The Maryland Public Policy Institute

PERPETUAL SHORTFALL

Maryland's Pension and Benefit Funds

APPENDIX

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APPENDIX

The Maryland Public Policy Institute

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PERPETUAL SHORTFALL

Maryland's Pension and Benefit Funds

GABRIEL J. MICHAEL

THIS APPENDIX to "Perpetual Shortfall: Maryland's Pension and Benefit Funds" provides a graphical presentation of the fiscal status of all pension and OPEB funds in Maryland for which data are available. Maryland's state pension and OPEB funds are presented first, followed by the counties and Baltimore City in alphabetical order. Generally, each fund has four graphs:

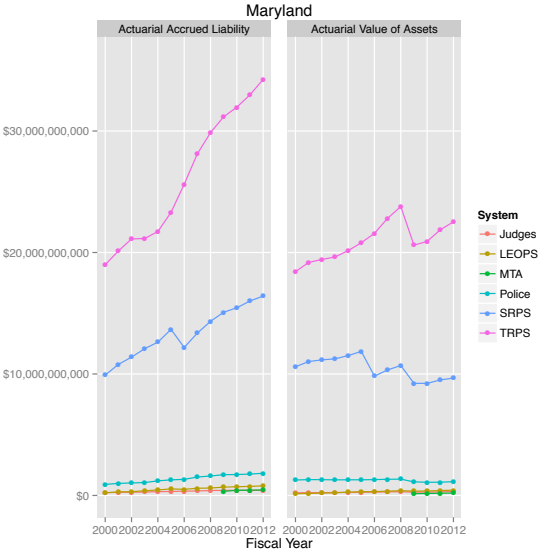
- a comparison of liabilities and assets over time (a large gap between these is bad).
- a comparison of the actuarially required annual contribution (the amount necessary to fund the pension or OPEB benefit), and the annual contribution that was actually made over time (a large gap between these is bad).
- the funded ratio of the fund over time (smaller is worse).
- the unfunded liability as a percentage of payroll over time. This provides an alternative measure of the size and severity of liabilities (larger is worse).

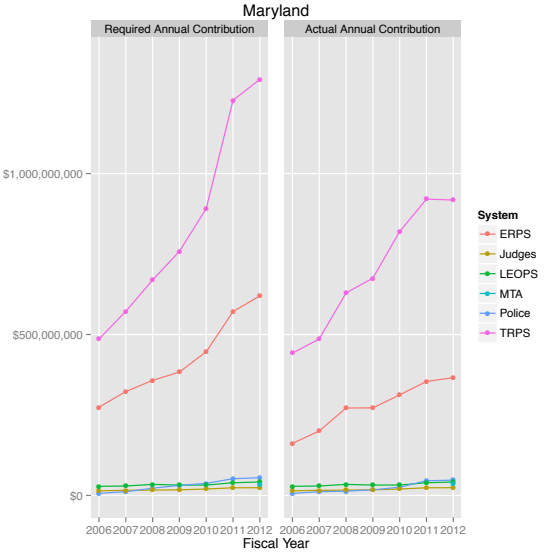
A NOTE ABOUT THE GRAPHS

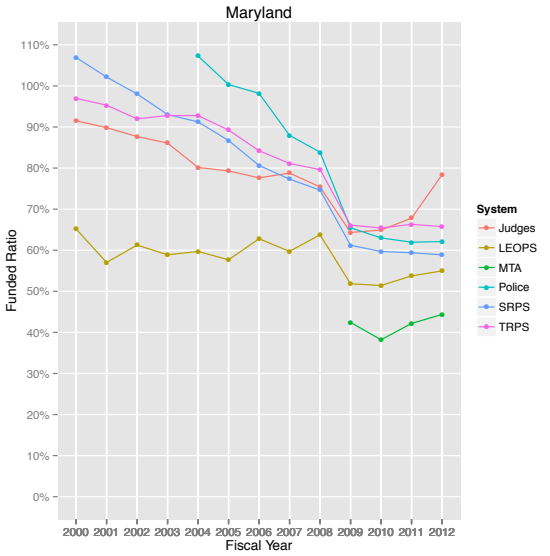
Before drawing conclusions based on graphical representations of data, one should carefully examine the scales used in the graph. Because of the large number of graphs and the large differences in sizes between counties, the scales used on the vertical axes of the graphs are automatically adjusted based on the data displayed. Automatic adjustment ensures that all relevant data points are visible, and that useful visual information can be conveyed. However, it also means that graphs with different scales are not directly comparable. Keep in mind the following caveats when examining the graphs:

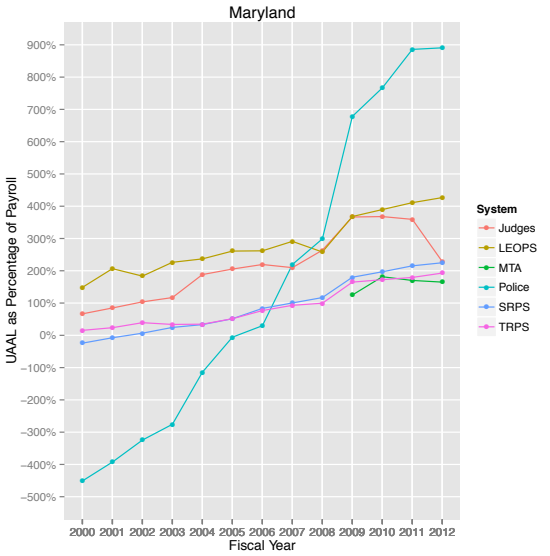
- the graphs of state systems use significantly different scales for both percentages and dollars compared to the local systems, due to the significantly different nature and conditions of these systems.
- the graphs of local systems use different scales for dollars due to the large differences in sizes between counties.
- the percentage scales used for local pension funds are the same, but differ from those used for local OPEB funds since OPEB funds are currently funded at a significantly lower level than pension funds.

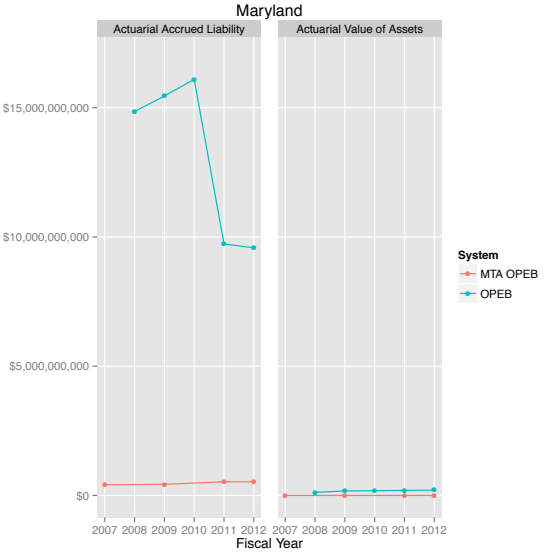
GABRIEL J. MICHAEL *is a senior fellow at The Maryland Public Policy Institute and a doctoral candidate in political science at The George Washington University. He holds master's degrees from The George Washington University and Yale University, and a bachelor's degree from the University of Maryland, College Park. He can be reached at gmichael@mdpolicy.org.*

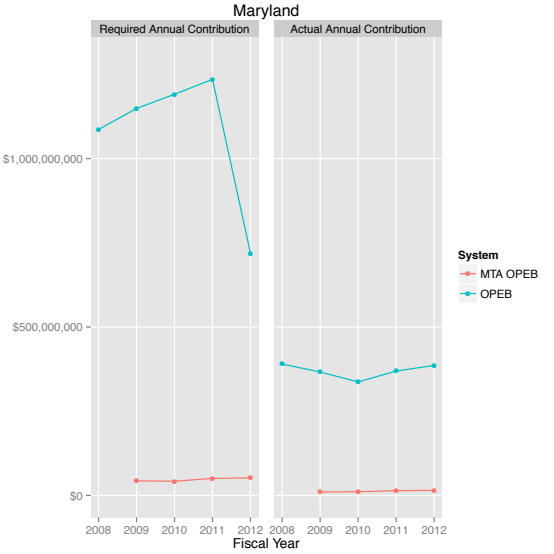

Maryland
Actuarial Accrued Liability
Actuarial Value of Assets
$30,000,000,000
$20,000,000,000
$10,000,000,000
$0
2000 2002 2004 2006 2008 2010 2012
Fiscal Year
System
Judges
LEOPS
MTA
Police
SRPS
TRPS

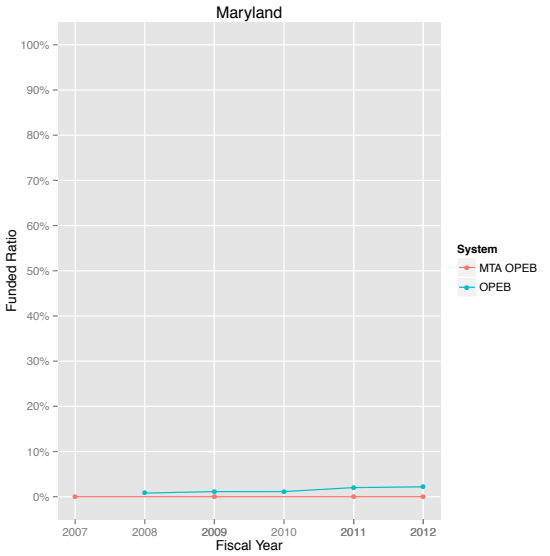

Maryland
Required Annual Contribution
Actual Annual Contribution
$1,000,000,000
$500,000,000
$0
2006 2007 2008 2009 2010 2011 2012
Fiscal Year
System
ERPS
Judges
LEOPS
MTA
Police
TRPS

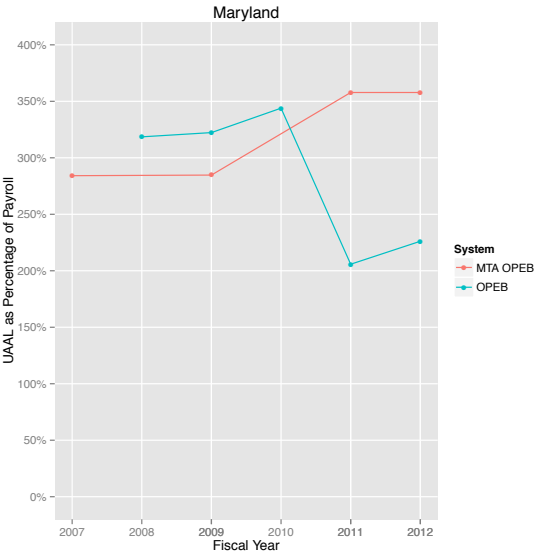

Maryland
Funded Ratio
110%
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012
Fiscal Year
System
Judges
LEOPS
MTA
Police
SRPS
TRPS

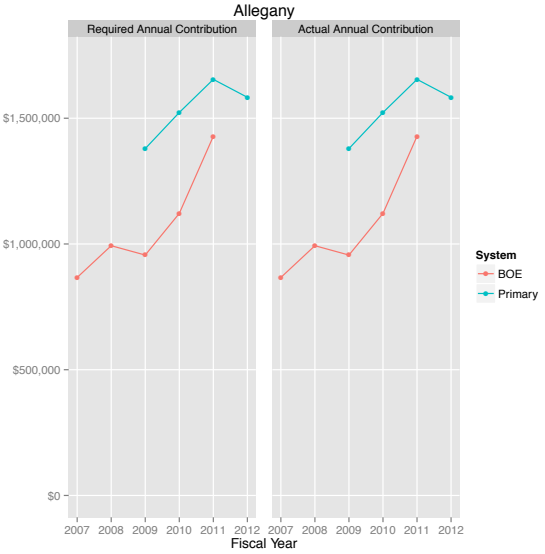

Maryland
UAAL as Percentage of Payroll
900%
800%
700%
600%
500%
400%
300%
200%
100%
0%
−100%
−200%
−300%
−400%
−500%
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012
Fiscal Year
System
Judges
LEOPS
MTA
Police
SRPS
TRPS


Maryland
Actuarial Accrued Liability
Actuarial Value of Assets
$15,000,000,000
$10,000,000,000
$5,000,000,000
$0
2007 2008 2009 2010 2011 2012 2007 2008 2009 2010 2011 2012
Fiscal Year
System
MTA OPEB
OPEB


Maryland
Required Annual Contribution
Actual Annual Contribution
$1,000,000,000
$500,000,000
$0
2008 2009 2010 2011 2012 2008 2009 2010 2011 2012
Fiscal Year
System
MTA OPEB
OPEB


Maryland
Funded Ratio
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2007 2008 2009 2010 2011 2012
Fiscal Year
System
MTA OPEB
OPEB


Maryland
UAAL as Percentage of Payroll
400%
350%
300%
250%
200%
150%
100%
50%
0%
2007 2008 2009 2010 2011 2012
Fiscal Year
System
MTA OPEB
OPEB


Allegany
Required Annual Contribution
Actual Annual Contribution
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$1,000,000
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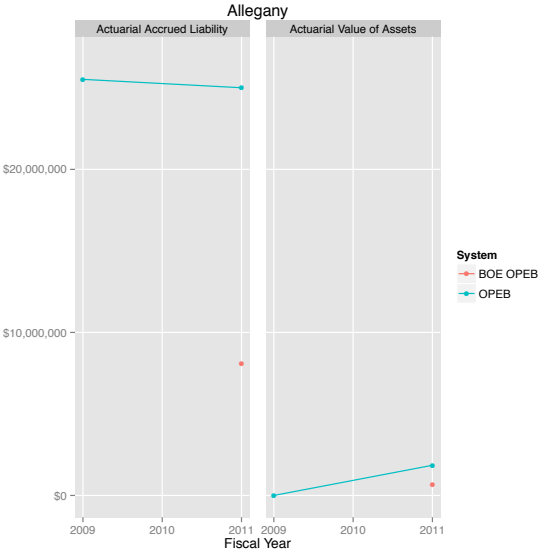
2007 2008 2009 2010 2011 2012
2007 2008 2009 2010 2011 2012
Fiscal Year
System
BOE
Primary


Allegany
Actuarial Accrued Liability
Actuarial Value of Assets
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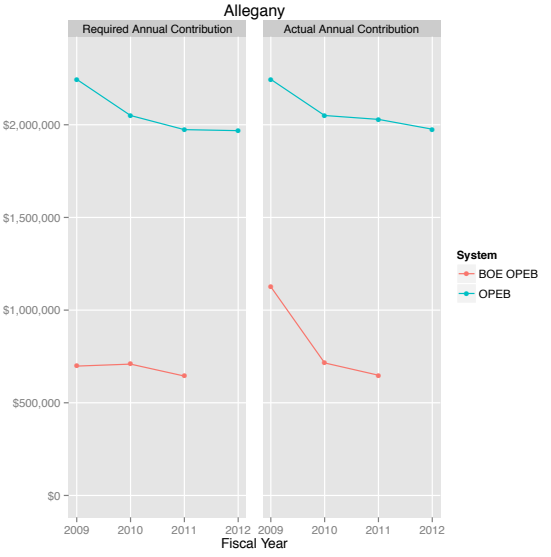
2009
2010
2011
Fiscal Year
System
BOE OPEB
OPEB


Allegany
Required Annual Contribution
Actual Annual Contribution
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$1,000,000
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$0
2009
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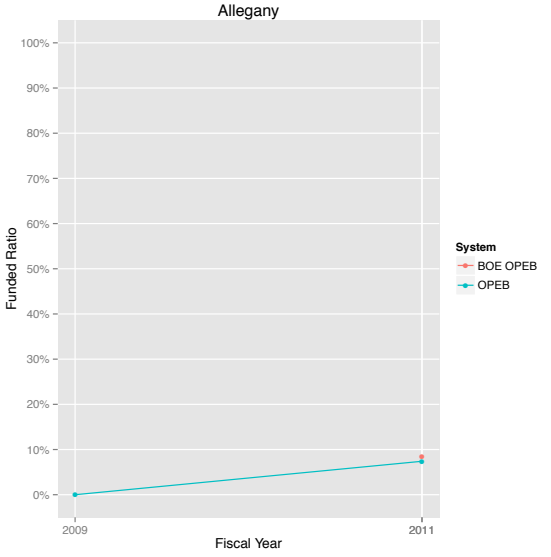
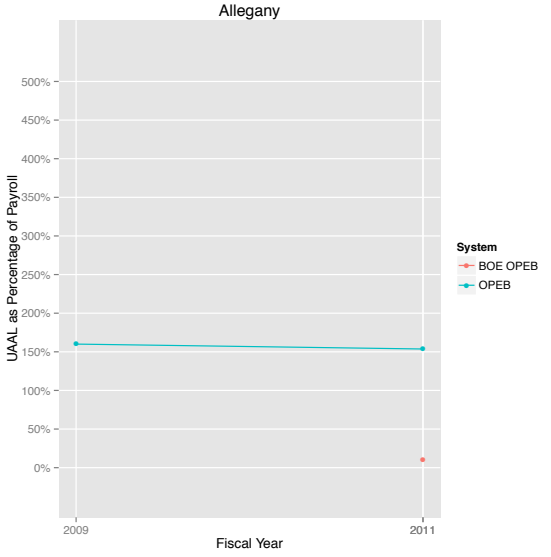
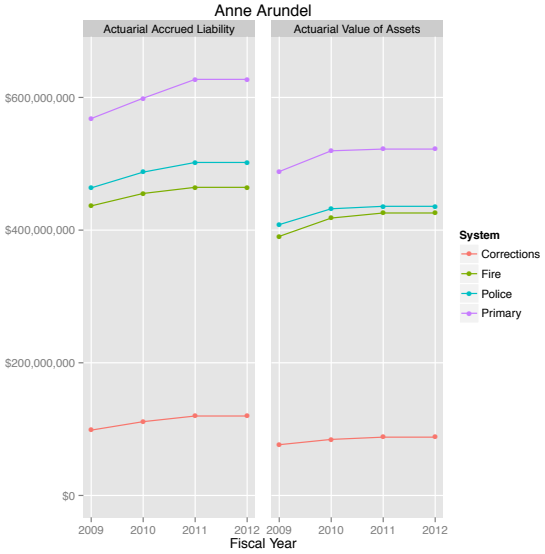
2011
2012
Fiscal Year
System
BOE OPEB
OPEB


Allegany
Funded Ratio
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2009
2011
Fiscal Year
System
BOE OPEB
OPEB


Allegany
UAAL as Percentage of Payroll
500%
450%
400%
350%
300%
250%
200%
150%
100%
50%
0%
2009
2011
Fiscal Year
System
BOE OPEB
OPEB


Anne Arundel
Actuarial Accrued Liability
Actuarial Value of Assets
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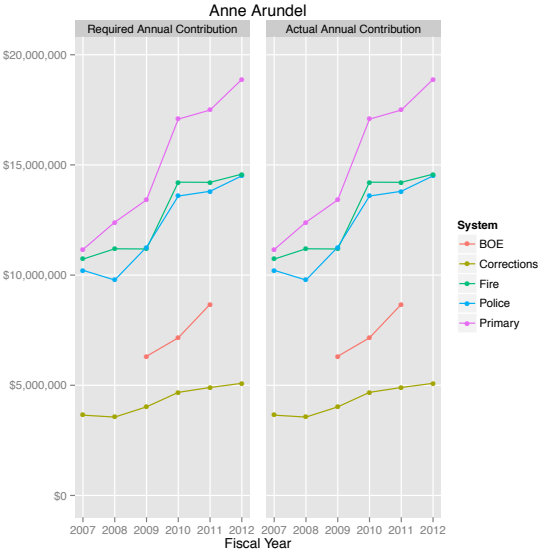
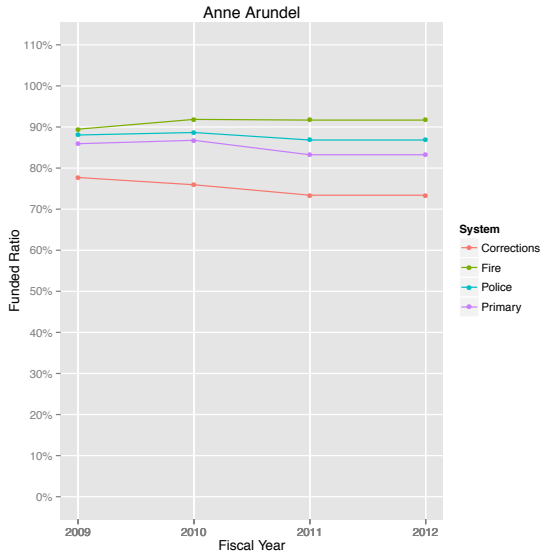
$200,000,000
$0
2009
2010
2011
2012
Fiscal Year
System
Corrections
Fire
Police
Primary


Anne Arundel
Required Annual Contribution
Actual Annual Contribution
$20,000,000
$15,000,000
$10,000,000
$5,000,000
$0
2007
2008
2009
2010
2011
2012
Fiscal Year
System
BOE
Corrections
Fire
Police
Primary


Anne Arundel
Funded Ratio
110%
100%
90%
80%
70%
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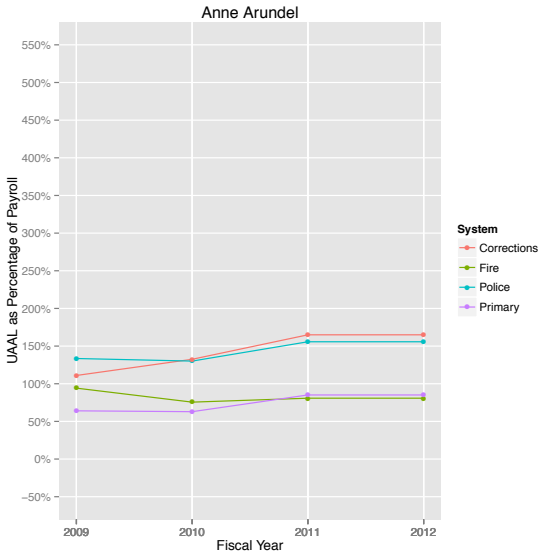
30%
20%
10%
0%
2009
2010
2011
2012
Fiscal Year
System
Corrections
Fire
Police
Primary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UAAL as Percentage of Payroll
550%
500%
450%
400%
350%
300%
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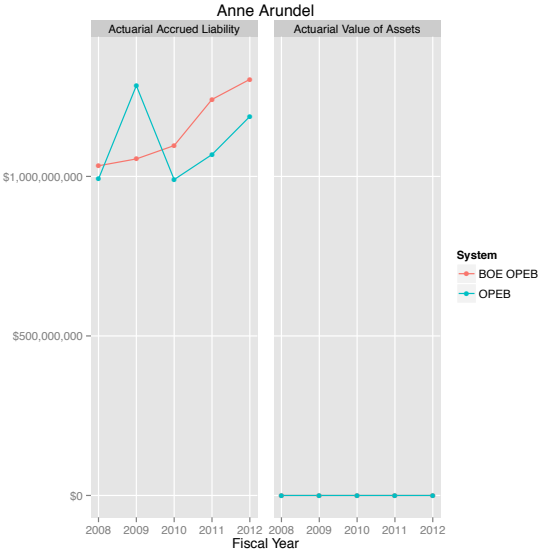
150%
100%
50%
0%
−50%
2009
2010
2011
2012
Fiscal Year
System
Corrections
Fire
Police
Primary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Actuarial Accrued Liability
Actuarial Value of Assets
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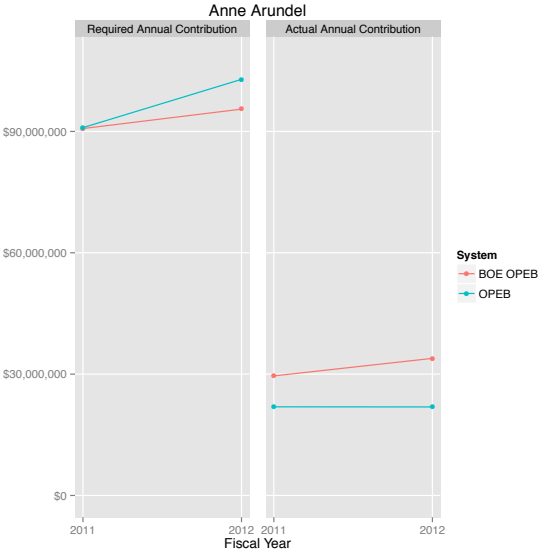
$500,000,000
$0
2008
2009
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB


