response: Considered – Not included in final report.</i>                                                                                                                                                                                                                                                                                                                            |
| Page <del>82</del> <sup>80</sup><br>Last paragraph <sup>5</sup>         | Please delete the last two sentences.<br><i>F44 Response: Considered – Not included in final report.</i>                                                                                                                                                                                                                                                                                                     |
| Page 83-<br>Paragraph 2<br><i>added</i>                                 | Please delete last sentence and add the following: (the cost of a merger over the next 10 years will be at least \$2 million).<br><i>F44 Response: Sentence deleted, new language considered. Not included in final report.</i>                                                                                                                                                                              |

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| Page 118-<br>118 | Until the equity of Fire District #1 analysis is corrected, we believe page 118 should be eliminated.<br><i>F44 Response: F44 is unaware of any required corrections. Considered – not included in final report.</i> |
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**Comments from South Hadley Fire District No. 2 – Chief Michael Koske**

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
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| Comment No.1 | <p>You state there would be a possible \$1.4 mil savings over a ten-year period. Is this after an engineering study as to the combining of the two water systems (pumping station, raising District 2 water tanks etc.), purchasing and developing Hockanum Flats, building a central fire station, etc.?</p> <p><i>FA4 Response: We forecasted expenses using the status quo methods of providing fire services and EMS. We estimate that over the next 10 years, using the status quo approach of financing and delivering services the two districts will spend in excess of \$23 million for fire services and the Town will spend upwards of \$5 million towards EMS. This totals \$28 million over ten years.</i></p> <p><i>We further suggest that management change to a single government. Then we suggest that if this single leadership team can simply achieve a modest 5% savings through any number of efficiency methods available to them over the next ten years then it means a savings of \$1.4 million for the taxpayers over the ten years.</i></p> <p><i>Thus, the suggested savings of \$1.4 million is not quantified. It is simply an example of a management goal. It is also exclusive of any water savings.</i></p> <p><i>We do not believe that a new central station would be necessary. We believe that the existing facilities would adequately accommodate the districts' fire facilities needs for many years into the future.</i></p> |
| Comment No.2 | <p>What would the total cost be and what would the cost be to each taxpayer in each District and the cost to each water customer in each District?</p> <p><i>FA4 Response: We have demonstrated estimated future costs. They assume no changes in the methods of doing business. We report that a change in governance could bring some efforts towards consolidation. We suggest that with consolidation would come savings. We leave the consolidation changes and cost savings methods to the future leaders of the District(s).</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Comment No.3 | <p>As for a “centrally” located Fire Station, this would mean longer response times for both fire and ambulance calls to all outer areas of town. For your info, there is now an ambulance and EMT on duty at District 2 station during the day shift.</p> <p><i>FA4 Response: We appreciate knowing that an EMT and ambulance is now located in District #2. We have not suggested that ambulances and fire equipment be located in a single facility. We have offered multiple organizational structures for management to consider.</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

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| Comment No. 4 | <p>I would also like to see the water and fire department charts and graphs separated so as to get a better handle on operating costs of each department.</p> <p><i>F44 Response: The past and future finances for water and fire functions are separated for each of the two districts. They are also presented combined by district and by function.</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Comment No. 5 | <p>The fire department has bought two pumps, a brush truck and a Chevy Tahoe utility vehicle in the past 12 years and therefore should not need to purchase any of these vehicles for many years to come. Yet your charts indicate large increases in expenses in the next ten years. Why is this?</p> <p><i>F44 Response: The district's financial records indicate more than \$240,000 was spent on capital outlay during the past ten years. We have level funded a similar amount of \$240,000 in our 10-year forecast. While we are not aware of any specific pending equipment requirements, we are aware that the district does not currently own its own ladder truck. Additionally, we are aware of existing plans that call for the renovation and expansion of the current district facility. Either of these capital outlay items would considerably exceed the \$240,000 capital outlay budget that we have carried in our forecast.</i></p> |