Anne Arundel
Required Annual Contribution
Actual Annual Contribution
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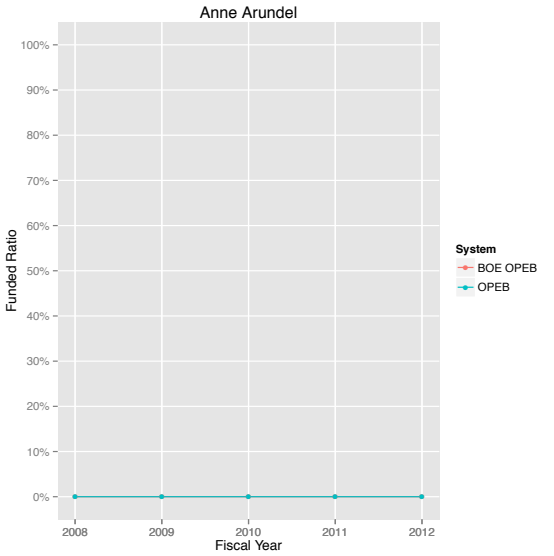
$60,000,000
$30,000,000
$0
2011
2012
Fiscal Year
System
BOE OPEB
OPEB


Anne Arundel
Funded Ratio
100%
90%
80%
70%
60%
50%
40%
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10%
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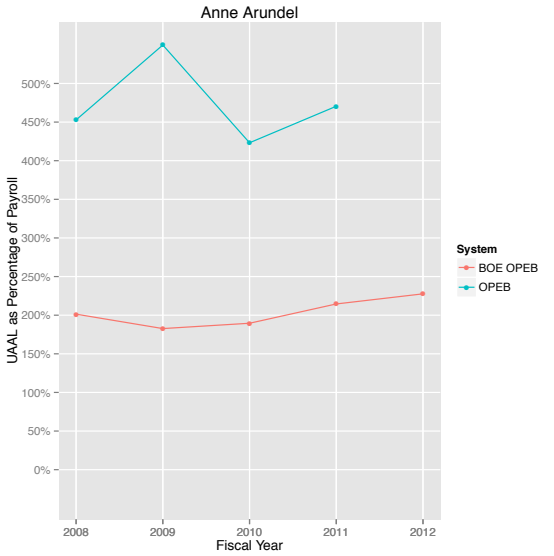
2008
2009
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB


Anne Arundel
UAAL as Percentage of Payroll
500%
450%
400%
350%
300%
250%
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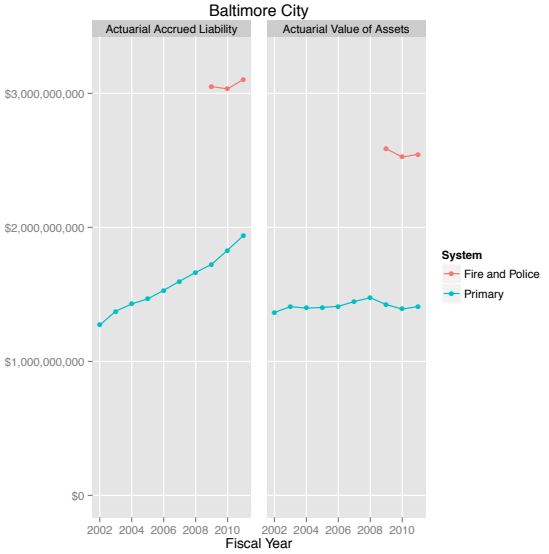
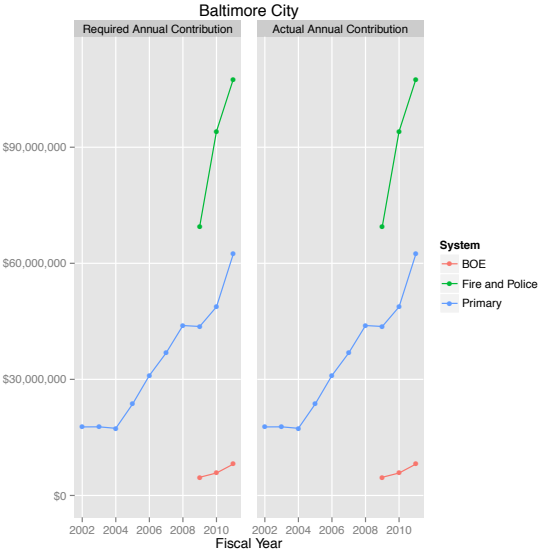
150%
100%
50%
0%
2008
2009
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB


Baltimore City
Actuarial Accrued Liability
Actuarial Value of Assets
$3,000,000,000
$2,000,000,000
$1,000,000,000
$0
2002 2004 2006 2008 2010
Fiscal Year
System
Fire and Police
Primary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Required Annual Contribution
Actual Annual Contribution
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$60,000,000
$30,000,000
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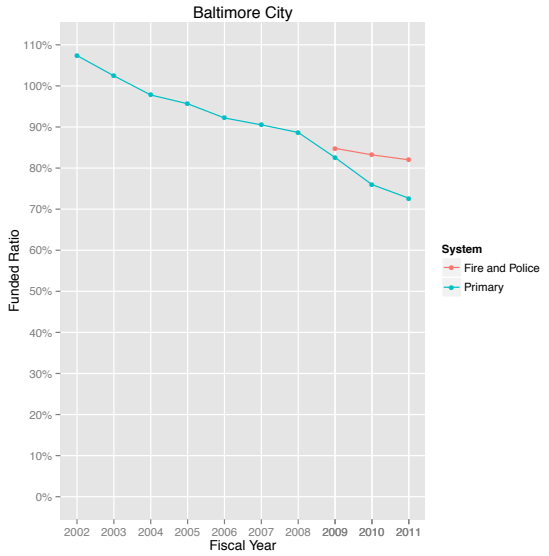
2002 2004 2006 2008 2010
Fiscal Year
System
BOE
Fire and Police
Primary


Baltimore City
Funded Ratio
110%
100%
90%
80%
70%
60%
50%
40%
30%
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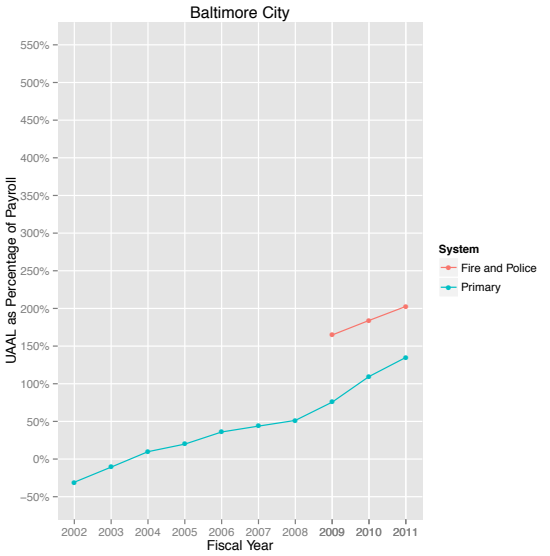
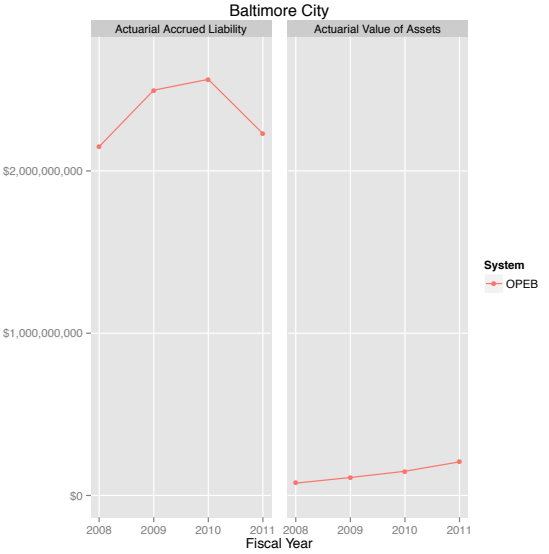
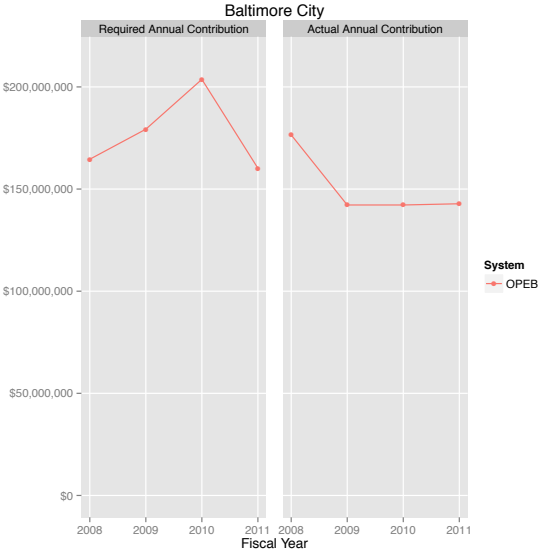
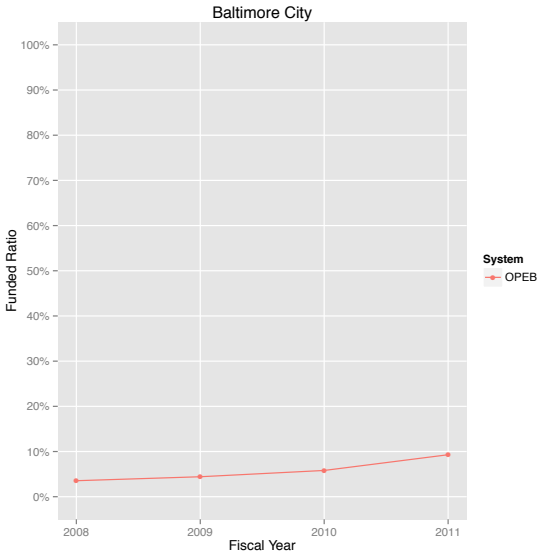
10%
0%
2002 2003 2004 2005 2006 2007 2008 2009 2010 2011
Fiscal Year
System
Fire and Police
Primary


Baltimore City
UAAL as Percentage of Payroll
550%
500%
450%
400%
350%
300%
250%
200%
150%
100%
50%
0%
−50%
2002 2003 2004 2005 2006 2007 2008 2009 2010 2011
Fiscal Year
System
Fire and Police
Primary


Baltimore City
Actuarial Accrued Liability
Actuarial Value of Assets
$2,000,000,000
$1,000,000,000
$0
2008
2009
2010
2011
Fiscal Year
System
OPEB


Baltimore City
Required Annual Contribution
Actual Annual Contribution
$200,000,000
$150,000,000
$100,000,000
$50,000,000
$0
2008
2009
2010
2011
Fiscal Year
System
OPEB


Baltimore City
Funded Ratio
100%
90%
80%
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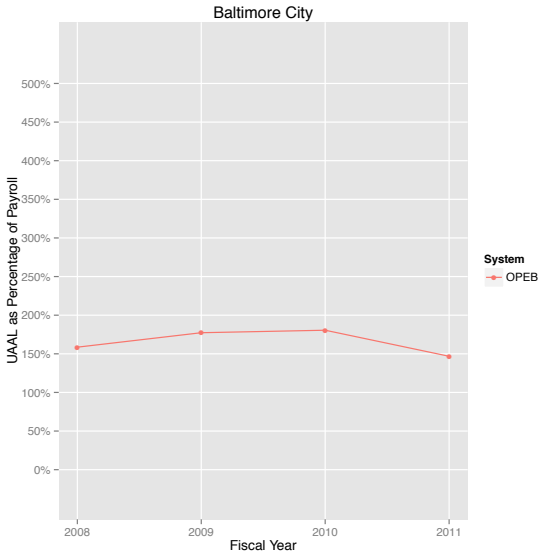
0%
2008
2009
2010
2011
Fiscal Year
System
OPEB


Baltimore City
UAAL as Percentage of Payroll
500%
450%
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200%
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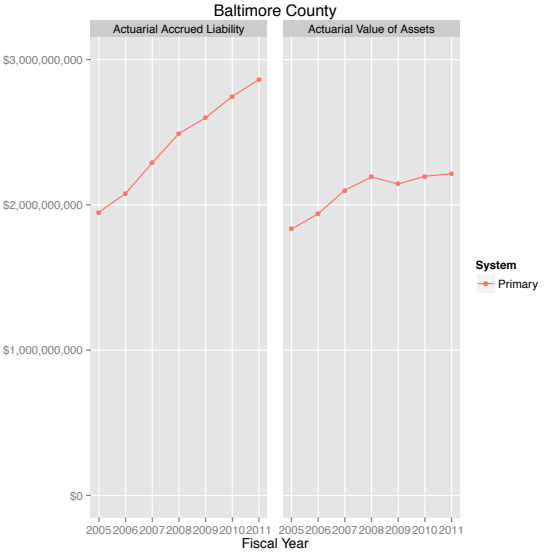
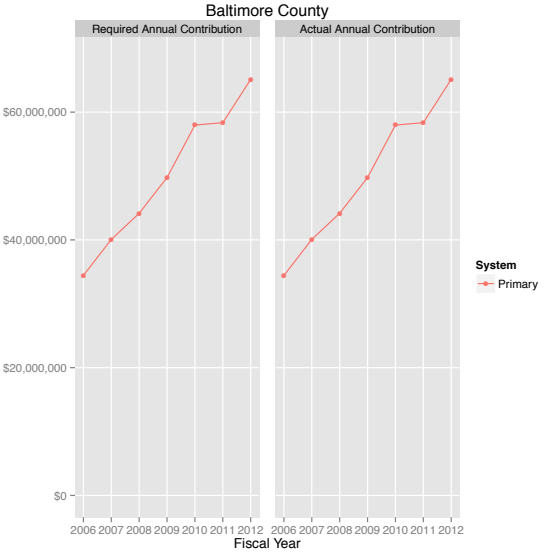
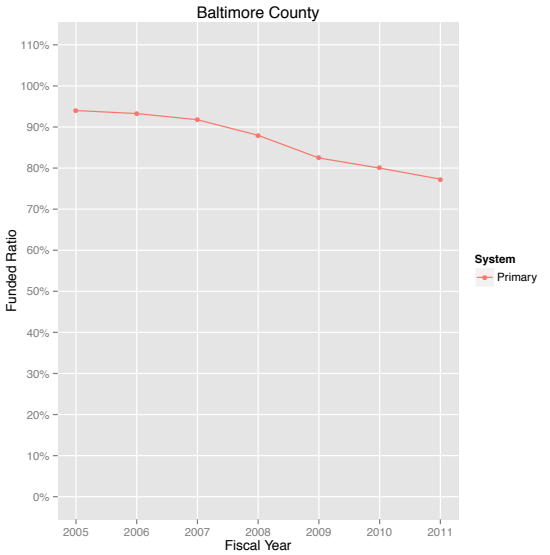
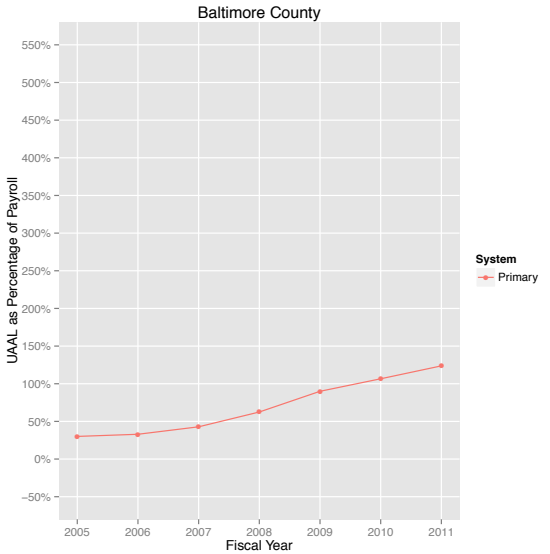
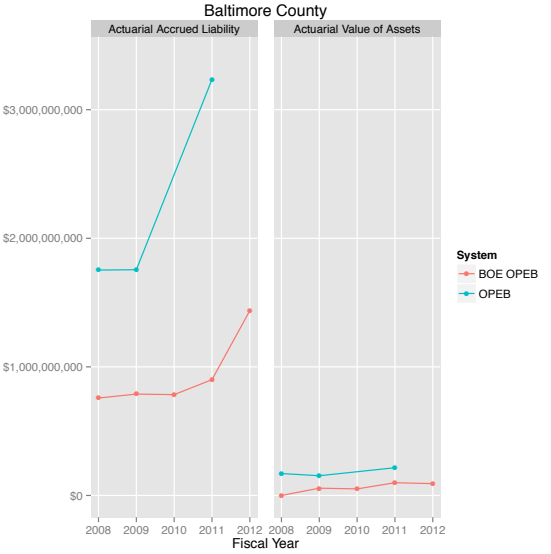
50%
0%
2008
2009
2010
2011
Fiscal Year
System
OPEB

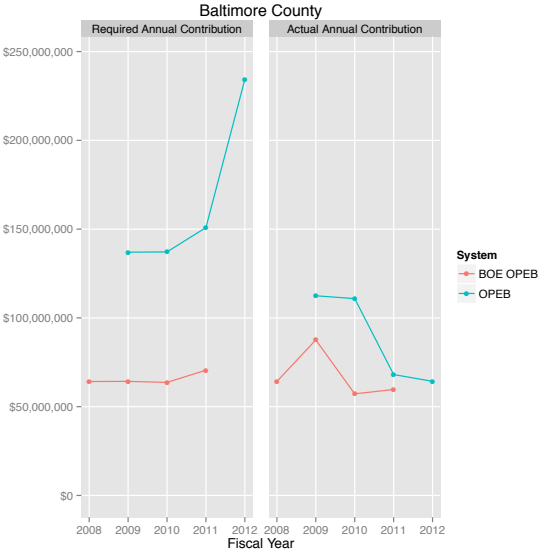

Baltimore County
Actuarial Accrued Liability
Actuarial Value of Assets
$3,000,000,000
$2,000,000,000
$1,000,000,000
$0
2005 2006 2007 2008 2009 2010 2011
2005 2006 2007 2008 2009 2010 2011
Fiscal Year
System
Primary

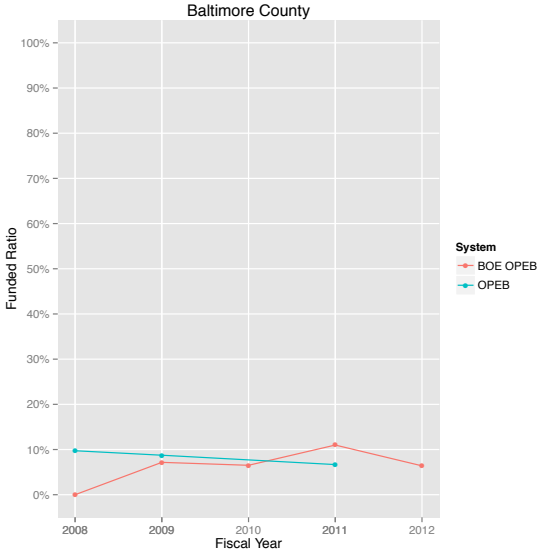

Baltimore County
Required Annual Contribution
Actual Annual Contribution
$60,000,000
$40,000,000
$20,000,000
$0
2006 2007 2008 2009 2010 2011 2012
2006 2007 2008 2009 2010 2011 2012
Fiscal Year
System
Primary

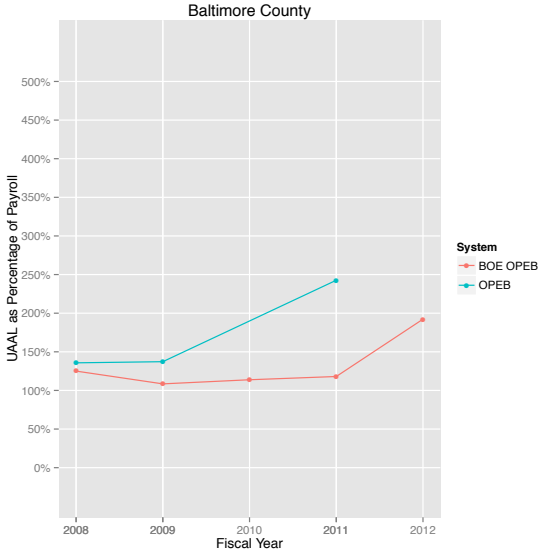

Baltimore County
Funded Ratio
110%
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2005 2006 2007 2008 2009 2010 2011
Fiscal Year
System
Primary

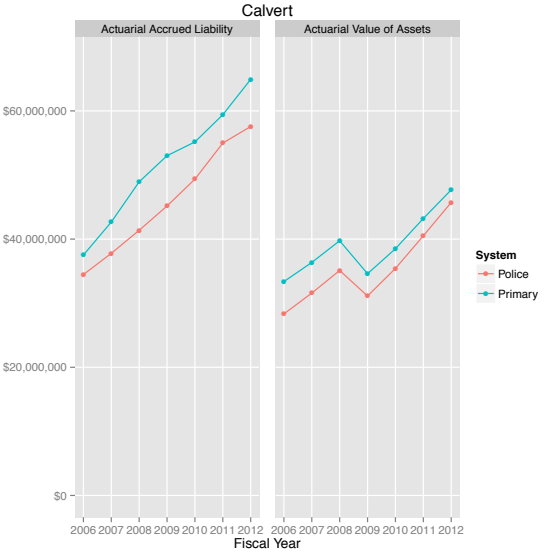

Baltimore County
UAAL as Percentage of Payroll
550%
500%
450%
400%
350%
300%
250%
200%
150%
100%
50%
0%
−50%
2005 2006 2007 2008 2009 2010 2011
Fiscal Year
System
Primary

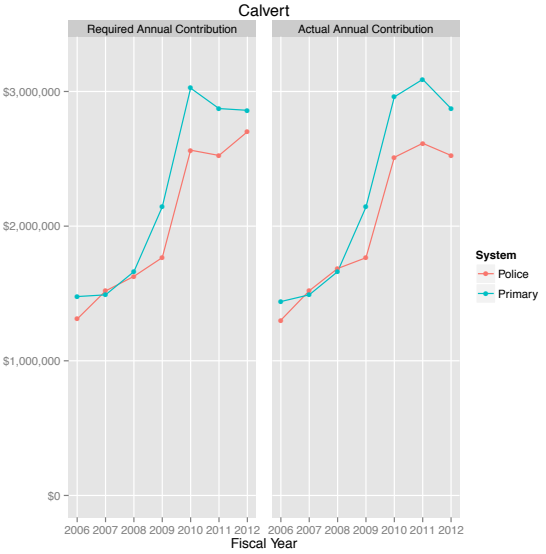

Baltimore County
Actuarial Accrued Liability
Actuarial Value of Assets
$3,000,000,000
$2,000,000,000
$1,000,000,000
$0
2008 2009 2010 2011 2012 2008 2009 2010 2011 2012
Fiscal Year
System
BOE OPEB
OPEB

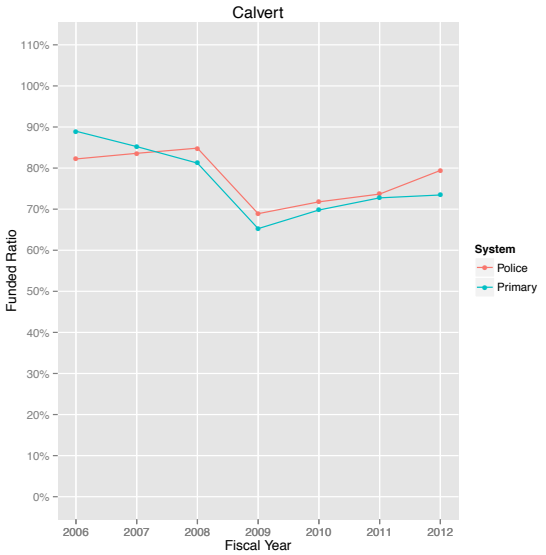

Baltimore County
Required Annual Contribution
Actual Annual Contribution
$250,000,000
$200,000,000
$150,000,000
$100,000,000
$50,000,000
$0
2008 2009 2010 2011 2012 2008 2009 2010 2011 2012
Fiscal Year
System
BOE OPEB
OPEB

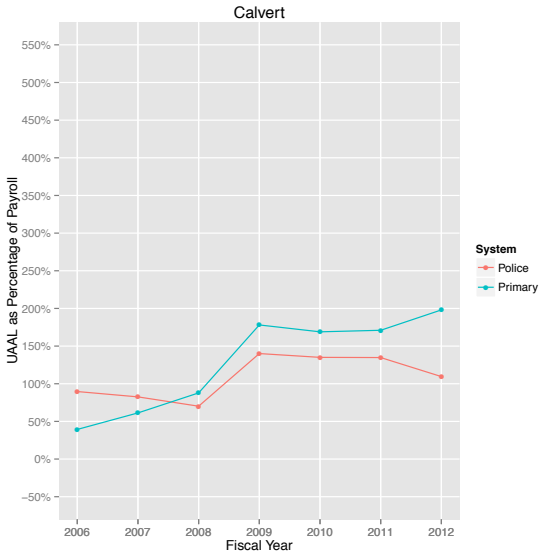

Baltimore County
Funded Ratio
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2008 2009 2010 2011 2012
Fiscal Year
System
BOE OPEB
OPEB


Baltimore County
UAAL as Percentage of Payroll
500%
450%
400%
350%
300%
250%
200%
150%
100%
50%
0%
2008 2009 2010 2011 2012
Fiscal Year
System
BOE OPEB
OPEB


Calvert
Actuarial Accrued Liability
Actuarial Value of Assets
$60,000,000
$40,000,000
$20,000,000
$0
2006 2007 2008 2009 2010 2011 2012
Fiscal Year
System
Police
Primary


Calvert
Required Annual Contribution
Actual Annual Contribution
$3,000,000
$2,000,000
$1,000,000
$0
2006 2007 2008 2009 2010 2011 2012
Fiscal Year
System
Police
Primary


Calvert
Funded Ratio
110%
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2006 2007 2008 2009 2010 2011 2012
Fiscal Year
System
Police
Primary


Calvert
UAAL as Percentage of Payroll
550%
500%
450%
400%
350%
300%
250%
200%
150%
100%
50%
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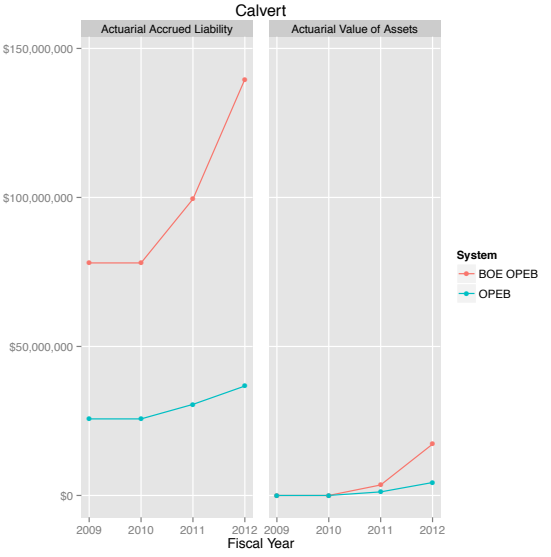
−50%
2006 2007 2008 2009 2010 2011 2012
Fiscal Year
System
Police
Primary


Calvert
Actuarial Accrued Liability
Actuarial Value of Assets
$150,000,000
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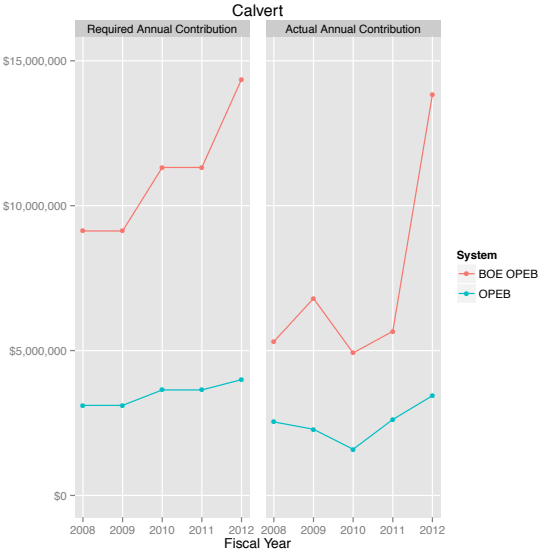
$50,000,000
$0
2009
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB


Calvert
Required Annual Contribution
Actual Annual Contribution
$15,000,000
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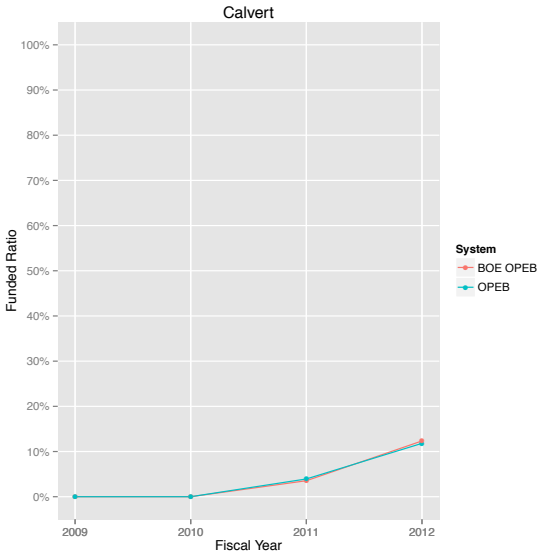
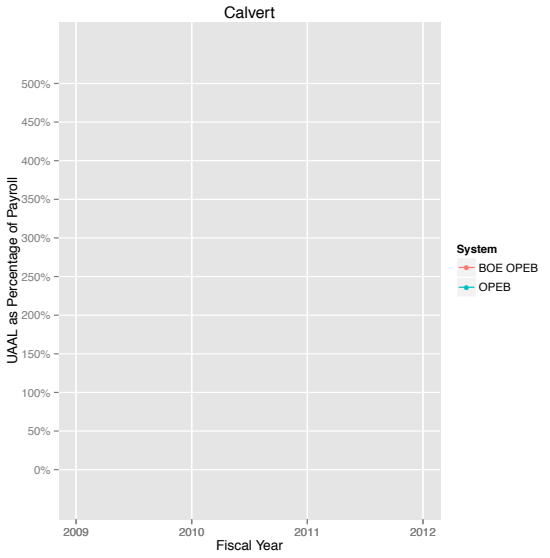
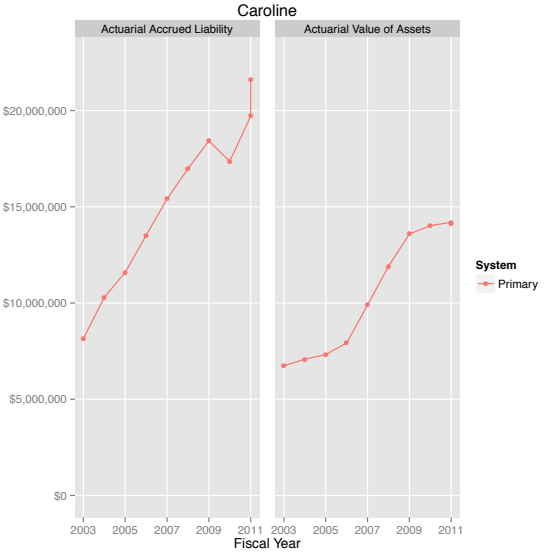
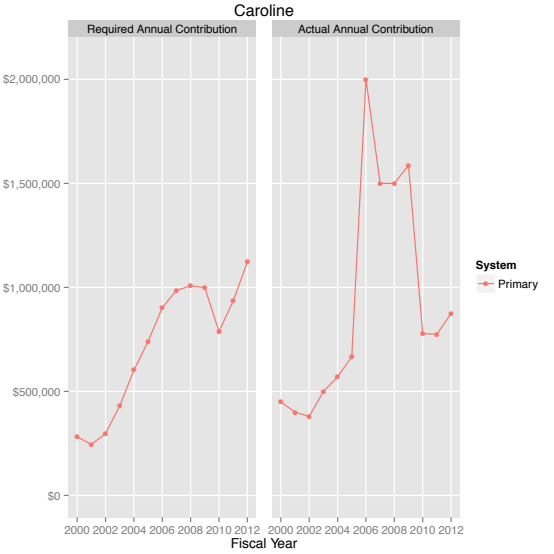
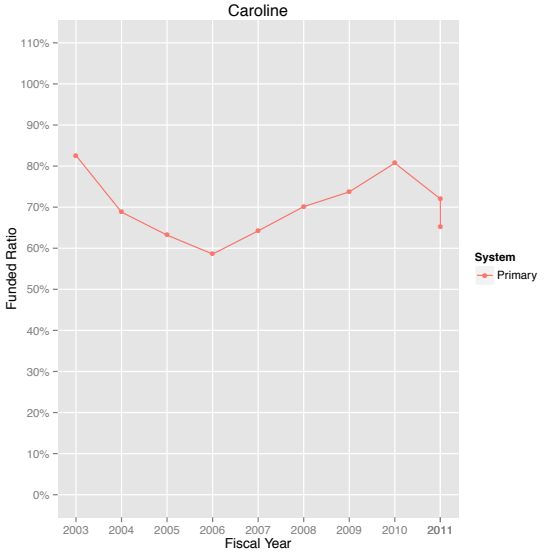
$5,000,000
$0
2008
2009
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB

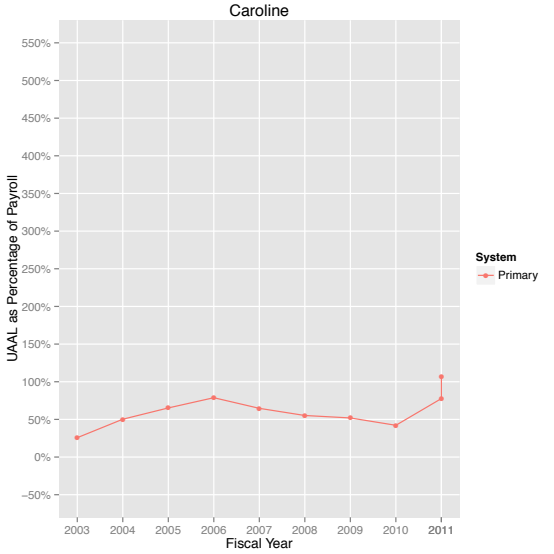

Calvert
Funded Ratio
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2009
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB

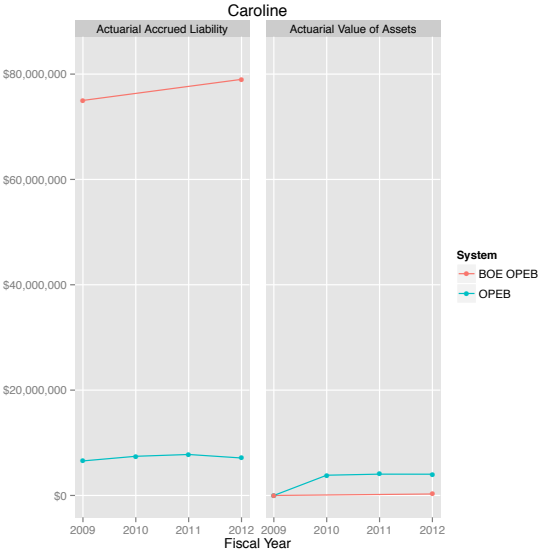

Calvert
UAAL as Percentage of Payroll
500%
450%
400%
350%
300%
250%
200%
150%
100%
50%
0%
2009
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB


Caroline
Actuarial Accrued Liability
Actuarial Value of Assets
$20,000,000
$15,000,000
$10,000,000
$5,000,000
$0
2003 2005 2007 2009 2011
2003 2005 2007 2009 2011
Fiscal Year
System
Primary


Caroline
Required Annual Contribution
Actual Annual Contribution
$2,000,000
$1,500,000
$1,000,000
$500,000
$0
2000 2002 2004 2006 2008 2010 2012
2000 2002 2004 2006 2008 2010 2012
Fiscal Year
System
Primary


Caroline
Funded Ratio
110%
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2003 2004 2005 2006 2007 2008 2009 2010 2011
Fiscal Year
System
Primary


Caroline
UAAL as Percentage of Payroll
550%
500%
450%
400%
350%
300%
250%
200%
150%
100%
50%
0%
−50%
2003 2004 2005 2006 2007 2008 2009 2010 2011
Fiscal Year
System
Primary


Caroline
Actuarial Accrued Liability
Actuarial Value of Assets
$80,000,000
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$20,000,000
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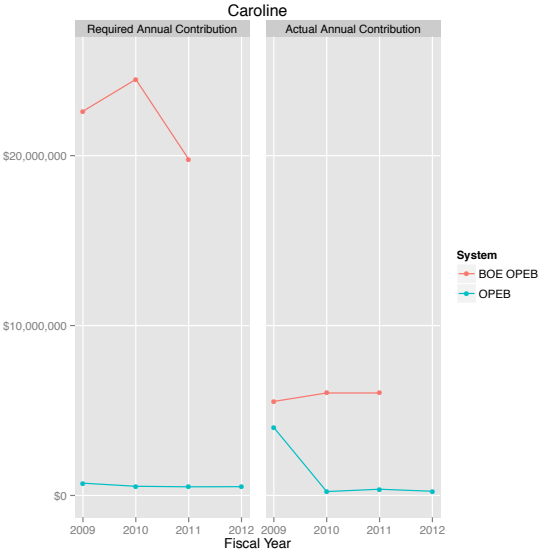
2009
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB


Caroline
Required Annual Contribution
Actual Annual Contribution
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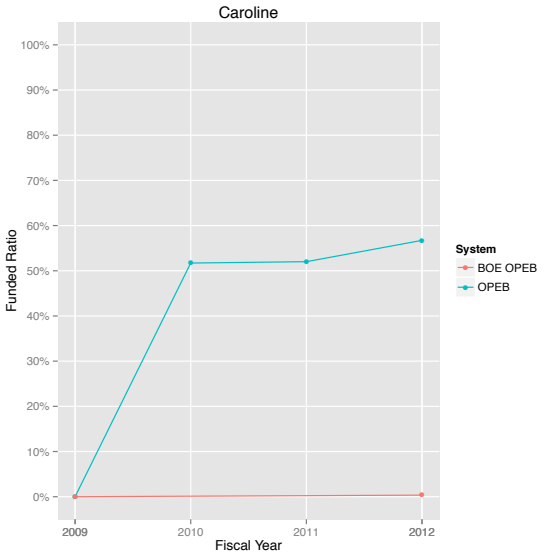
$10,000,000
$0
2009
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB


Caroline
Funded Ratio
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2009
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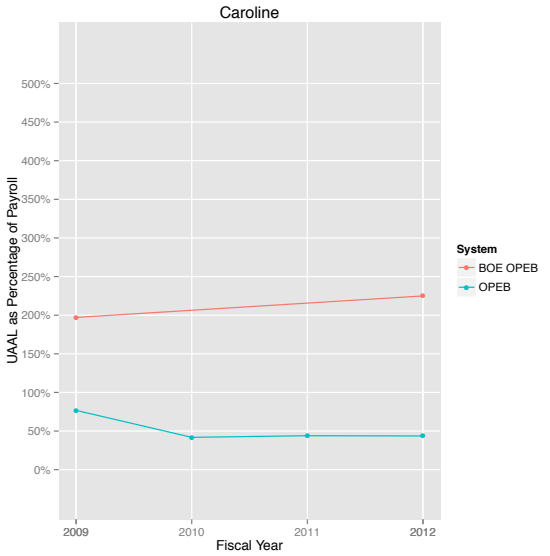
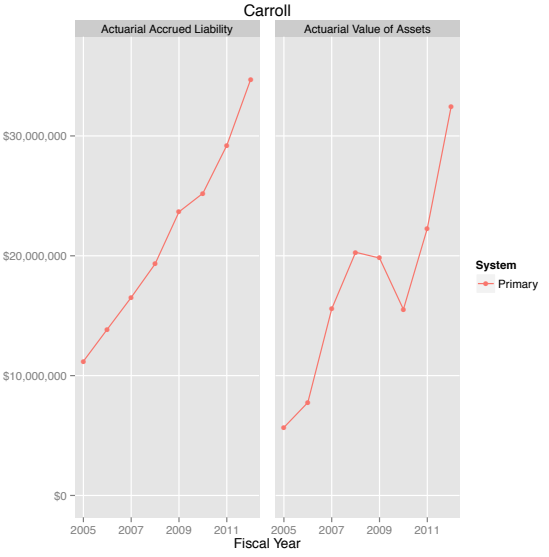
2011
2012
Fiscal Year
System
BOE OPEB
OPEB


Caroline
UAAL as Percentage of Payroll
500%
450%
400%
350%
300%
250%
200%
150%
100%
50%
0%
2009
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB


Carroll
Actuarial Accrued Liability
Actuarial Value of Assets
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$20,000,000
$10,000,000
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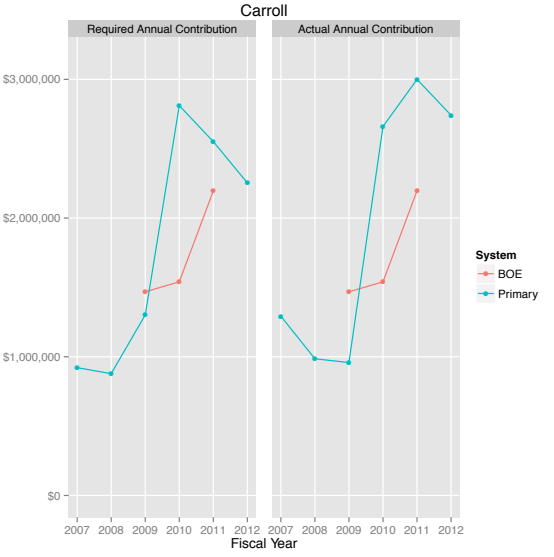
2005
2007
2009
2011
Fiscal Year
System
Primary


Carroll
Required Annual Contribution
Actual Annual Contribution
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$2,000,000
$1,000,000
$0
2007
2008
2009
2010
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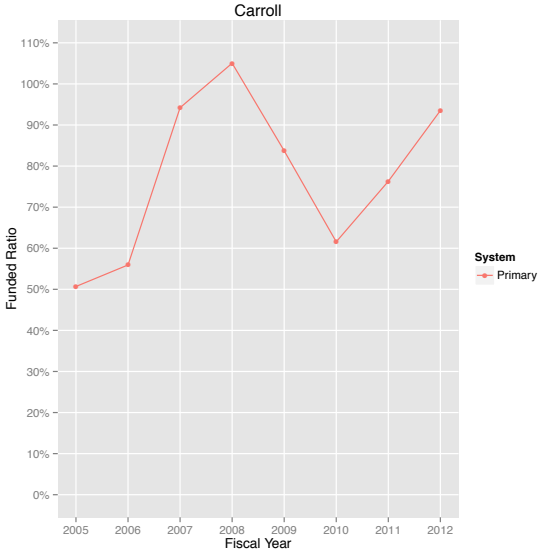
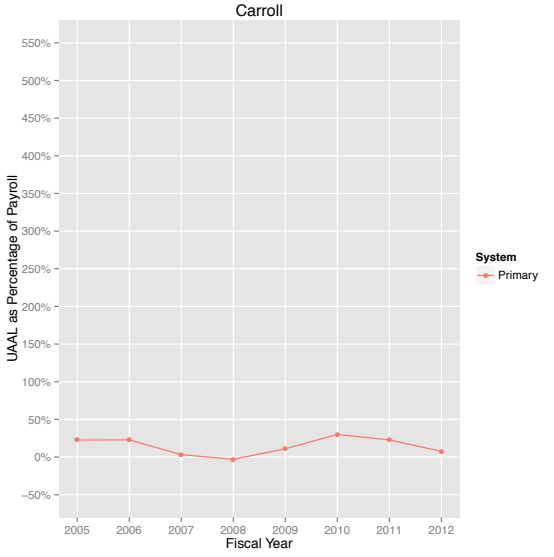
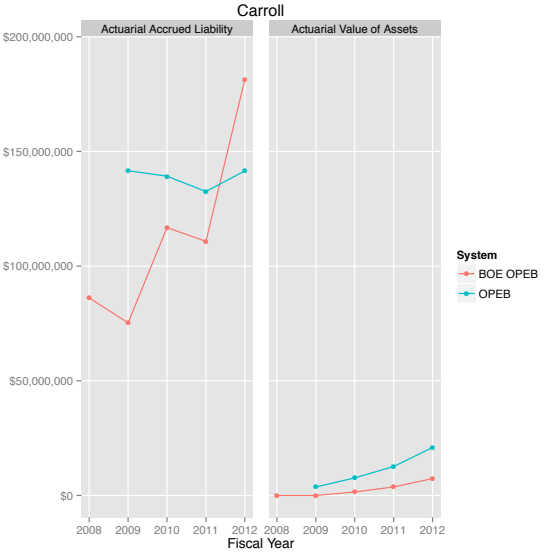
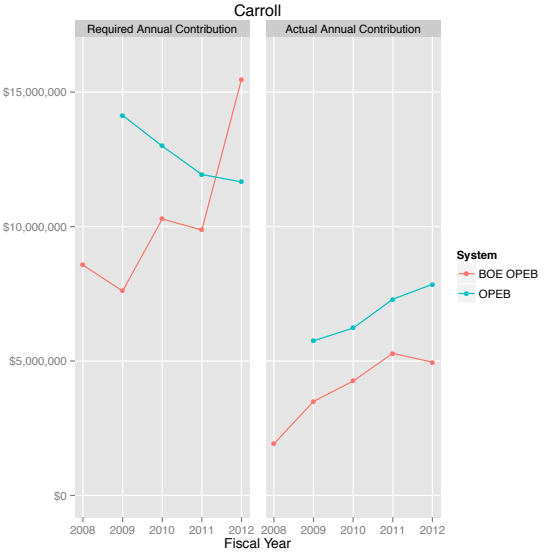
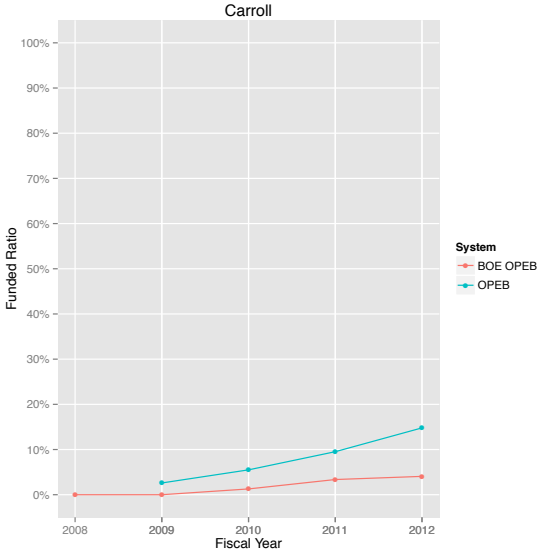
Fiscal Year
System
BOE
Primary