**Comments from the Board of Water Commissioners relating to study Draft 1.0**

|                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
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| Page 17-<br>Paragraph 3                | <p>We find the paragraph to lack important information considering it is located within the "Recommendations section" of the report. We would like to suggest the following: With regard to the water utilities, we find the same to be true. Our forecasting models indicate the cost of water in both independent districts will average around \$4 per thousand gallons over the next ten years (\$4.06 in FD#1 and \$3.94 in FD#2). This fairly similar cost does not include the development of a second source of water for either District. At the end of the ten years both systems will only have a redundant means of acquiring the water from their single source of supply.</p> <p>Those costs would change dramatically should the systems expend considerable amounts of money to be made compatible and have a redundant supply. The Districts' consultant has prepared estimates on what those costs may be for the following items:</p> <ul style="list-style-type: none"> <li>• A cost of approximately \$4,971,089 would be needed to be expended to make the systems compatible hydraulically. Before an expenditure of this amount could be considered, a determination would have to be made to see if the idea of "blending" the water in a combined District would be favorable from a regulatory standpoint.</li> <li>• A cost of approximately \$7,400,000 would need to be expended to develop the Hockanum Flats well site located in District No. 2. We believe that the synergy created by the merged water utilities is substantial. We recommend looking closely at the figures provided to determine if the potential cost savings resulting from reduced MWRA purchases will justifiably cover the costs associated with merging the two entities, both hydraulically and redundantly.</li> </ul> <p><i>F4A Response: Considered – not included in final report.</i></p> |
| Page 89 –<br>Last paragraph            | <p>We would like Water Exploration to be added as part of our significant Capital improvement program in past years.</p> <p><i>F4A Response: Included in final report.</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Page 90 –<br>2 <sup>nd</sup> paragraph | <p>There is mention of District No. 1 paying \$1,000 per million gallons? We believe the current rate setting methodology for the three CVA communities should be referenced. This should include an explanation when it went into effect, what costs are associated to purvey water through the CVA, projects that have taken place and what is in the foreseeable future, what system is utilized to calculate consumption, and how all those costs proportionately are calculated for all three communities. The rate for District No. 1 fluctuates due to this methodology.</p> <p><i>F4A Response: See Interim Briefing document in Appendix.</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

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| Page 90 –<br>3 <sup>rd</sup> paragraph | The information provided is very confusing. We feel the paragraph should read as follows: The District has expended a total of \$683,000 from FY 95 to FY 02 for the exploration of a local water source. This effort was the result of the MWRRA encouraging member communities to explore and develop local sources of supply during the mid to late 80's in order to create redundant sources of supply.<br><i>F44 Response: Considered – not included in final report.</i>                                                                                                                                                                                                                         |
| Page 90 –<br>4 <sup>th</sup> paragraph | We request that the following figures be revised: 4531 service connections, 8% unaccounted for water.<br><i>F44 Response: new data developed after study was completed.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Page 91                                | We request that the following figures be revised: the Superintendent currently holds a T2 Grade Operator Treatment License. Both Billing Clerks are at 20 hours each.<br><i>F44 Response: included in final report.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Page 92 –<br>1 <sup>st</sup> paragraph | We believe the paragraph should include the current water rates District No. 1 currently pays. The rates are as follows: \$2.74 per hundred Cu.Ft. up to 250,000 Cu.Ft, and \$2.85 for 250,000 Cu.Ft. and above. The current base charge of \$5.00 should also be mentioned and explained. The figures given in the last sentence of the paragraph should be revised to reflect an average usage of 12,000 Cu.Ft. or (90,000 gallons) at a cost of \$328.80 per year.<br><i>F44 Response: Report is correct – annual cost is \$328.80 + \$20.00 = \$348.80.</i>                                                                                                                                        |
| Page 92 –<br>2 <sup>nd</sup> paragraph | The second to last sentence in this paragraph refers to 31.5 percent spent has been expended on supplies and services. Much of this \$4.79 million was paid to the MWRRA for water purchase? Historical data shows that a total of \$1,592,700 was actually spent on water purchase in the past ten years. The majority of this amount has been paid within the past 4 years. We don't consider this figure to be "much" of the \$4.79 million? Very misleading.<br><i>F44 Response: F44 had no intention to mislead. The \$1,592,700 does not include \$476,345 paid in FY '02. Total 10-year ('93-'02) MWRRA payments equals \$2,069,043. "Much" was changed to "more than 43%" in final report.</i> |