Carroll
Funded Ratio
110%
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2005
2006
2007
2008
2009
2010
2011
2012
Fiscal Year
System
Primary


Carroll
UAAL as Percentage of Payroll
550%
500%
450%
400%
350%
300%
250%
200%
150%
100%
50%
0%
−50%
2005
2006
2007
2008
2009
2010
2011
2012
Fiscal Year
System
Primary


Carroll
Actuarial Accrued Liability
Actuarial Value of Assets
$200,000,000
$150,000,000
$100,000,000
$50,000,000
$0
2008
2009
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB


Carroll
Required Annual Contribution
Actual Annual Contribution
$15,000,000
$10,000,000
$5,000,000
$0
2008
2009
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB


Carroll
Funded Ratio
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2008
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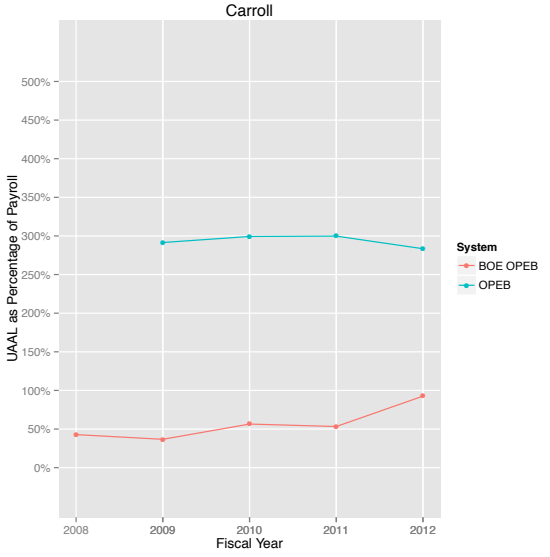
2011
2012
Fiscal Year
System
BOE OPEB
OPEB


Carroll
UAAL as Percentage of Payroll
500%
450%
400%
350%
300%
250%
200%
150%
100%
50%
0%
2008
2009
2010
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Fiscal Year
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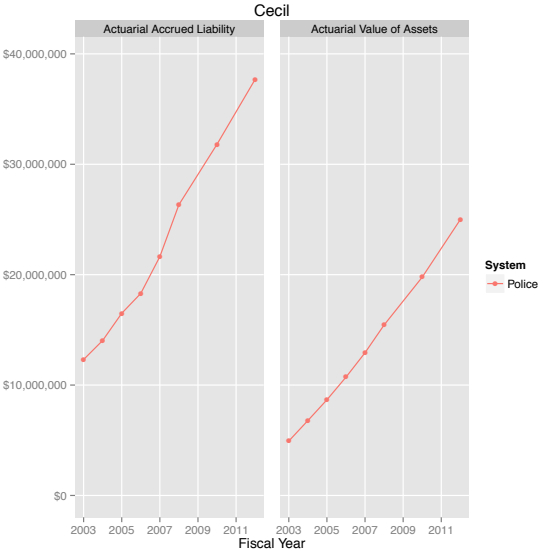
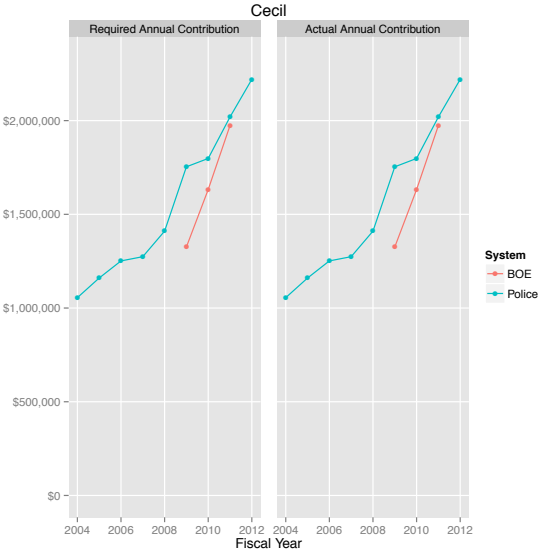
BOE OPEB
OPEB


Cecil
Actuarial Accrued Liability
Actuarial Value of Assets
$40,000,000
$30,000,000
$20,000,000
$10,000,000
$0
2003 2005 2007 2009 2011
2003 2005 2007 2009 2011
Fiscal Year
System
Police


Cecil
Required Annual Contribution
Actual Annual Contribution
$2,000,000
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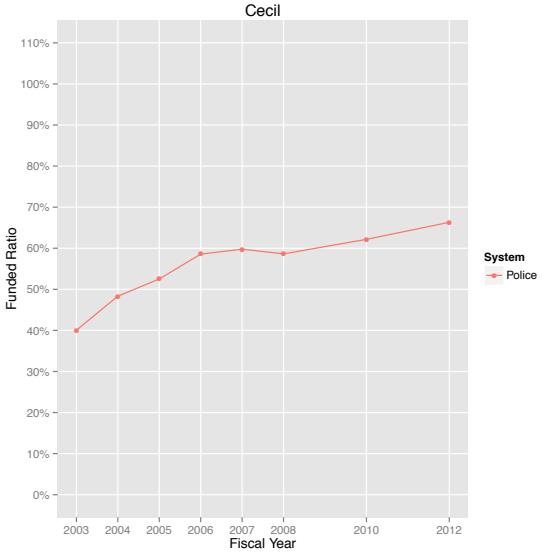
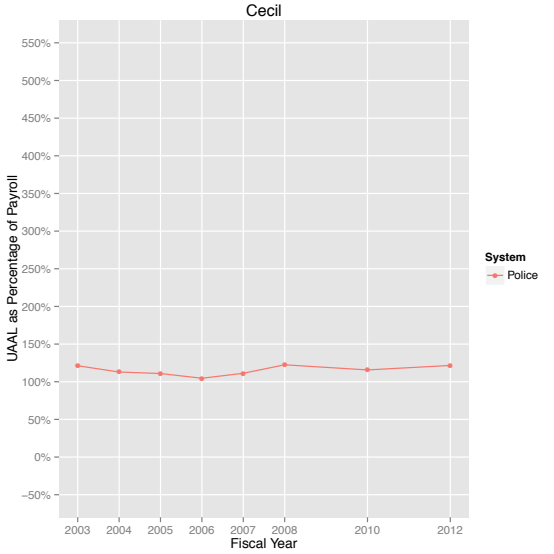
$1,000,000
$500,000
$0
2004 2006 2008 2010 2012
2004 2006 2008 2010 2012
Fiscal Year
System
BOE
Police


Cecil
Funded Ratio
110%
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2003 2004 2005 2006 2007 2008 2010 2012
Fiscal Year
System
Police


Cecil
UAAL as Percentage of Payroll
550%
500%
450%
400%
350%
300%
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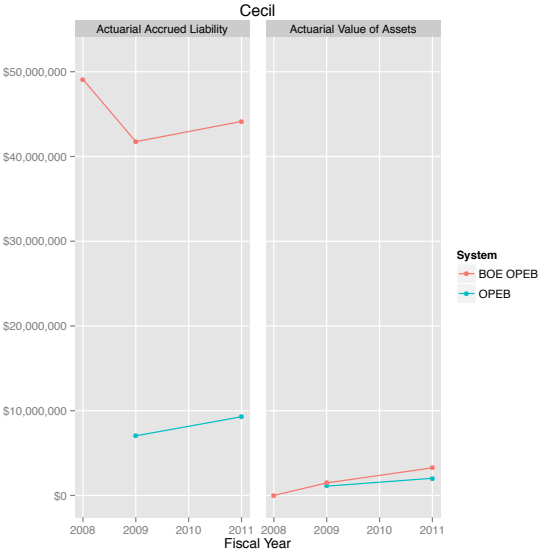
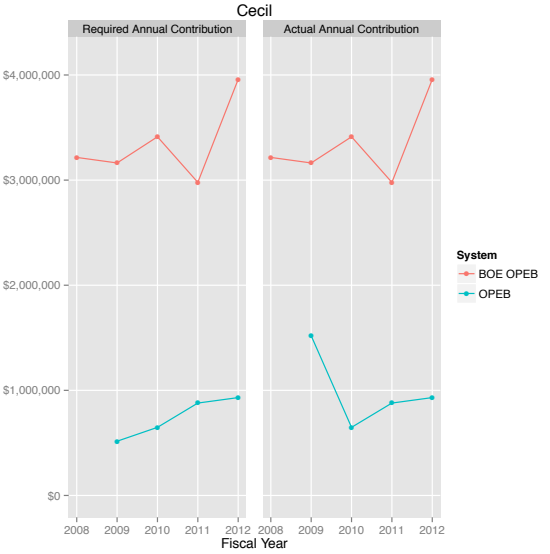
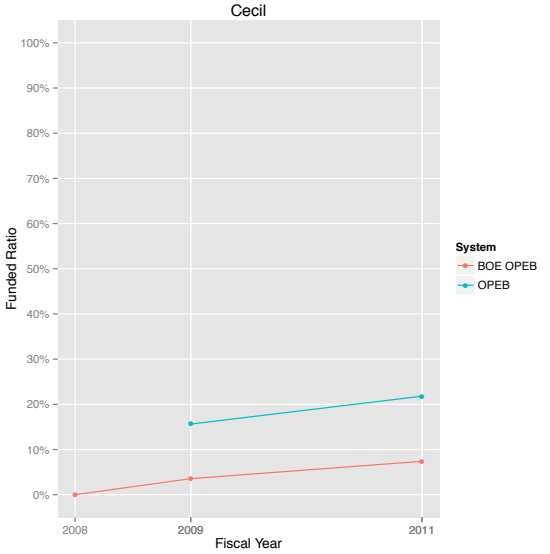
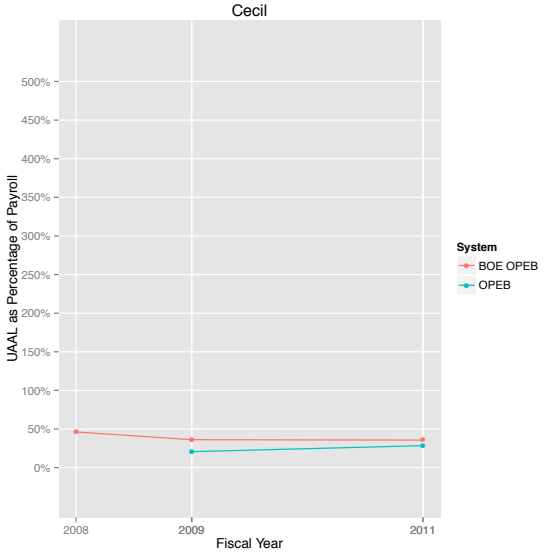
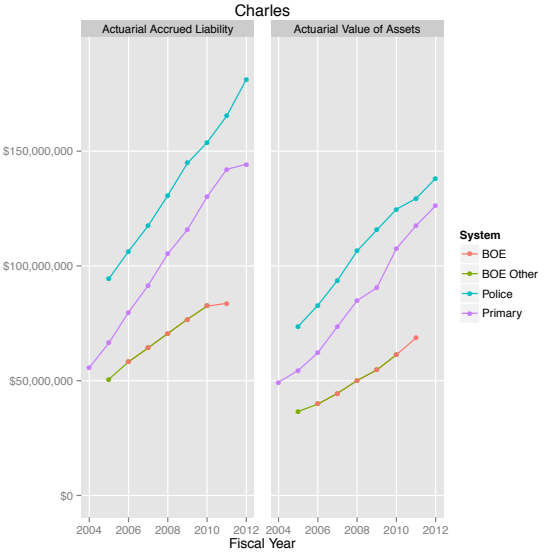
200%
150%
100%
50%
0%
−50%
2003 2004 2005 2006 2007 2008 2010 2012
Fiscal Year
System
Police

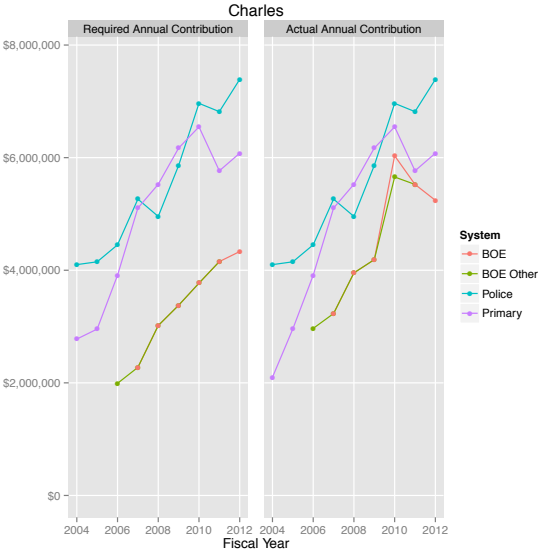

Cecil
Actuarial Accrued Liability
Actuarial Value of Assets
$50,000,000
$40,000,000
$30,000,000
$20,000,000
$10,000,000
$0
2008
2009
2010
2011
Fiscal Year
System
BOE OPEB
OPEB

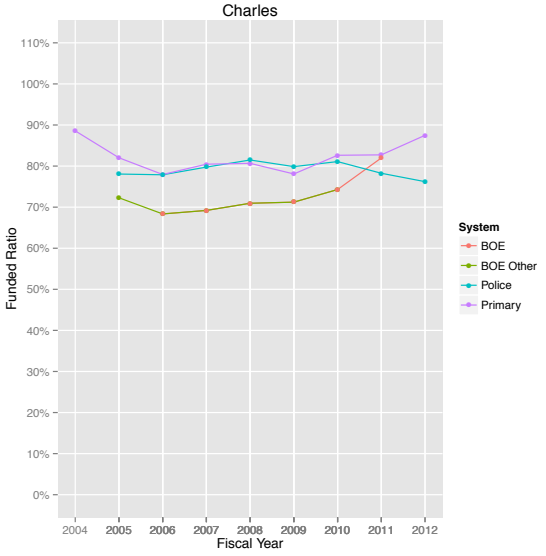

Cecil
Required Annual Contribution
Actual Annual Contribution
$4,000,000
$3,000,000
$2,000,000
$1,000,000
$0
2008
2009
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB

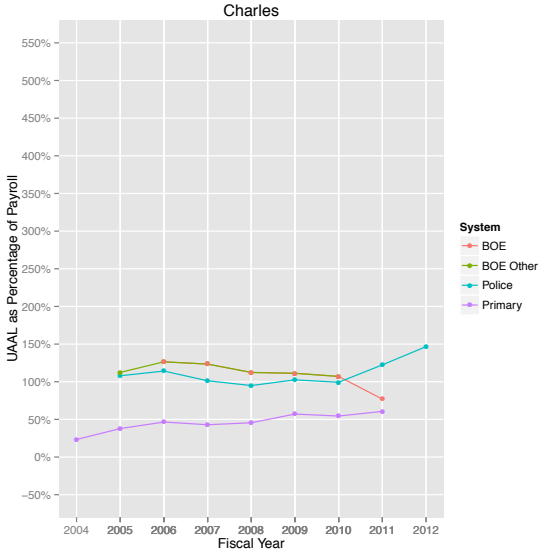

Cecil
Funded Ratio
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2008
2009
2011
Fiscal Year
System
BOE OPEB
OPEB

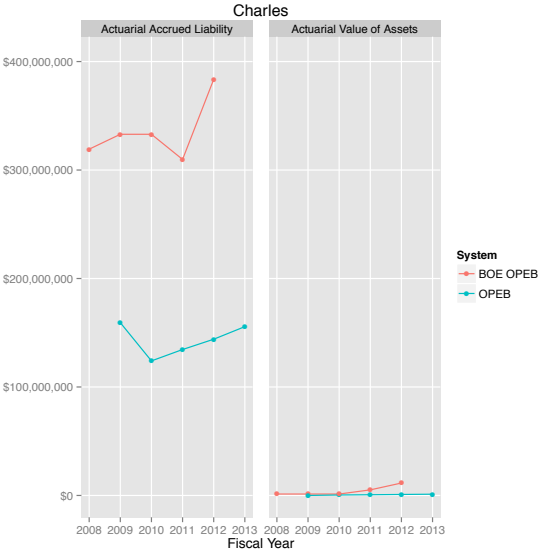

Cecil
UAAL as Percentage of Payroll
500%
450%
400%
350%
300%
250%
200%
150%
100%
50%
0%
2008
2009
2011
Fiscal Year
System
BOE OPEB
OPEB

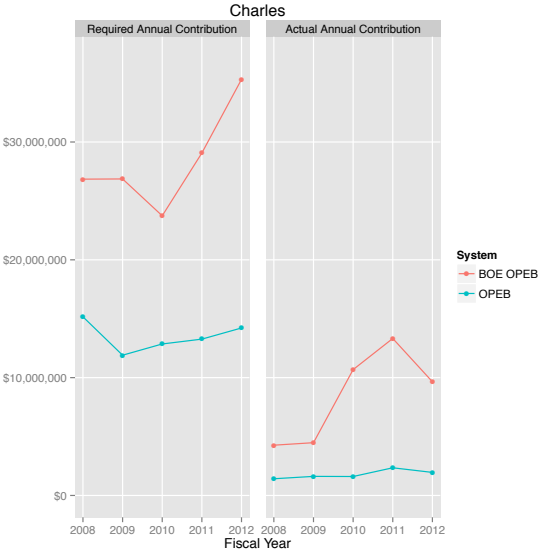

Charles
Actuarial Accrued Liability
Actuarial Value of Assets
$150,000,000
$100,000,000
$50,000,000
$0
2004
2006
2008
2010
2012
Fiscal Year
System
BOE
BOE Other
Police
Primary


Charles
Required Annual Contribution
Actual Annual Contribution
$8,000,000
$6,000,000
$4,000,000
$2,000,000
$0
2004
2006
2008
2010
2012
Fiscal Year
System
BOE
BOE Other
Police
Primary


Charles
Funded Ratio
110%
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2004
2005
2006
2007
2008
2009
2010
2011
2012
Fiscal Year
System
BOE
BOE Other
Police
Primary


Charles
UAAL as Percentage of Payroll
550%
500%
450%
400%
350%
300%
250%
200%
150%
100%
50%
0%
−50%
2004
2005
2006
2007
2008
2009
2010
2011
2012
Fiscal Year
System
BOE
BOE Other
Police
Primary


Charles
Actuarial Accrued Liability
Actuarial Value of Assets
$400,000,000
$300,000,000
$200,000,000
$100,000,000
$0
2008 2009 2010 2011 2012 2013
Fiscal Year
System
BOE OPEB
OPEB


Charles
Required Annual Contribution
Actual Annual Contribution
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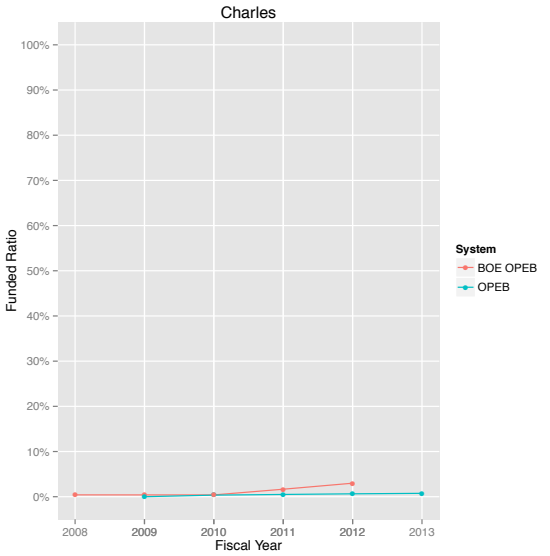
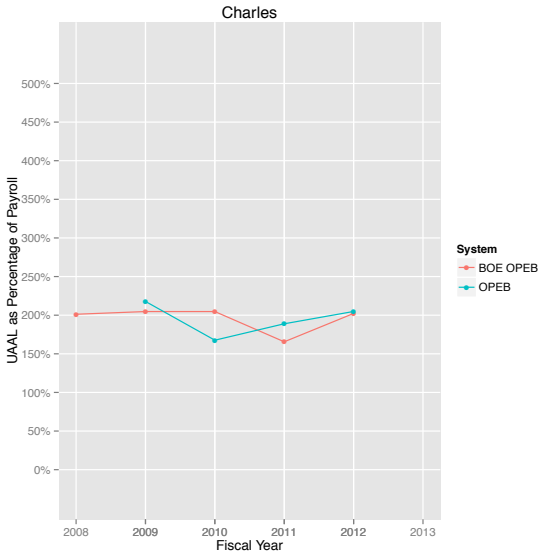
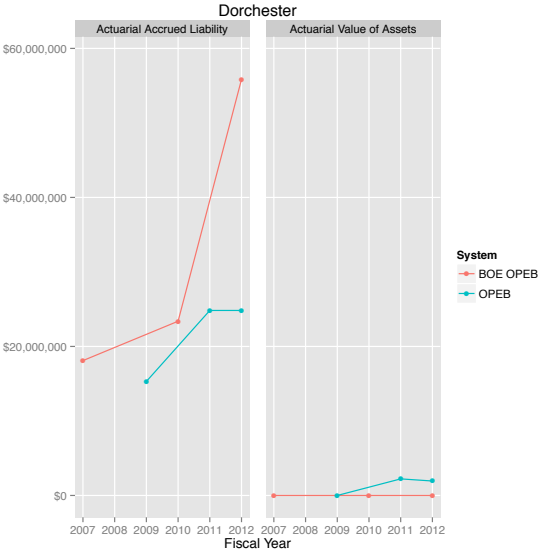
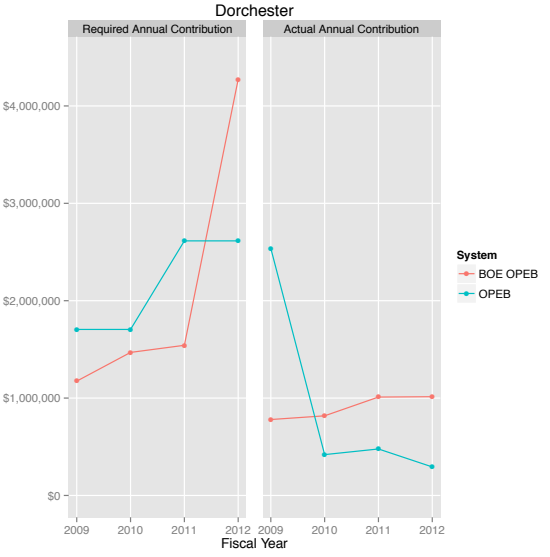
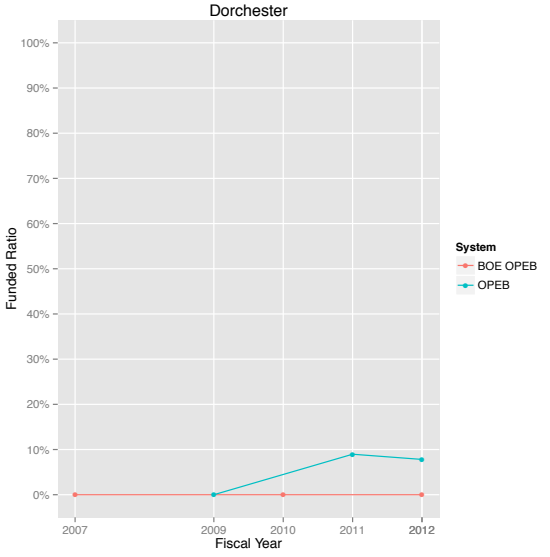
$20,000,000
$10,000,000
$0
2008 2009 2010 2011 2012
Fiscal Year
System
BOE OPEB
OPEB