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| Page 92 –<br>3 <sup>rd</sup> Paragraph | There are a few facts and statements that need revision. The average number of gallons pumped by the District during the last three years has averaged about <u>517</u> million gallons. This <u>38</u> million gallons or 6.75 percent annual reduction results in a significant savings considering the District pays an average of 15 percent of the total CVA water cost.<br><i>F44 Response: Data developed after study was completed.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Page 93 –<br>2 <sup>nd</sup> Paragraph | The paragraph should be revised to reflect further explanation as follows: The cost of MWRRA water is expected to continue to rise over the next 10 years. There are two MWRRA capital projects planned for the Chicopee Valley Aqueduct (CVA). <u>The first project is the CVA Redundancy Project which will provide each of the CVA members with a second transmission pipeline system to provide a redundant source of supply. Should the Chicopee Valley Aqueduct become disabled, the District would have the ability to be supplied from the Nash Hill storage tanks via their particular pipeline. In addition to the redundant pipeline, the MWRRA will be potentially utilizing an increased level of primary disinfection. The costs of these two projects are built into the percentage the District pays for water.</u><br><i>F44 Response: Included in final report.</i> |
| Page 93 –<br>3 <sup>rd</sup> paragraph | We believe the paragraph should be revised due to the fact that there is <u>no</u> concrete evidence of Wilbraham reducing their consumption from the CVA. In addition, there is no mention of Wilbraham still being responsible for their portion of the two upcoming projects if they should reduce consumption which would reflect <u>less shifting of MWRRA costs from Wilbraham to both Chicopee and South Hadley.</u> The paragraph lacks extensive knowledge of potential impacts of the CVA communities' future water costs.<br><i>F44 Response: Considered - not included in final report.</i>                                                                                                                                                                                                                                                                               |
| Page 93 –<br>4 <sup>th</sup> paragraph | We recommend the paragraph state that the <u>actual</u> cost of water purchased from the MWRRA in Fiscal Year 2002 was \$476,345. It is interesting how the Districts' payment amount of \$734,676 for FY12 was figured. According to the FY12 MWRRA projections which were based on CY 01 flow Shares. The amount Dist. 1 would approximately be paying in FY 12 would be \$600,686.00. This would indicate a <u>26</u> percent increase in the next ten years provided the flows for the three communities are relatively close to the flows in CY 01. We feel the paragraph lacks information in order to make this type of projection. In the event that no further information can be provided, we recommend deletion of this paragraph.<br><i>F44 Response: Considered – not included in final report.</i>                                                                      |

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| Page 94 –<br>1 <sup>st</sup> paragraph | The figures calculated for 1000 gallons produced have been confirmed to be correct. However, the figure of \$3.48 that was given for the past three years in comparison to \$1.96 in 1993, has significant reasons for the increase which is not explained in detail. Also, within the same paragraph, we believe the figures calculated for the future are reversed for 2004 and 2007. This would reflect the increase mentioned.<br><i>F4A Response: Figures are correct – 2004 has considerable capital.</i>                                                                                                                                                                                                                                                                                                                                                                                                           |
| Page 94 –<br>2 <sup>nd</sup> paragraph | The paragraph mentions the spending indicator peaking out in 2004 at \$600 per user. This is a reflection of approx. \$800,000 being spent on the painting of a water tank. This particular project is being funded out of a separate revenue account for cell tower leases to which is specifically set up to pay for such projects. With the spending outlay adjusted reflecting the change, the spending indicator reduces to \$460 per user. This increase reflects a 60% increase for the past ten years, or 6% a year.<br><i>F4A Response: We agree - see prior paragraph.</i>                                                                                                                                                                                                                                                                                                                                      |
| Page 94 –<br>3 <sup>rd</sup> paragraph | The surplus figure given as of June 30, 2002 needs correction to reflect the total amount of \$785,195. The correct figure can be confirmed on Pg. 119.<br><i>F4A Response: Total reflects all surplus accounts, not a single one.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Page 94 –<br>4 <sup>th</sup> paragraph | We find some of the information in this paragraph to be untrue. The following items are of concern:<br>1. The concern of a single source of supply is not troubling for the Commission considering there are five existing (emergency) interconnections between the Districts.<br>2. The mention of a eminent reduction in use by other CVA Communities is <u>not</u> a known fact at this time.<br>3. The recognition of an alternative source is reduced in light of the CVA Redundancy Project providing an additional pipeline from the Nash hill tanks.<br>Board of Water Commissioners are suggesting making the mentioned changes also to include that the District is very fortunate to be a member community of the MWRRA system. We also feel strongly about jeopardizing that relationship. If changes cannot be made, we would suggest the paragraph be marked for deletion.<br><i>F4A Response: Deleted.</i> |
| Page 99 –<br>3 <sup>rd</sup> paragraph | Does Dry Brook Well have the capacity of 3 million gallons?<br><i>F4A Response: Report states preliminary tests indicate that level of capacity. Report advises data will be available in Spring 2003.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

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| Page 99 –<br>4 <sup>th</sup> paragraph  | Would like mention of the suggested pumping station needed to safely transfer water between Districts? Also all costs associated?<br><i>F4A Response: No changes or costs necessary to provide assistance in emergencies; see Item No. 1 two comments above.</i>                                                                                                                                                                                                                                                                                                                                |
| Page 100 -<br>1 <sup>st</sup> paragraph | The Hockanum flats well site is talked about in detail. We agree with what is said. However, the most pertinent fact missing is the cost associated with the development of the well site. In addition, there is no 10-year projection on future rates?<br><i>F4A Response: Previous engineering reports have covered these items.</i>                                                                                                                                                                                                                                                          |
| Page 100 –<br>3 <sup>rd</sup> paragraph | The calculation for the average user of 12,000 cu. Ft. or (90,000 gallons) is \$309.60.<br><i>F4A Response: F4A's calculation is supported in Appendix Briefing Document.</i>                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Page 101 –<br>Finance Section           | Does District #2 operate as a self-funding “enterprise?” Is there or was there funding from the Prudential Board for Operating? Does Dist. #2 bill monthly for the commercial or larger water meter accounts to keep cash flow more constant?<br><i>F4A Response: Both Districts attempt to recover all costs through rates.</i>                                                                                                                                                                                                                                                                |
| Page 103 –                              | The first two paragraphs do not coincide with each other. The first paragraph states there is no significant surplus accumulated. The second paragraph indicates there is a fund balance (surplus) of \$97,000 as of June 30, 2002. According to the Equity Sheet on page 122, the water dept. has a surplus amount of \$89,142. Are these amounts not considered significant?<br><i>F4A Response: District No. 1 maintains a surplus position that exceeds the total annual cost of operations. This is significant. District No. 2 maintains a surplus equal to 20% of annual operations.</i> |
| Page 103 –<br>2 <sup>nd</sup> paragraph | Will the land sale amount of \$600,000 go directly towards the water portion of the District?<br><i>F4A Response: District No. 2 voters will determine this.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Page 103 –<br>4 <sup>th</sup> paragraph | There is reference made to Dist. #1 spending \$405 per user and Dist. #2 spending \$312 per user in the past three years. Looking at the Expenditure charts for each District, the reason for the significant difference is District #1 has spent \$354,330 on capital outlay compared to \$121,704 in District #2. We believe the reasoning behind the difference should be noted.<br><i>F4A Response: We believe this refers to Page 108 – the point of the paragraph is to note future spending similarities.</i>                                                                            |