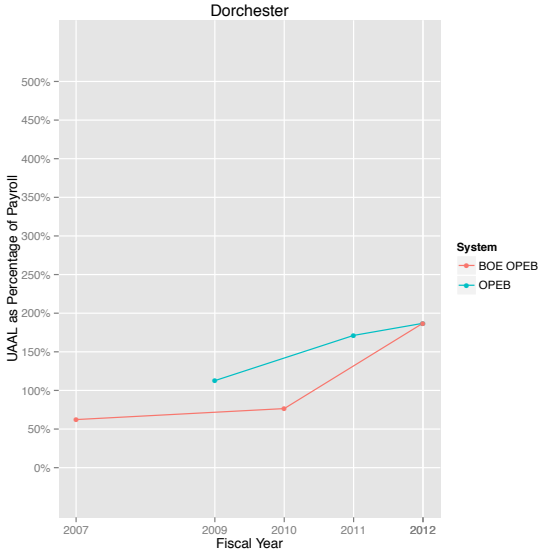

Charles
Funded Ratio
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2008 2009 2010 2011 2012 2013
Fiscal Year
System
BOE OPEB
OPEB

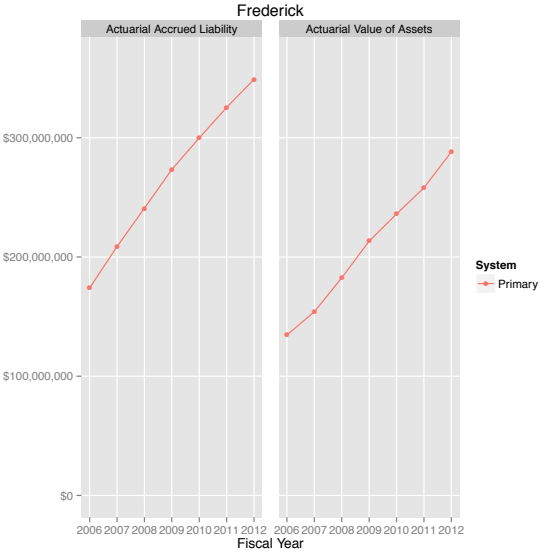

Charles
UAAL as Percentage of Payroll
500%
450%
400%
350%
300%
250%
200%
150%
100%
50%
0%
2008 2009 2010 2011 2012 2013
Fiscal Year
System
BOE OPEB
OPEB

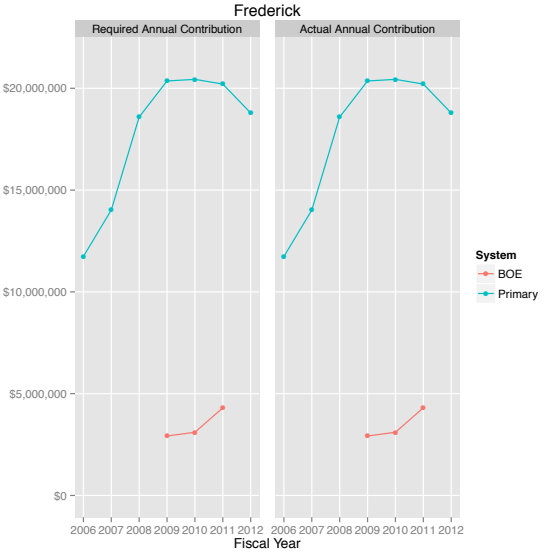

Dorchester
Actuarial Accrued Liability
Actuarial Value of Assets
$60,000,000
$40,000,000
$20,000,000
$0
2007 2008 2009 2010 2011 2012
2007 2008 2009 2010 2011 2012
Fiscal Year
System
BOE OPEB
OPEB

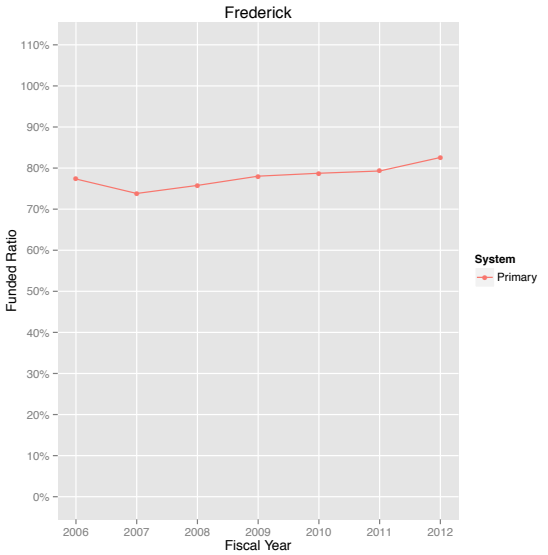

Dorchester
Required Annual Contribution
Actual Annual Contribution
$4,000,000
$3,000,000
$2,000,000
$1,000,000
$0
2009 2010 2011 2012
2009 2010 2011 2012
Fiscal Year
System
BOE OPEB
OPEB

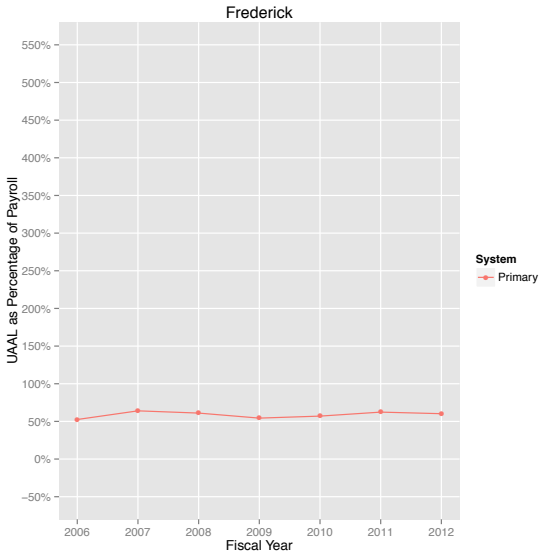

Dorchester
Funded Ratio
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2007 2009 2010 2011 2012
Fiscal Year
System
BOE OPEB
OPEB

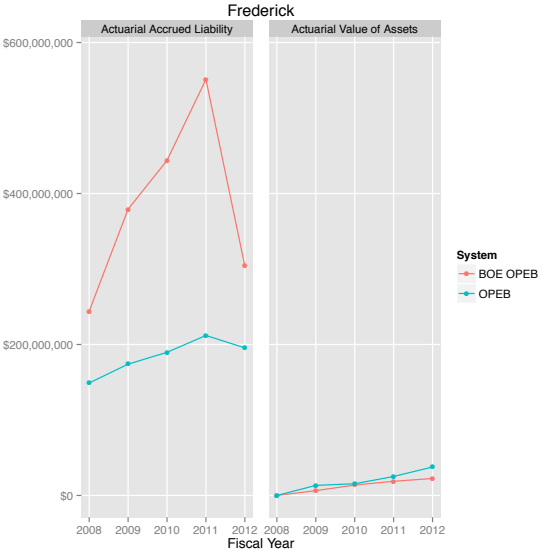

Dorchester
UAAL as Percentage of Payroll
500%
450%
400%
350%
300%
250%
200%
150%
100%
50%
0%
2007 2009 2010 2011 2012
Fiscal Year
System
BOE OPEB
OPEB

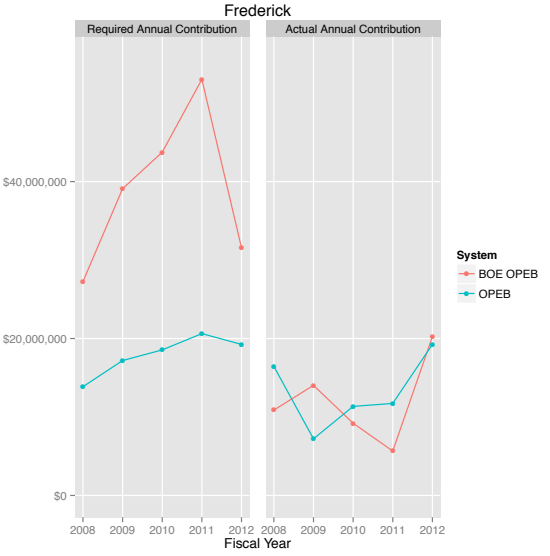

Frederick
Actuarial Accrued Liability
Actuarial Value of Assets
$300,000,000
$200,000,000
$100,000,000
$0
2006 2007 2008 2009 2010 2011 2012
2006 2007 2008 2009 2010 2011 2012
Fiscal Year
System
Primary

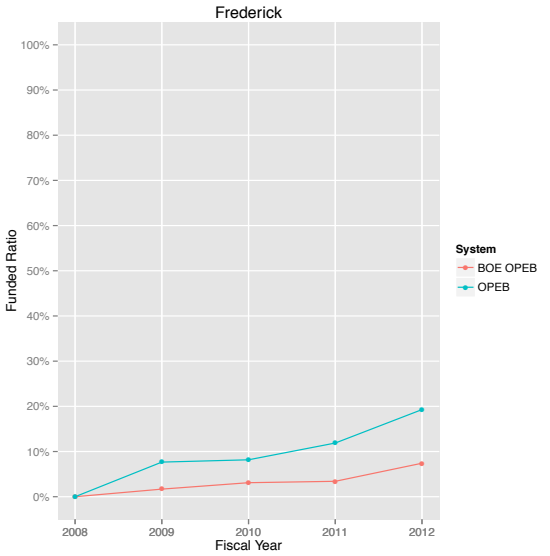

Frederick
Required Annual Contribution
Actual Annual Contribution
$20,000,000
$15,000,000
$10,000,000
$5,000,000
$0
2006 2007 2008 2009 2010 2011 2012
2006 2007 2008 2009 2010 2011 2012
Fiscal Year
System
BOE
Primary

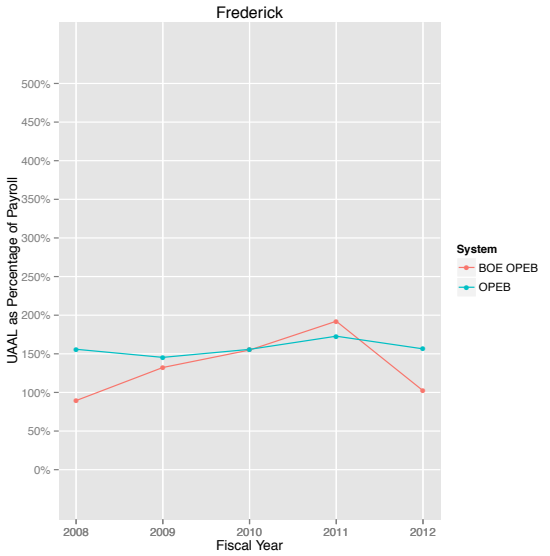

Frederick
110%
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Funded Ratio
2006 2007 2008 2009 2010 2011 2012
Fiscal Year
System
Primary

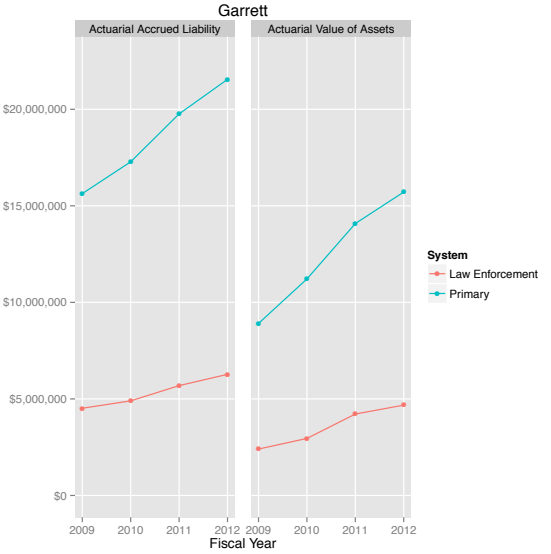

Frederick
550%
500%
450%
400%
350%
300%
250%
200%
150%
100%
50%
0%
−50%
UAAL as Percentage of Payroll
2006 2007 2008 2009 2010 2011 2012
Fiscal Year
System
Primary

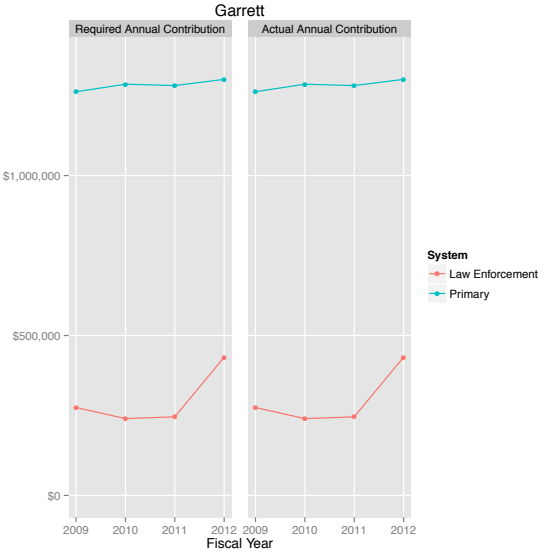

Frederick
Actuarial Accrued Liability
Actuarial Value of Assets
$600,000,000
$400,000,000
$200,000,000
$0
2008
2009
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB

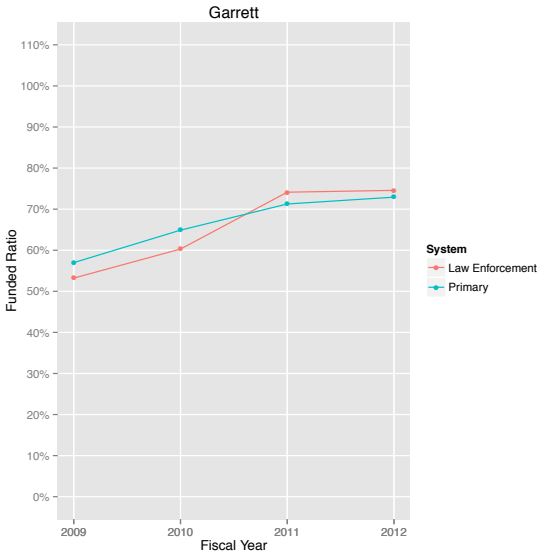

Frederick
Required Annual Contribution
Actual Annual Contribution
$40,000,000
$20,000,000
$0
2008
2009
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB

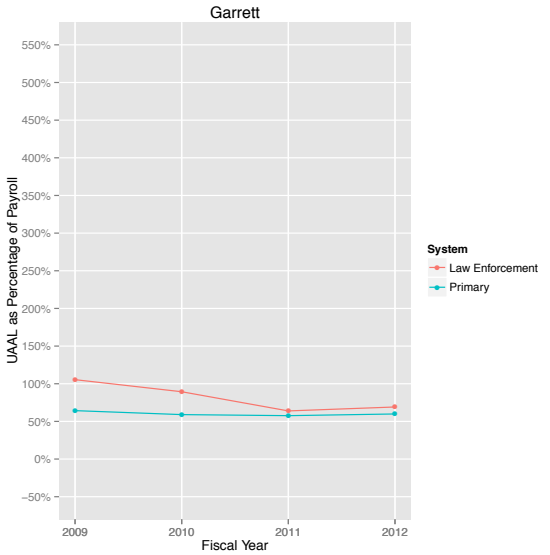

Frederick
Funded Ratio
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2008
2009
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB

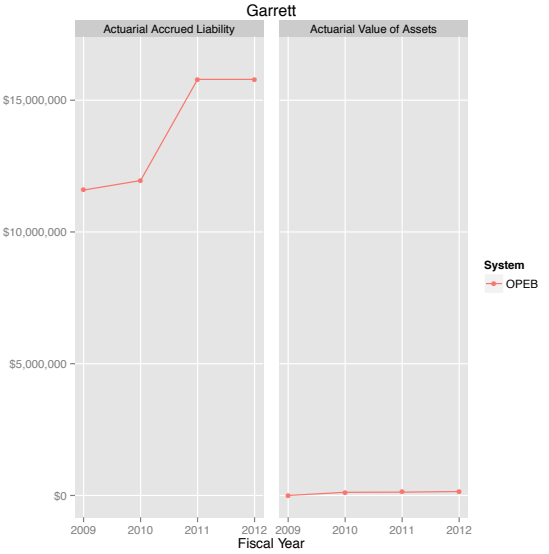

Frederick
UAAL as Percentage of Payroll
500%
450%
400%
350%
300%
250%
200%
150%
100%
50%
0%
2008
2009
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB


Garrett
Actuarial Accrued Liability
Actuarial Value of Assets
$20,000,000
$15,000,000
$10,000,000
$5,000,000
$0
2009
2010
2011
2012
Fiscal Year
System
Law Enforcement
Primary


Garrett
Required Annual Contribution
Actual Annual Contribution
$1,000,000
$500,000
$0
2009
2010
2011
2012
Fiscal Year
System
Law Enforcement
Primary


Garrett
Funded Ratio
110%
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2009
2010
2011
2012
Fiscal Year
System
Law Enforcement
Primary


Garrett
UAAL as Percentage of Payroll
550%
500%
450%
400%
350%
300%
250%
200%
150%
100%
50%
0%
−50%
2009
2010
2011
2012
Fiscal Year
System
Law Enforcement
Primary


Garrett
Actuarial Accrued Liability
Actuarial Value of Assets
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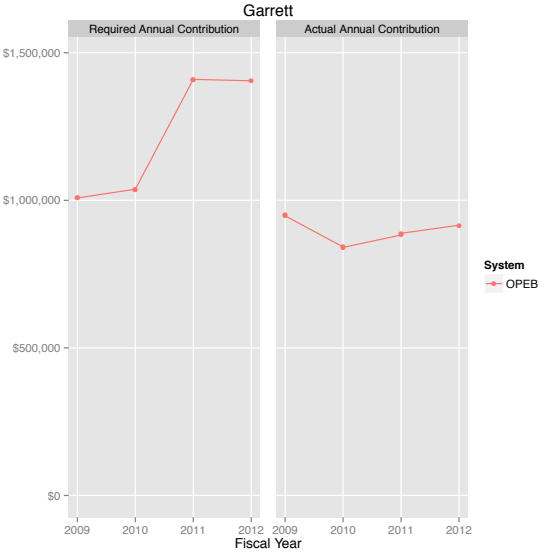
$10,000,000
$5,000,000
$0
2009
2010
2011
2012
Fiscal Year
System
OPEB


Garrett
Required Annual Contribution
Actual Annual Contribution
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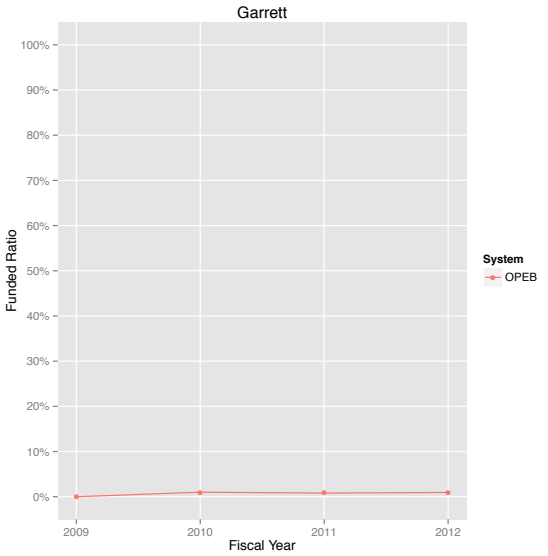
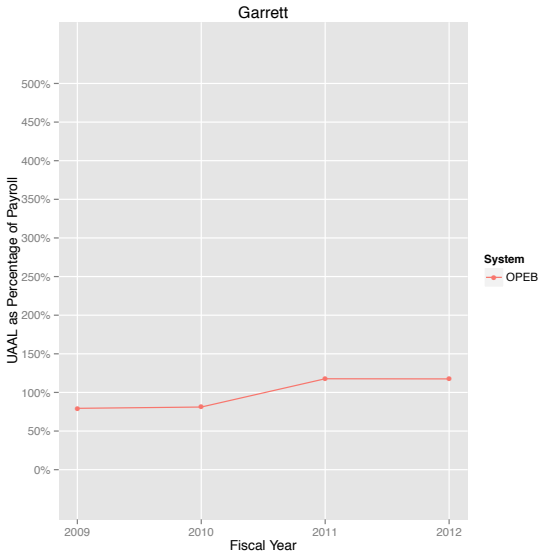
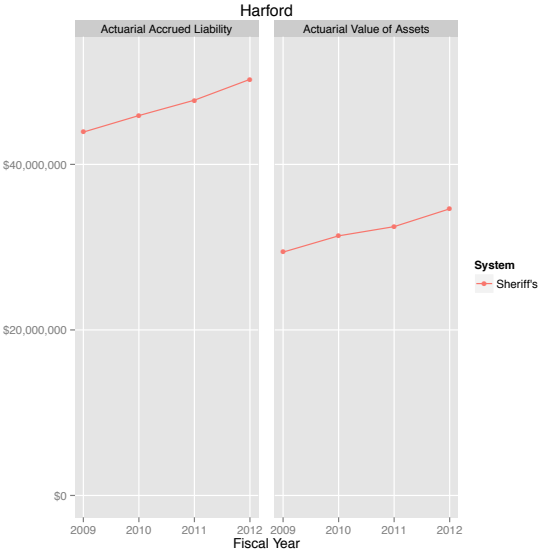
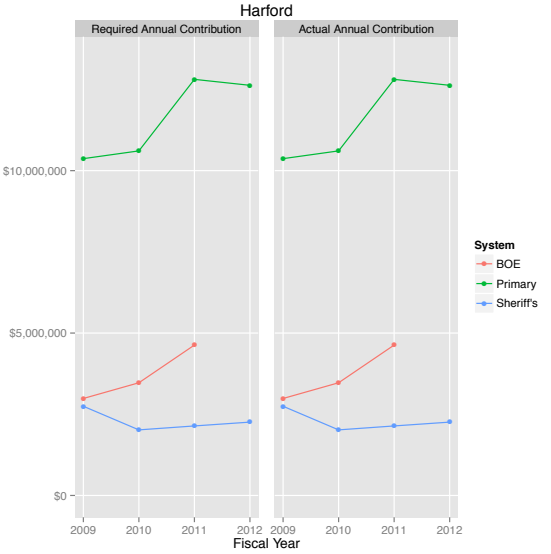
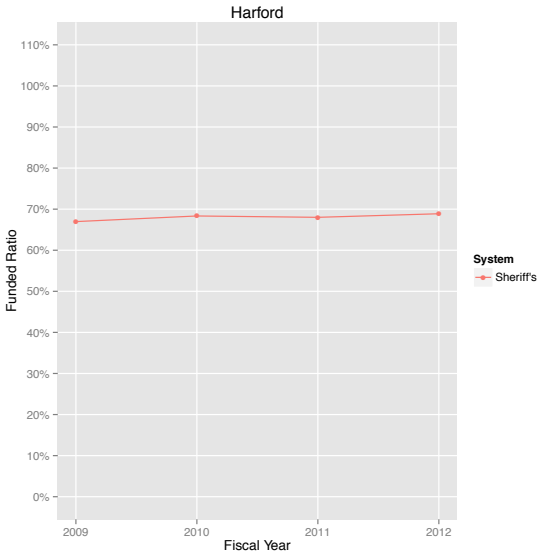
$1,000,000
$500,000
$0
2009
2010
2011
2012
Fiscal Year
System
OPEB