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| Page 110 –<br>1 <sup>st</sup> paragraph | <p>We believe the paragraph needs additional information to be accurate. In particular to the comments on redundancy, there is no mention to addressing the system expansion policy and related costs with the MWRRA associated with being a merged single district. It is the districts' understanding that an entire new contract would need to be negotiated. We feel these issues are important and should be included.</p> <p><i>F44 Response: F44 disagrees. We believe no new contract is required.</i></p>                                                                                                                                                                                                                                                                                                                     |
| Page 110 –<br>2 <sup>nd</sup> paragraph | <p>Was there an engineer hired to verify the analysis provided by the Districts' engineers' relative to merging the two systems? Do the future projected costs provided earlier in the report reflect spending <u>\$5,000,000</u> to merge the systems? If not, it must be noted.</p> <p>There is mention of two towns currently using the MWRRA as an additional source of supply. Is this all the time, or an "as needed" basis? There is also mention of the "blending" action being viable. This may be true, however, the current and future regulations for these types of systems are going to be costly from a regulations standpoint.</p> <p><i>F44 Response: F44 has no reason to believe the District's engineers are wrong – our report is based upon the use of one government to run both status quo operations.</i></p> |
| Page 110 –<br>3 <sup>rd</sup> paragraph | <p>There was never a recommendation requested. Again, the blending issue wasn't investigated thoroughly. Within the last sentence of the paragraph, it states that" the MWRRA relationship could be renewed to provide all of the users of South Hadley with an abundant third source of water in emergencies" There is no mention of what the impact would be on District #1 Granby and Ludlow ratepayers.</p> <p><i>F44 Response: Should be no impact given our proposed use of status quo systems.</i></p>                                                                                                                                                                                                                                                                                                                          |
| Page 111 –<br>1 <sup>st</sup> paragraph | <p>As mentioned previously, the projections made at the end of the paragraph do not include the \$5,000,000 figure in the estimated savings to the ratepayers.</p> <p><i>F44 Response: Our report is based upon use of status quo systems.</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

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| Page 117 | <p>We find the equity analysis of the report to be confusing. Consistently within the report, there is mention of the Dist. #2 Water Department receiving the \$600,000 for the sale of land? If this is in fact true, then the equity calculations are correct. If this is incorrect, the water equity position in Dist. #2 would have to be adjusted to reflect the amount of \$749 per user. The difference would be \$68 between the districts'. Therefore would a credit be due to the ratepayers of Dist. #1? We, as Commissioners of District #1, feel that the current contract with the MWRRA has Equity value. There is a substantial cost for a new community to join the MWRRA system. We would like to know what the potential cost would be and adjust the equity position of Dist. #1 accordingly. For example, if the \$600,000 was added to the Tax equity of the District, the total tax equity of District #2 would be \$861 per taxpayer. There would be a difference of \$557 taxpayer equity difference between FD#1 and FD#2.</p> <p>Note: all figures are in reference to pages 120-123.</p> <p><i>F44 Response: Considered – not included in final report. District No. 2 will determine the use of the \$600,000. As District No. 1 comes into compliance with GASB 34, the Water Commissioners should see that their MWRRA contract is properly valued and scheduled as a balance sheet asset.</i></p> |
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**Received from South Hadley Fire District No. 1 and included in report.**

Section D. Additional statutes applicable to Fire Districts

5. Local Option Statutes

| <b>MGL Chapter/Section</b> | <b>Date Adopted</b> | <b>Subject</b>                                                                                  |
|----------------------------|---------------------|-------------------------------------------------------------------------------------------------|
| 391/42A to 42B             | March 10, 1924      | Acts of 1923 related to unpaid water rents                                                      |
| 41/1&2                     | March 14, 1955      | Accepted by ballot annual election, Acts of 1955; to enlarge by moving boundaries               |
| 32B                        | March 12, 1956      | Accepted by ballot annual election % for health and life insurance                              |
| Act of 1957                | March 11, 1957      | Authorizing District 1 & 2 to supply water to each other with conditions                        |
| 32B/763/10                 | March 12, 1973      | Accepted Acts of 1972 RE: Amount of Life Insurance                                              |
| 32B/7A                     | March 7, 1973       | Accepted Re: % to be paid for Health Insurance                                                  |
| 41/119                     | March 11, 1974      | Accepted date change for annual meeting and election                                            |
| 151/12A                    | June 13, 1980       | Accepted Acts of 1979 RE: Not using free cash for the purpose of reducing property tax F/Y 1981 |
| 44/53F                     | April 28, 1986      | Accepted for F/Y 1987 Re: compensating balance                                                  |
| 642                        | April 30, 1990      | Accepted Acts of 1989 RE: Automatic sprinkler approved with additional wording                  |
| 291                        | April 29, 1991      | Accepted Acts of 1990 RE: Enhanced 911 service                                                  |
| 32B/18                     | April 26, 1993      | Accepted RE: Health insurance                                                                   |
| 399                        | April 26, 1993      | Accepted Act of 1992 RE: Early Retirement Incentive                                             |
| 32B/8A                     | May 15, 1995        | Accepted RE: Self-funding Health insurance                                                      |

Reviewed and approved by P. Costello 5/8/2003.