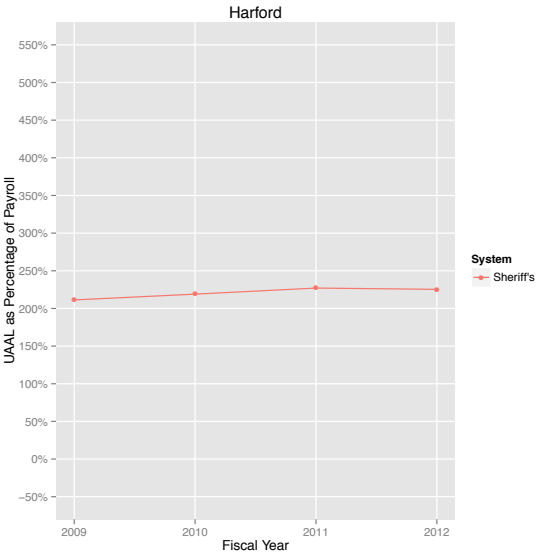

Garrett
Funded Ratio
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2009
2010
2011
2012
Fiscal Year
System
OPEB

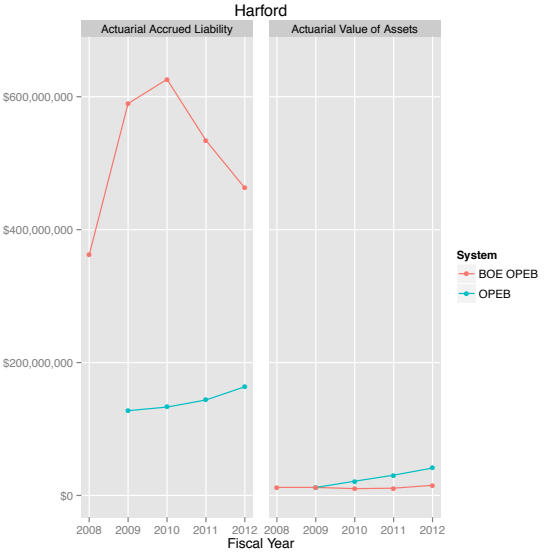

Garrett
UAAL as Percentage of Payroll
500%
450%
400%
350%
300%
250%
200%
150%
100%
50%
0%
2009
2010
2011
2012
Fiscal Year
System
OPEB

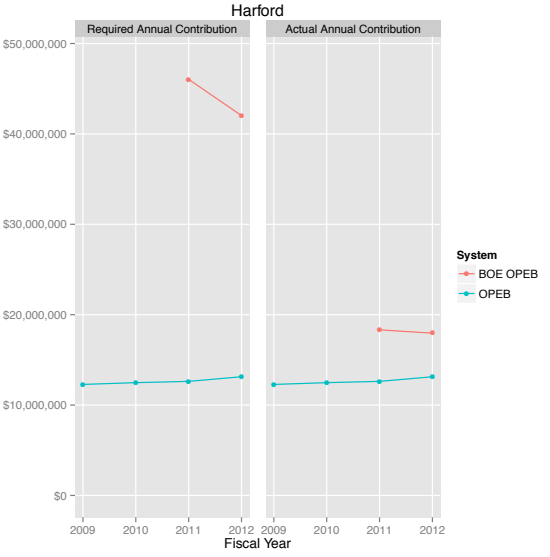

Harford
Actuarial Accrued Liability
Actuarial Value of Assets
$40,000,000
$20,000,000
$0
2009
2010
2011
2012
Fiscal Year
System
Sheriff's

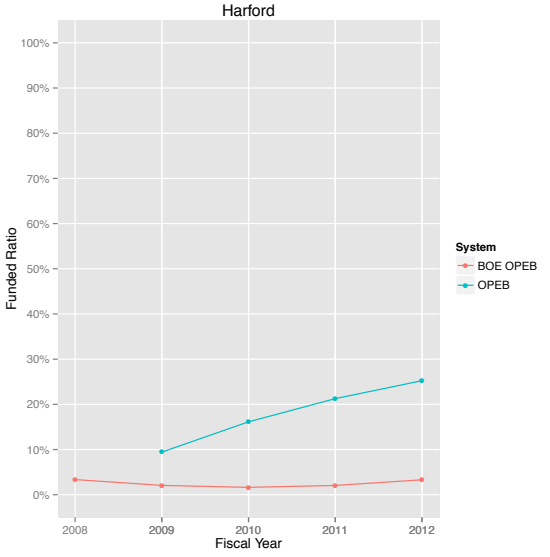

Harford
Required Annual Contribution
Actual Annual Contribution
$10,000,000
$5,000,000
$0
2009
2010
2011
2012
Fiscal Year
System
BOE
Primary
Sheriff's

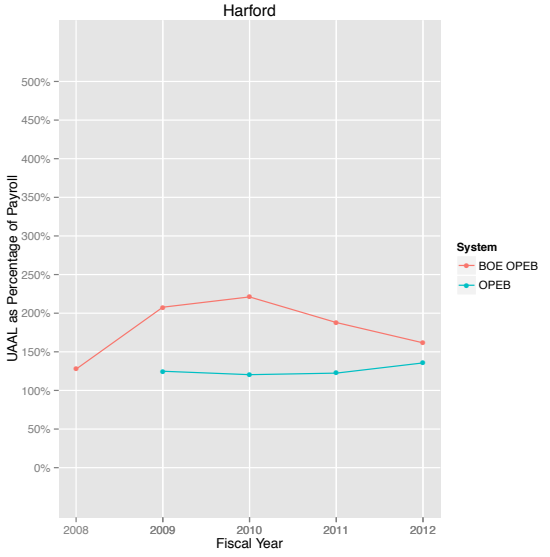

Harford
Funded Ratio
110%
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2009
2010
2011
2012
Fiscal Year
System
Sheriff's

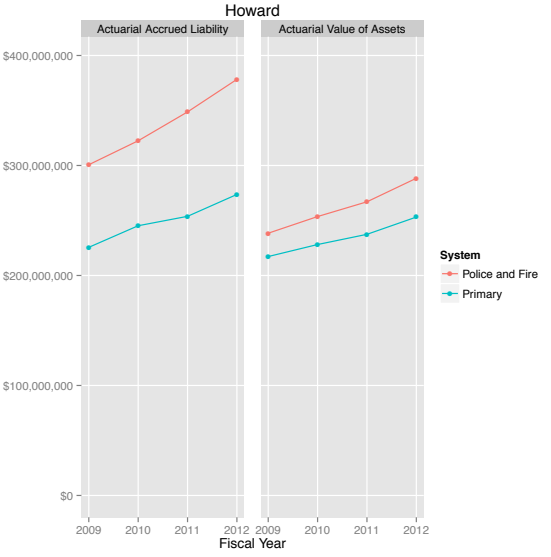

Harford
UAAL as Percentage of Payroll
550%
500%
450%
400%
350%
300%
250%
200%
150%
100%
50%
0%
−50%
2009
2010
2011
2012
Fiscal Year
System
Sheriff's

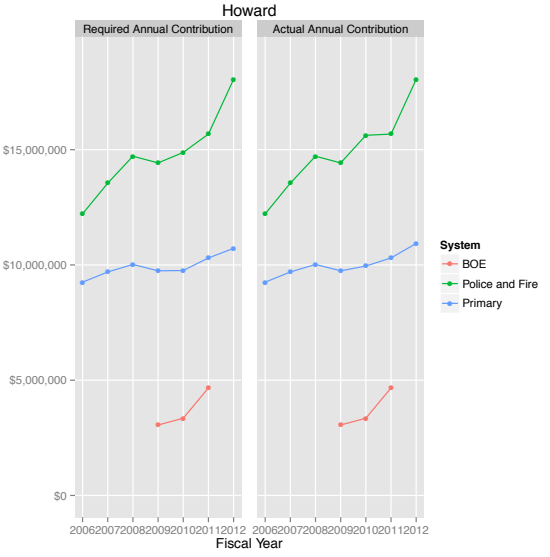

Harford
Actuarial Accrued Liability
Actuarial Value of Assets
$600,000,000
$400,000,000
$200,000,000
$0
2008
2009
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB

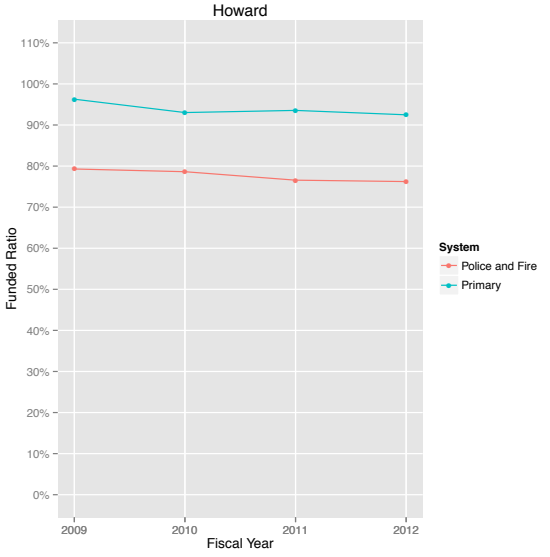

Harford
Required Annual Contribution
Actual Annual Contribution
$50,000,000
$40,000,000
$30,000,000
$20,000,000
$10,000,000
$0
2009
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB

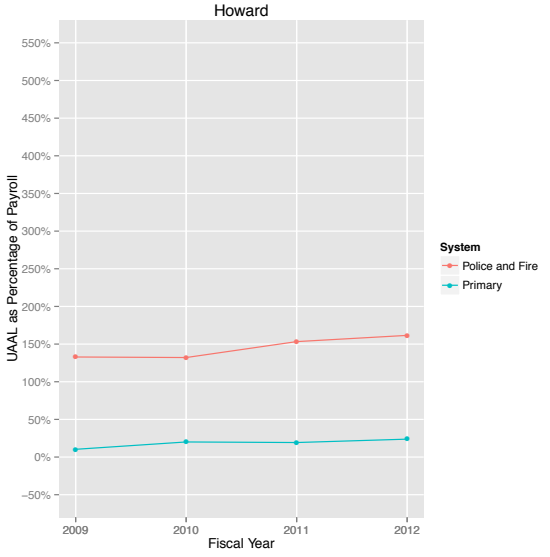

Harford
Funded Ratio
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2008
2009
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB

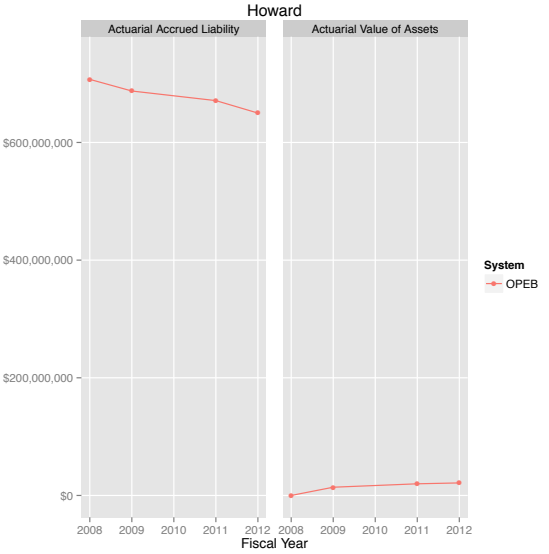

Harford
UAAL as Percentage of Payroll
500%
450%
400%
350%
300%
250%
200%
150%
100%
50%
0%
2008
2009
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB

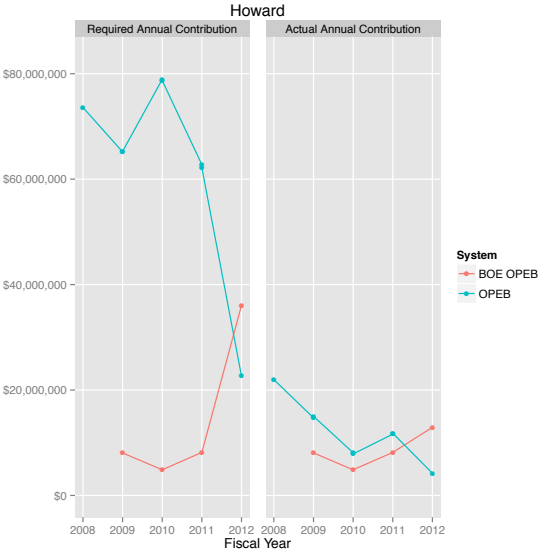

Howard
Actuarial Accrued Liability
Actuarial Value of Assets
$400,000,000
$300,000,000
$200,000,000
$100,000,000
$0
2009
2010
2011
2012
Fiscal Year
System
Police and Fire
Primary

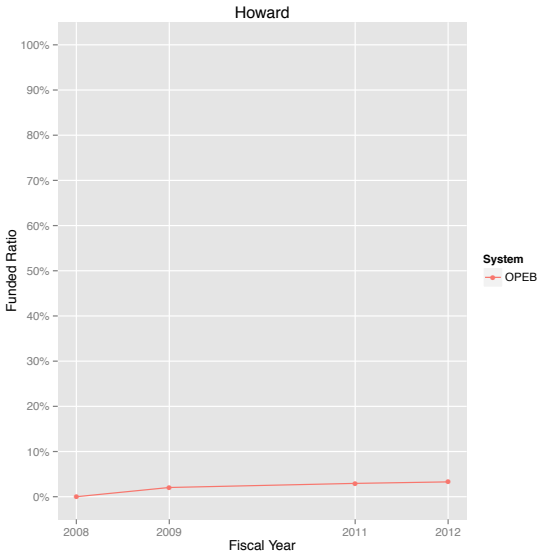

Howard
Required Annual Contribution
Actual Annual Contribution
$15,000,000
$10,000,000
$5,000,000
$0
2006
2007
2008
2009
2010
2011
2012
Fiscal Year
System
BOE
Police and Fire
Primary

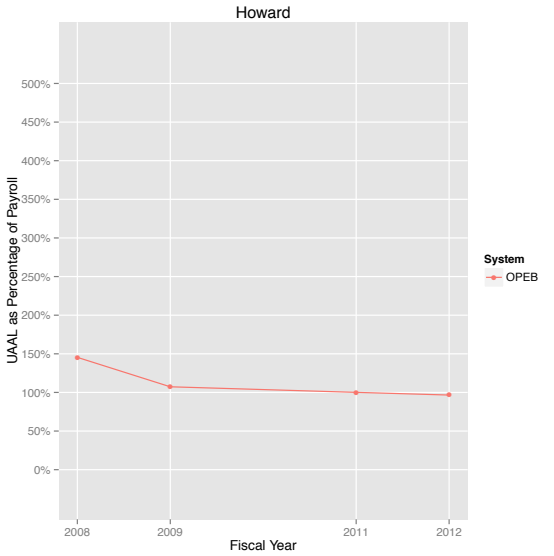

Howard
110%
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Funded Ratio
2009
2010
2011
2012
Fiscal Year
System
Police and Fire
Primary

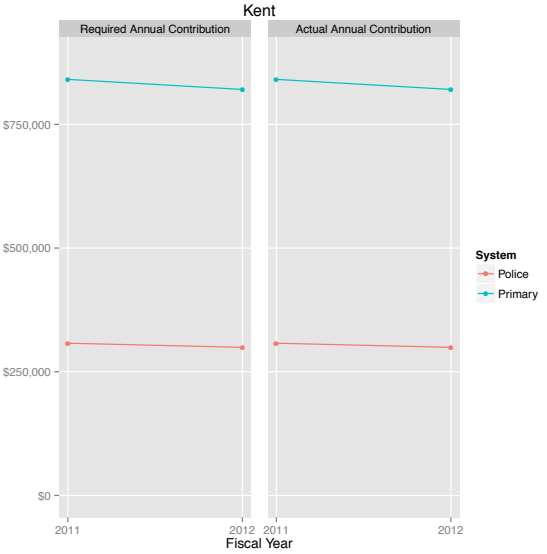

Howard
550%
500%
450%
400%
350%
300%
250%
200%
150%
100%
50%
0%
−50%
UAAL as Percentage of Payroll
2009
2010
2011
2012
Fiscal Year
System
Police and Fire
Primary

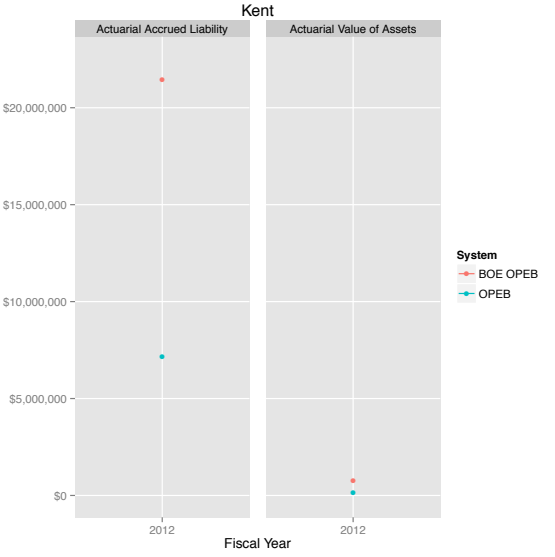

Howard
Actuarial Accrued Liability
Actuarial Value of Assets
$600,000,000
$400,000,000
$200,000,000
$0
2008
2009
2010
2011
2012
Fiscal Year
System
OPEB

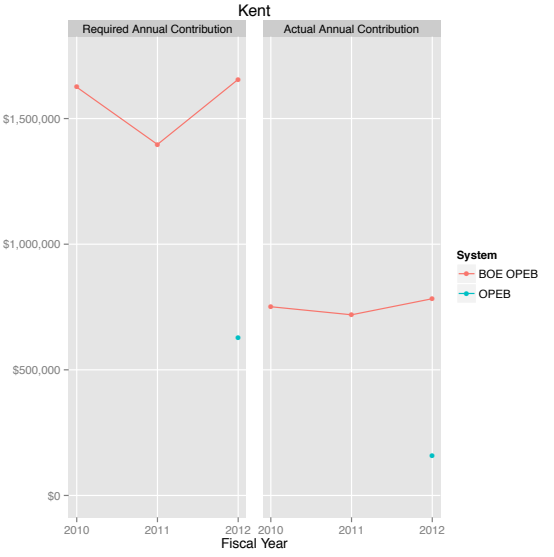

Howard
Required Annual Contribution
Actual Annual Contribution
$80,000,000
$60,000,000
$40,000,000
$20,000,000
$0
2008
2009
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB

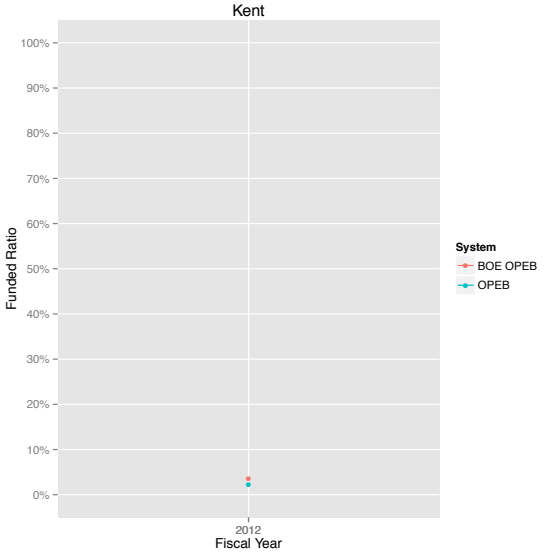

Howard
Funded Ratio
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2008
2009
2011
2012
Fiscal Year
System
OPEB

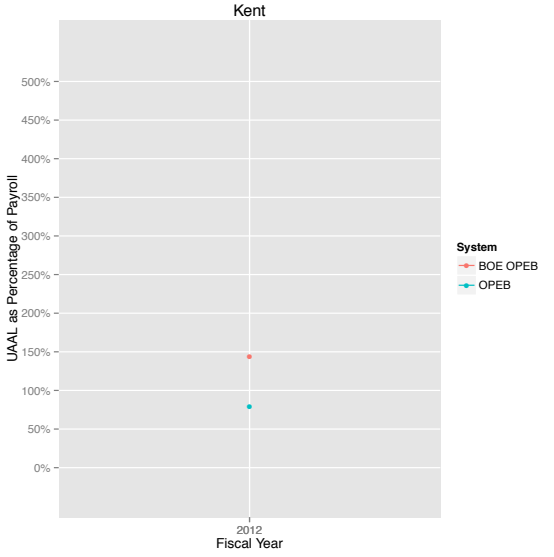

Howard
UAAL as Percentage of Payroll
500%
450%
400%
350%
300%
250%
200%
150%
100%
50%
0%
2008
2009
2011
2012
Fiscal Year
System
OPEB

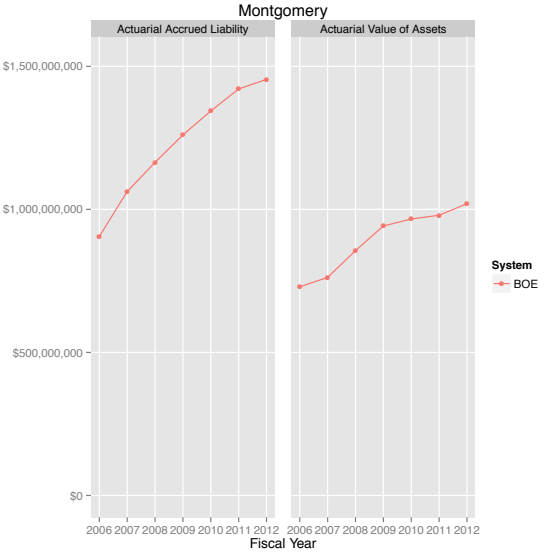

Kent
Required Annual Contribution
Actual Annual Contribution
$750,000
$500,000
$250,000
$0
2011
2012
2011
2012
Fiscal Year
System
Police
Primary

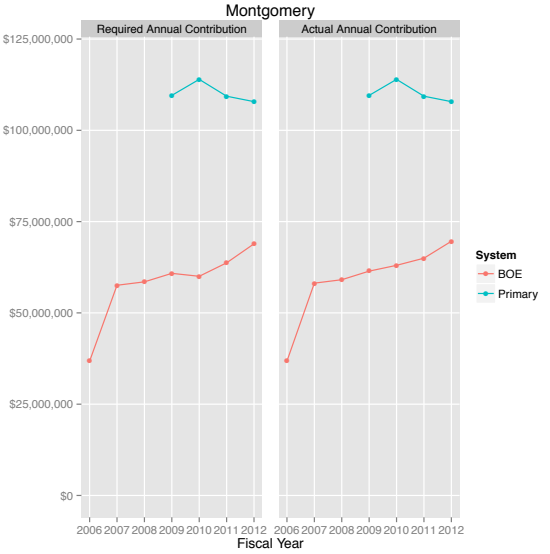

Kent
Actuarial Accrued Liability
Actuarial Value of Assets
$20,000,000
$15,000,000
$10,000,000
$5,000,000
$0
2012
2012
Fiscal Year
System
BOE OPEB
OPEB

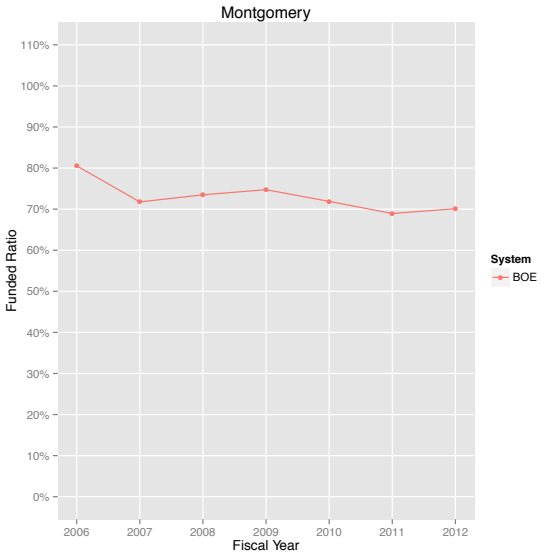

Kent
Required Annual Contribution
Actual Annual Contribution
$1,500,000
$1,000,000
$500,000
$0
2010
2011
2012
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB

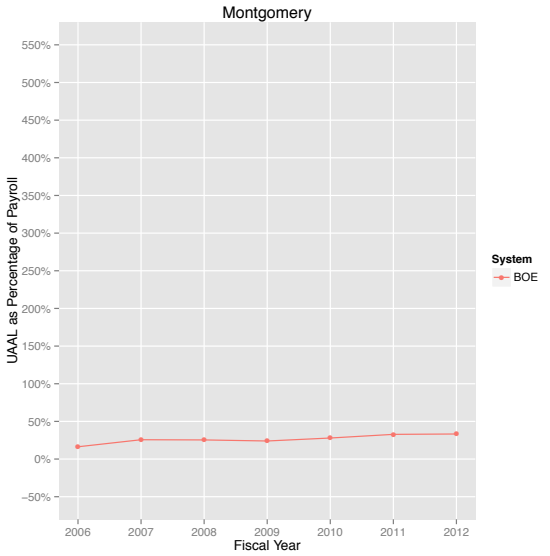

Kent
Funded Ratio
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2012
Fiscal Year
System
BOE OPEB
OPEB

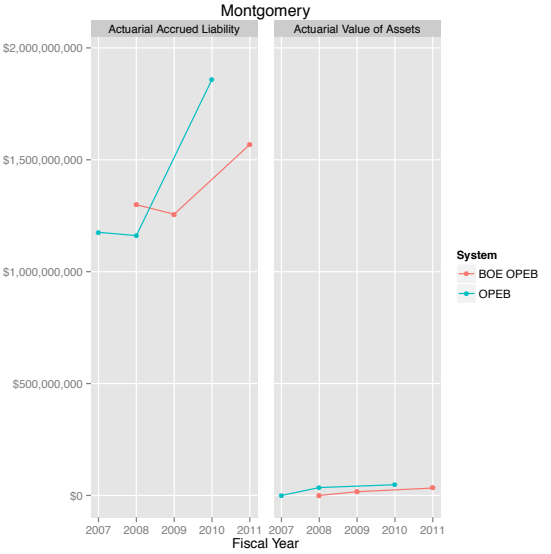

Kent
UAAL as Percentage of Payroll
500%
450%
400%
350%
300%
250%
200%
150%
100%
50%
0%
2012
Fiscal Year
System
BOE OPEB
OPEB

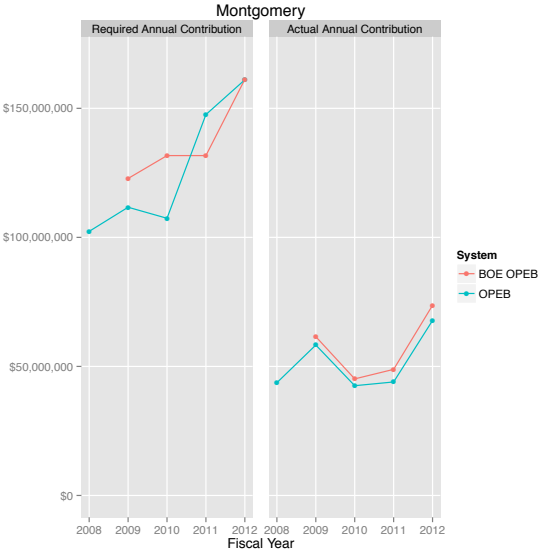

Montgomery
Actuarial Accrued Liability
Actuarial Value of Assets
$1,500,000,000
$1,000,000,000
$500,000,000
$0
2006 2007 2008 2009 2010 2011 2012
Fiscal Year
System
BOE

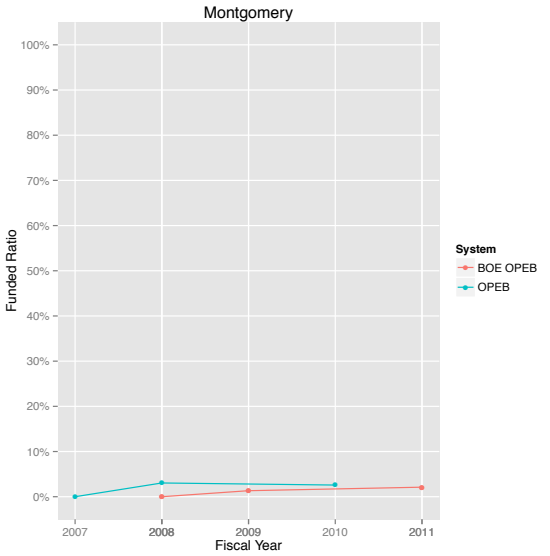

Montgomery
Required Annual Contribution
Actual Annual Contribution
$125,000,000
$100,000,000
$75,000,000
$50,000,000
$25,000,000
$0
2006 2007 2008 2009 2010 2011 2012
Fiscal Year
System
BOE
Primary

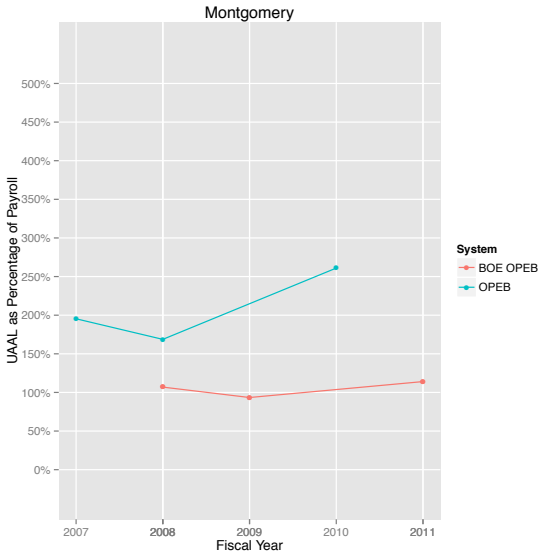

Montgomery
Funded Ratio
110%
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2006 2007 2008 2009 2010 2011 2012
Fiscal Year
System
BOE

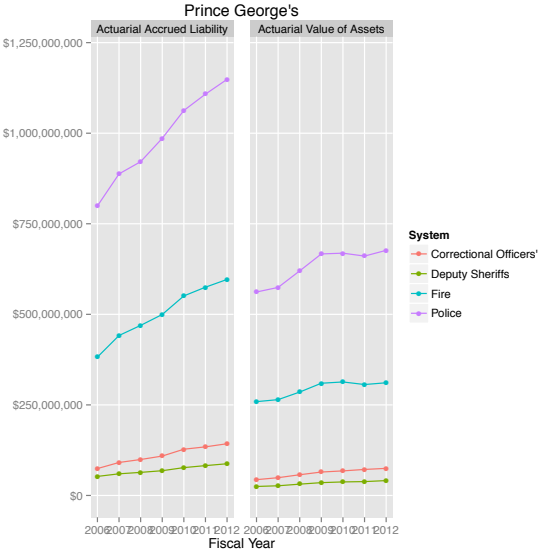

Montgomery
UAAL as Percentage of Payroll
550%
500%
450%
400%
350%
300%
250%
200%
150%
100%
50%
0%
−50%
2006 2007 2008 2009 2010 2011 2012
Fiscal Year
System
BOE

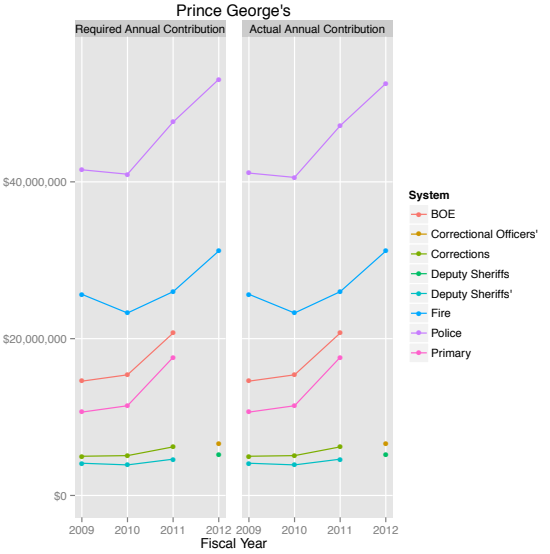

Montgomery
Actuarial Accrued Liability
Actuarial Value of Assets
$2,000,000,000
$1,500,000,000
$1,000,000,000
$500,000,000
$0
2007 2008 2009 2010 2011
Fiscal Year
System
BOE OPEB
OPEB

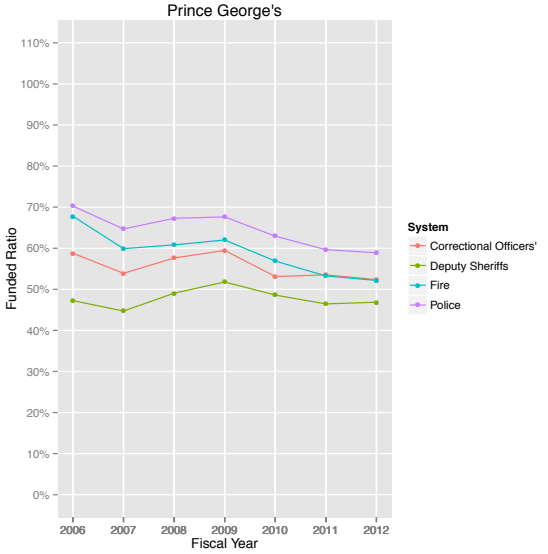

Montgomery
Required Annual Contribution
Actual Annual Contribution
$150,000,000
$100,000,000
$50,000,000
$0
2008 2009 2010 2011 2012
Fiscal Year
System
BOE OPEB
OPEB

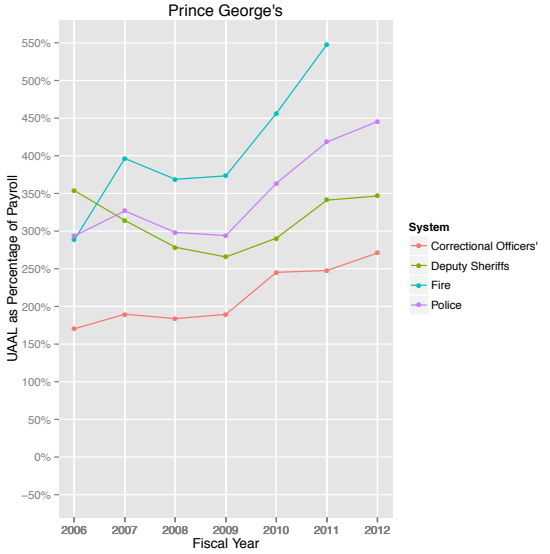

Montgomery
Funded Ratio
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2007 2008 2009 2010 2011
Fiscal Year
System
BOE OPEB
OPEB

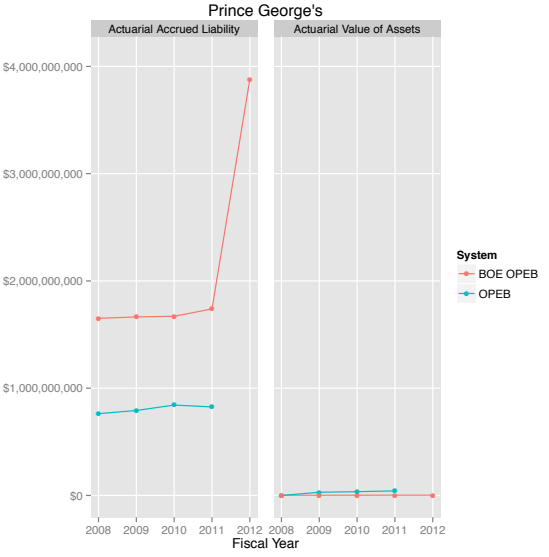

Montgomery
UAAL as Percentage of Payroll
500%
450%
400%
350%
300%
250%
200%
150%
100%
50%
0%
2007 2008 2009 2010 2011
Fiscal Year
System
BOE OPEB
OPEB

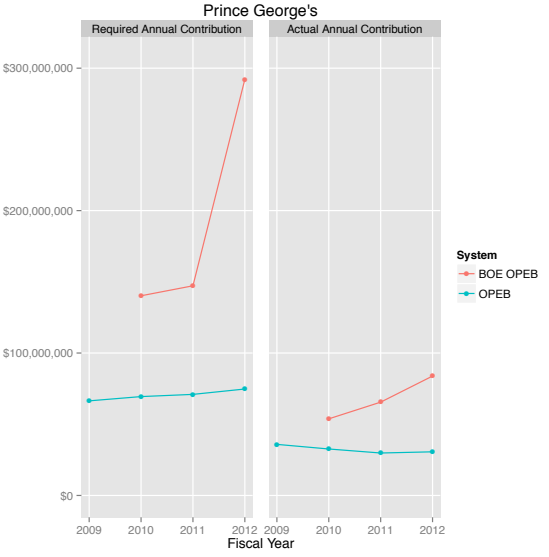

Prince George's
Actuarial Accrued Liability
Actuarial Value of Assets
$1,250,000,000
$1,000,000,000
$750,000,000
$500,000,000
$250,000,000
$0
2006 2007 2008 2009 2010 2011 2012
Fiscal Year
System
Correctional Officers'
Deputy Sheriffs
Fire
Police

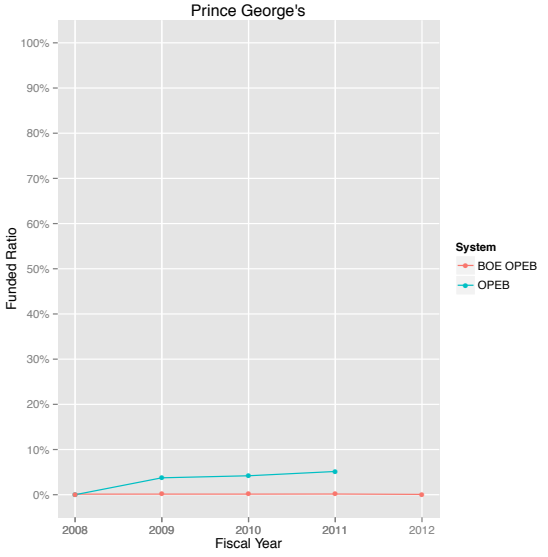

Prince George's
Required Annual Contribution
Actual Annual Contribution
$40,000,000
$20,000,000
$0
2009 2010 2011 2012
Fiscal Year
System
BOE
Correctional Officers'
Corrections
Deputy Sheriffs
Deputy Sheriffs'
Fire
Police
Primary

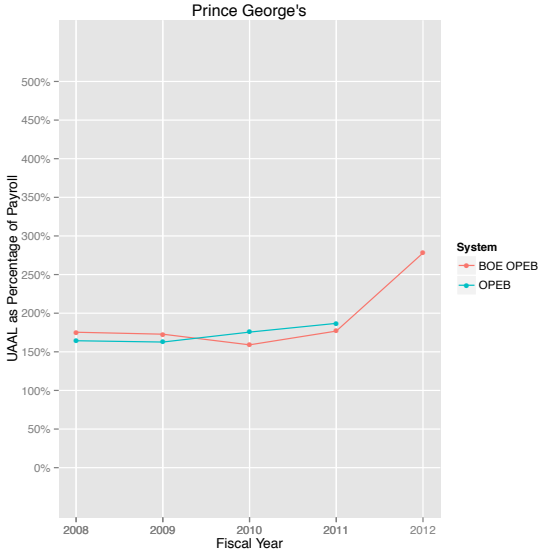

Prince George's
Funded Ratio
110%
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2006 2007 2008 2009 2010 2011 2012
Fiscal Year
System
Correctional Officers'
Deputy Sheriffs
Fire
Police

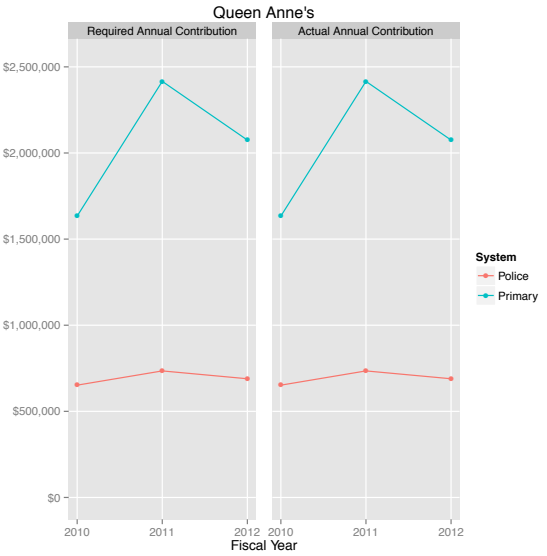

Prince George's
UAAL as Percentage of Payroll
550%
500%
450%
400%
350%
300%
250%
200%
150%
100%
50%
0%
−50%
2006 2007 2008 2009 2010 2011 2012
Fiscal Year
System
Correctional Officers'
Deputy Sheriffs
Fire
Police

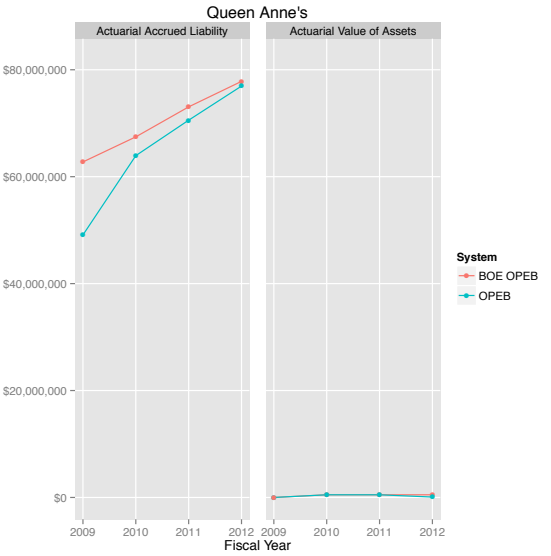

Prince George's
Actuarial Accrued Liability
Actuarial Value of Assets
$4,000,000,000
$3,000,000,000
$2,000,000,000
$1,000,000,000
$0
2008
2009
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB

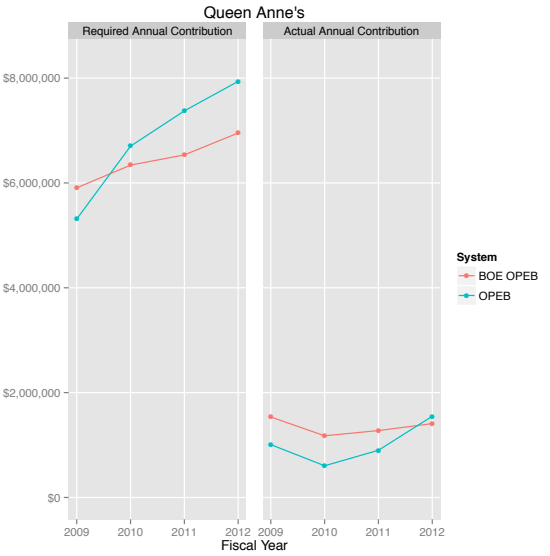

Prince George's
Required Annual Contribution
Actual Annual Contribution
$300,000,000
$200,000,000
$100,000,000
$0
2009
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB

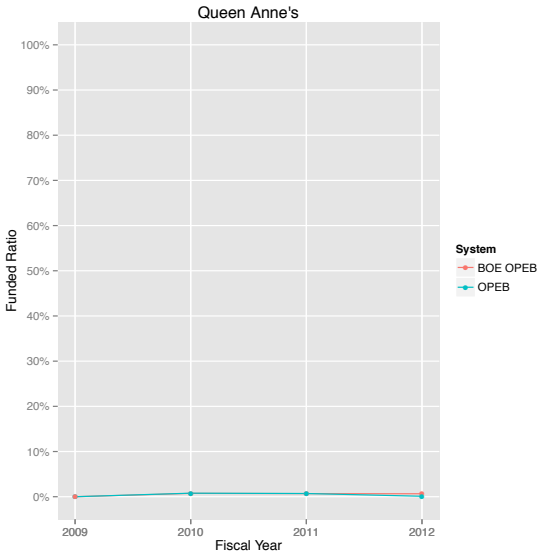

Prince George's
Funded Ratio
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2008
2009
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB

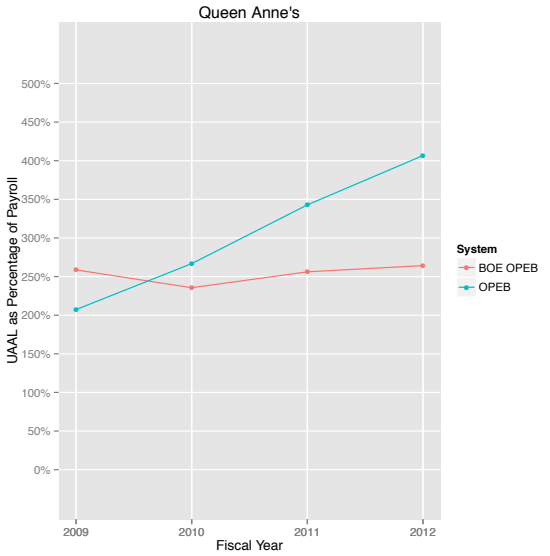

Prince George's
UAAL as Percentage of Payroll
500%
450%
400%
350%
300%
250%
200%
150%
100%
50%
0%
2008
2009
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB

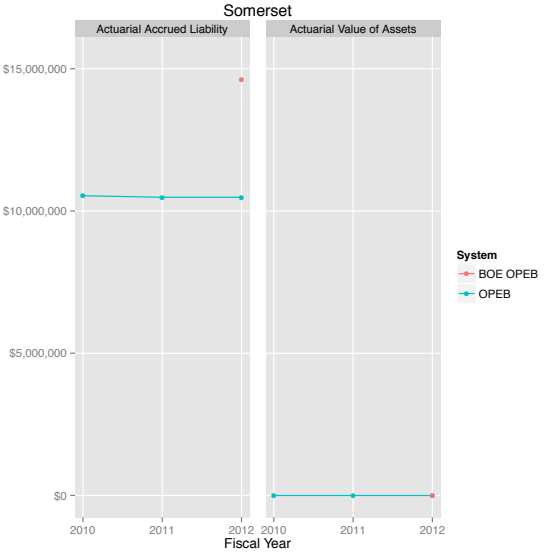

Queen Anne's
Required Annual Contribution
Actual Annual Contribution
$2,500,000
$2,000,000
$1,500,000
$1,000,000
$500,000
$0
2010
2011
2012
Fiscal Year
System
Police
Primary

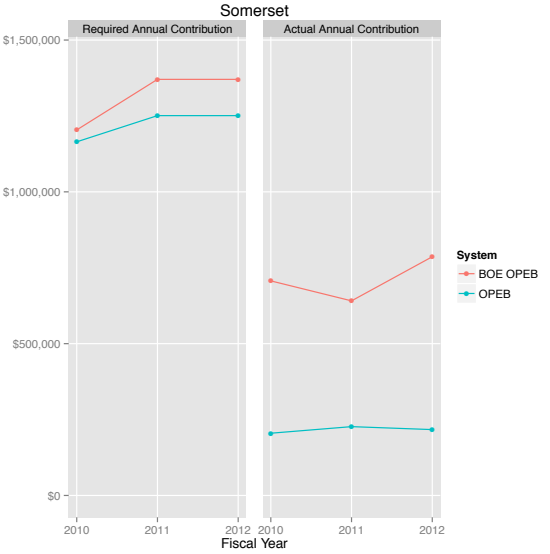

Queen Anne's
Actuarial Accrued Liability
Actuarial Value of Assets
$80,000,000
$60,000,000
$40,000,000
$20,000,000
$0
2009
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB

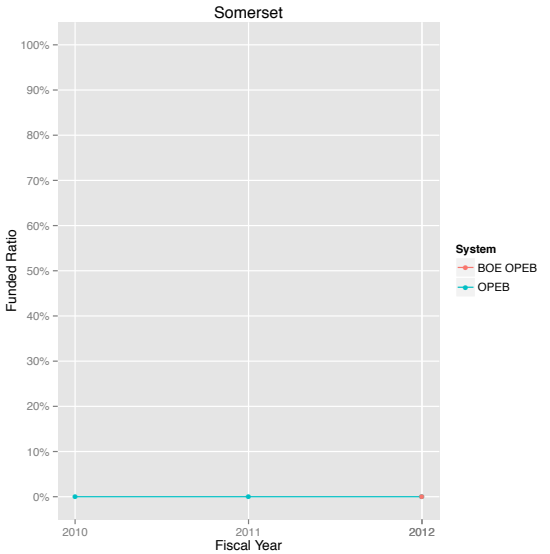

Queen Anne's
Required Annual Contribution
Actual Annual Contribution
$8,000,000
$6,000,000
$4,000,000
$2,000,000
$0
2009
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB

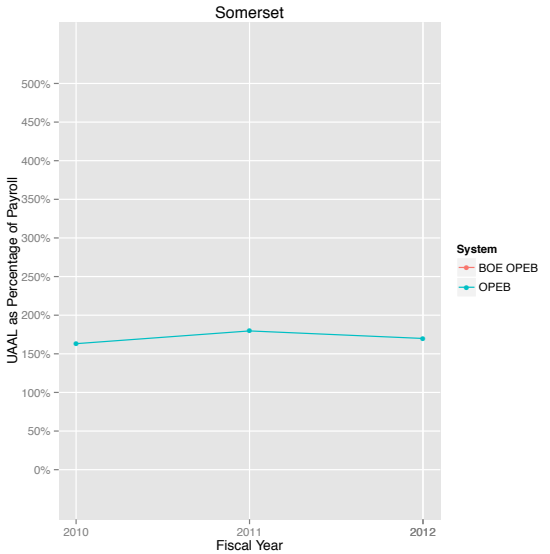

Queen Anne's
Funded Ratio
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2009
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB


Queen Anne's
UAAL as Percentage of Payroll
500%
450%
400%
350%
300%
250%
200%
150%
100%
50%
0%
2009
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB


Somerset
Actuarial Accrued Liability
Actuarial Value of Assets
$15,000,000
$10,000,000
$5,000,000
$0
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB


Somerset
Required Annual Contribution
Actual Annual Contribution
$1,500,000
$1,000,000
$500,000
$0
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB


Somerset
Funded Ratio
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB


Somerset
UAAL as Percentage of Payroll
500%
450%
400%
350%
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200%
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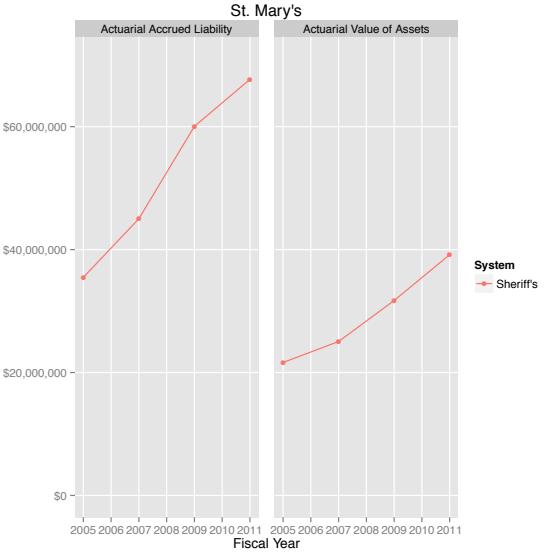
50%
0%
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB


St. Mary's
Actuarial Accrued Liability
Actuarial Value of Assets
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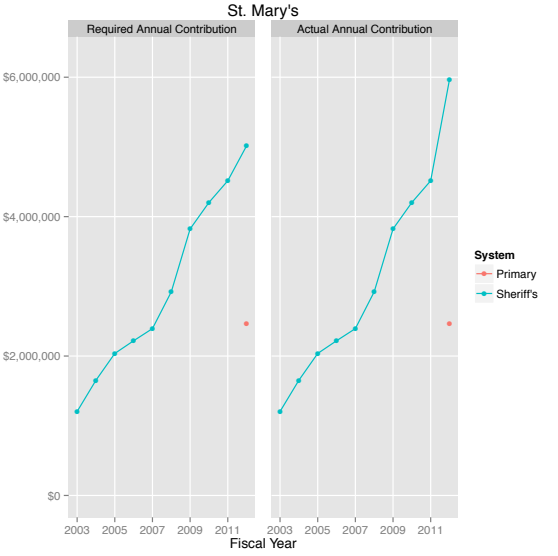
$40,000,000
$20,000,000
$0
2005 2006 2007 2008 2009 2010 2011
2005 2006 2007 2008 2009 2010 2011
Fiscal Year
System
Sheriff's


St. Mary's
Required Annual Contribution
Actual Annual Contribution
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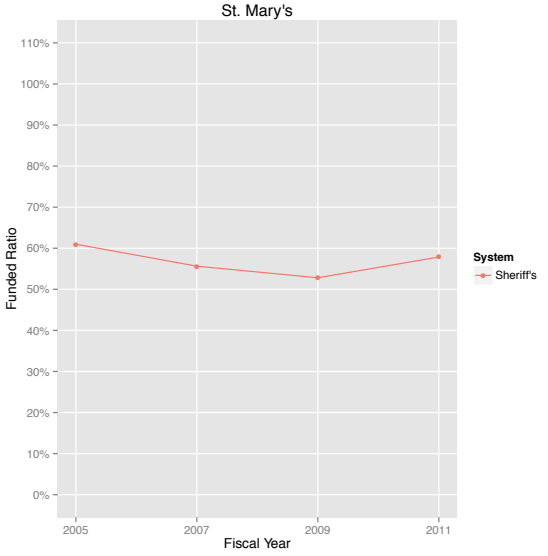
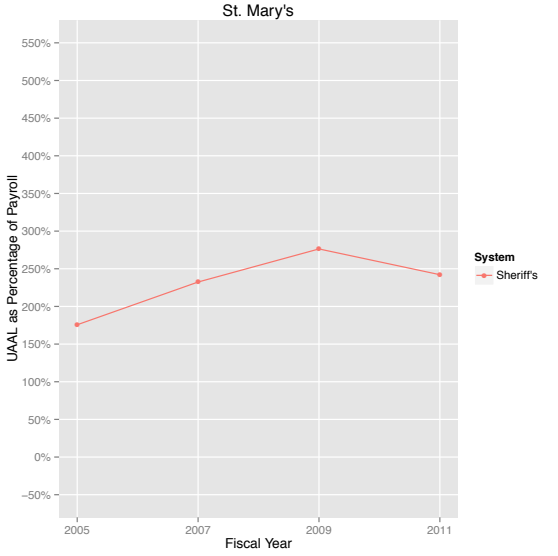
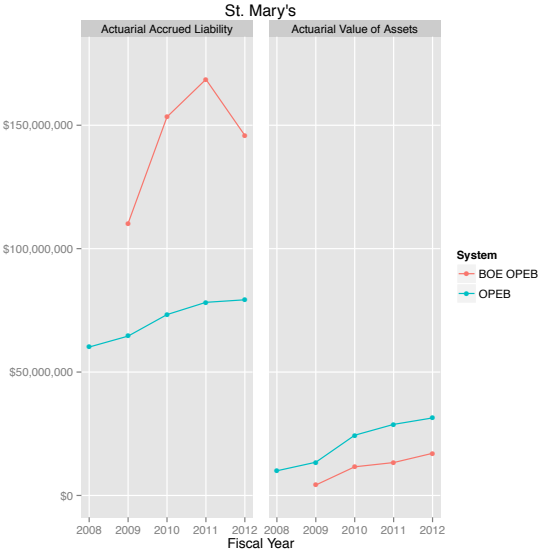
$0
2003 2005 2007 2009 2011
2003 2005 2007 2009 2011
Fiscal Year
System
Primary
Sheriff's


St. Mary's
110%
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Funded Ratio
2005 2007 2009 2011
Fiscal Year
System
Sheriff's


St. Mary's
550%
500%
450%
400%
350%
300%
250%
200%
150%
100%
50%
0%
−50%
UAAL as Percentage of Payroll
2005 2007 2009 2011
Fiscal Year
System
Sheriff's


St. Mary's
Actuarial Accrued Liability
Actuarial Value of Assets
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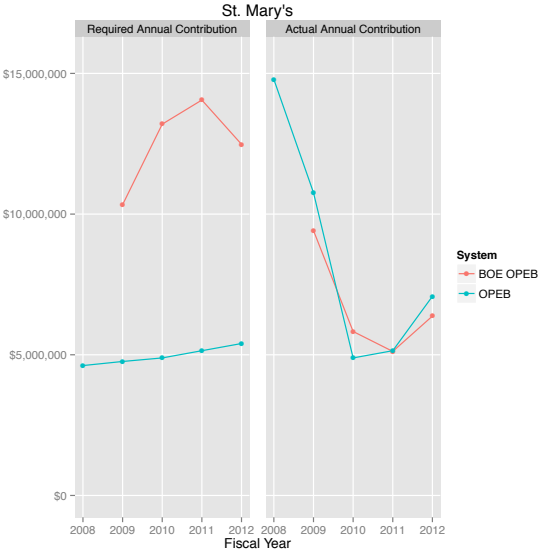
$100,000,000
$50,000,000
$0
2008
2009
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB


St. Mary's
Required Annual Contribution
Actual Annual Contribution
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$10,000,000
$5,000,000
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2008
2009
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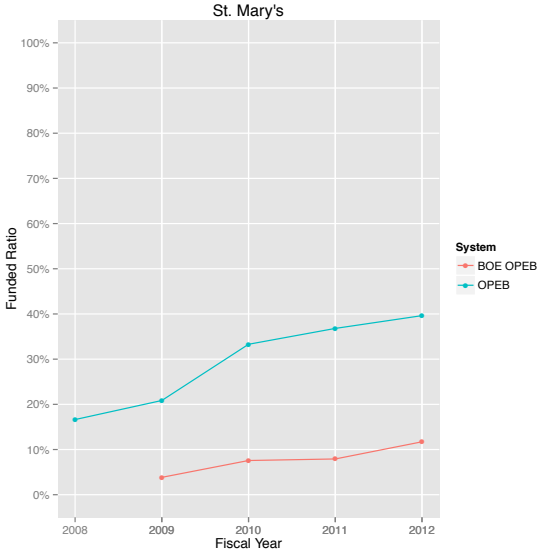
2011
2012
Fiscal Year
System
BOE OPEB
OPEB


St. Mary's
Funded Ratio
100%
90%
80%
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60%
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40%
30%
20%
10%
0%
2008
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2011
2012
Fiscal Year
System
BOE OPEB
OPEB

St. Mary's
UAAL as Percentage of Payroll
500%
450%
400%
350%
300%
250%
200%
150%
100%
50%
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2008
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2012
Fiscal Year
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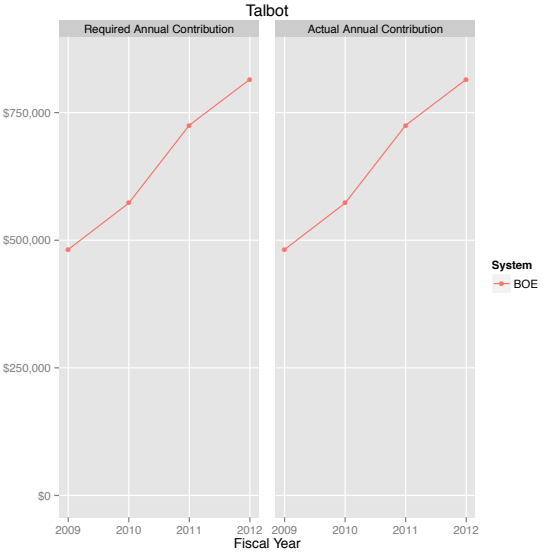
BOE OPEB
OPEB


Talbot
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Actual Annual Contribution
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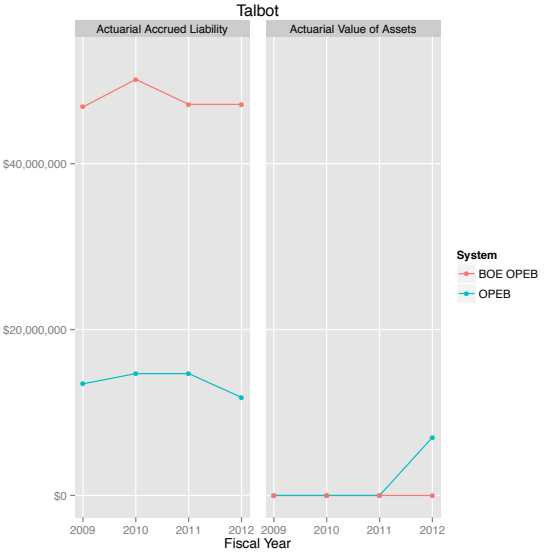
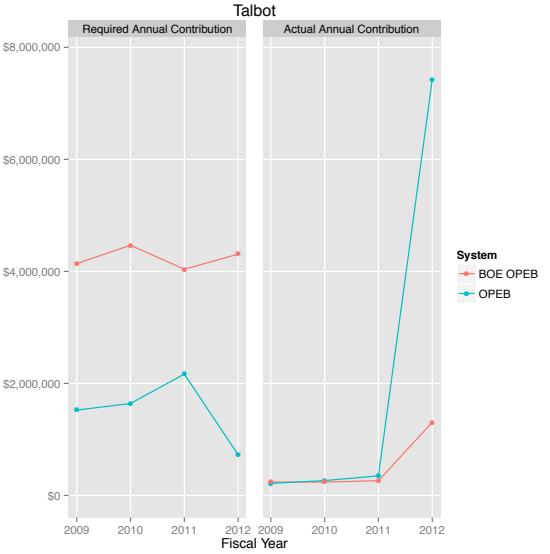
2009
2010
2011
2012
Fiscal Year
System
BOE


Talbot
Actuarial Accrued Liability
Actuarial Value of Assets
$40,000,000
$20,000,000
$0
2009
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB


Talbot
Required Annual Contribution
Actual Annual Contribution
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$4,000,000
$2,000,000
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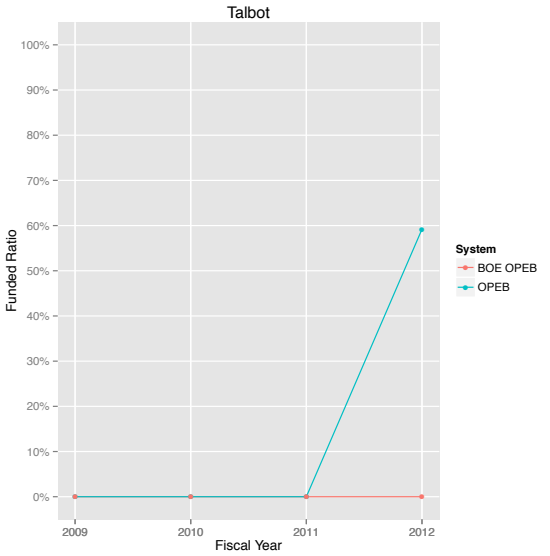
2009
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB


Talbot
Funded Ratio
100%
90%
80%
70%
60%
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30%
20%
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0%
2009
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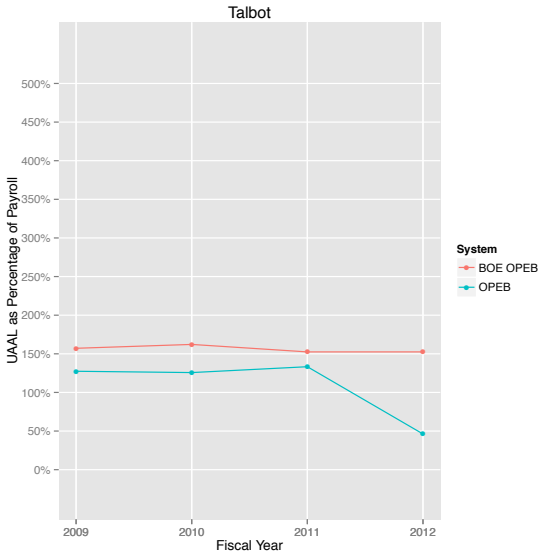
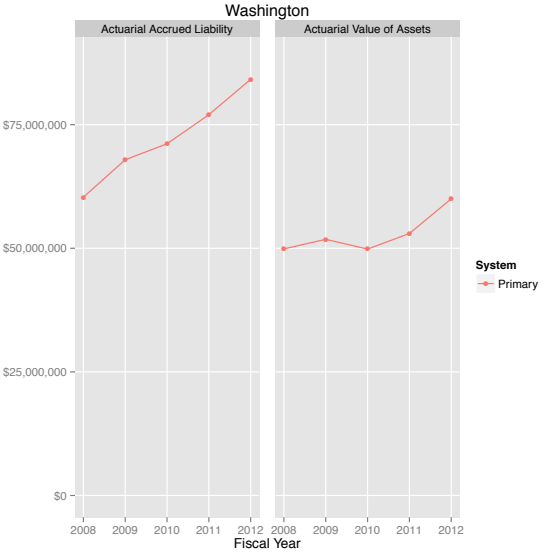
2012
Fiscal Year
System
BOE OPEB
OPEB


Talbot
UAAL as Percentage of Payroll
500%
450%
400%
350%
300%
250%
200%
150%
100%
50%
0%
2009
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB


Washington
Actuarial Accrued Liability
Actuarial Value of Assets
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$50,000,000
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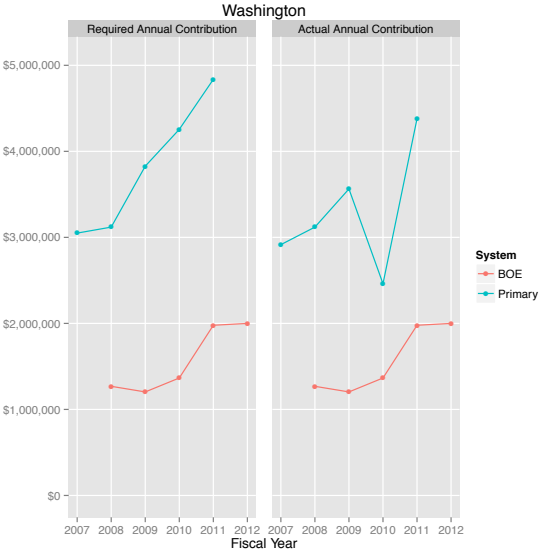
$0
2008
2009
2010
2011
2012
Fiscal Year
System
Primary


Washington
Required Annual Contribution
Actual Annual Contribution
$5,000,000
$4,000,000
$3,000,000
$2,000,000
$1,000,000
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2007
2008
2009
2010
2011
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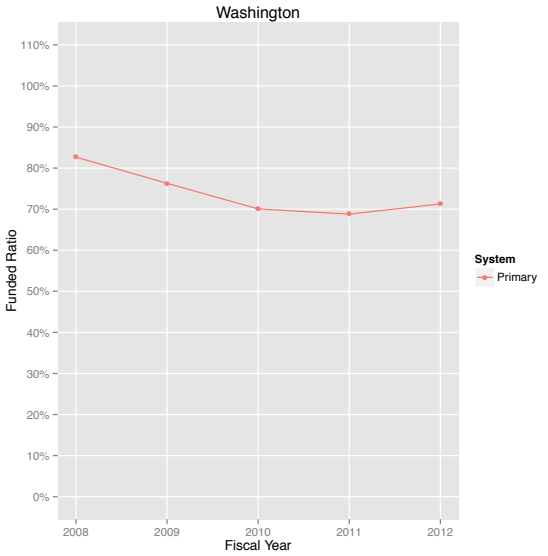
Fiscal Year
System
BOE
Primary


Washington
Funded Ratio
110%
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
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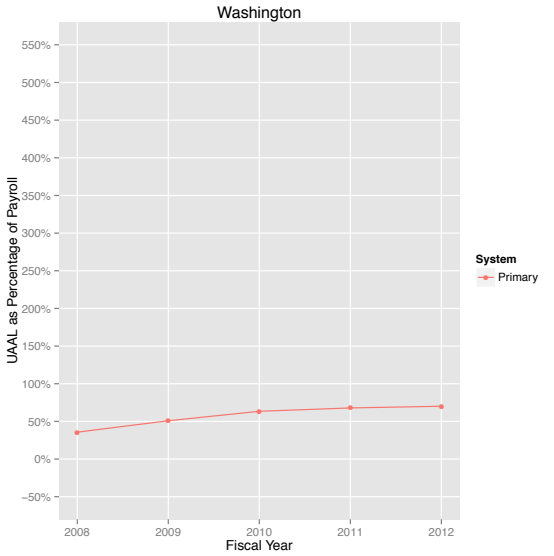
2012
Fiscal Year
System
Primary


Washington
UAAL as Percentage of Payroll
550%
500%
450%
400%
350%
300%
250%
200%
150%
100%
50%
0%
−50%
2008
2009
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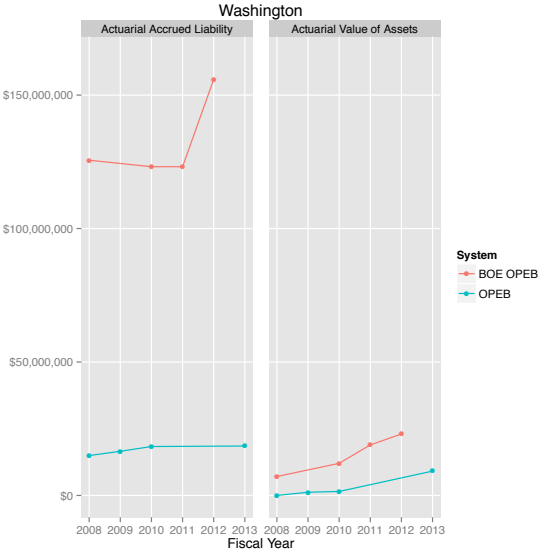
2012
Fiscal Year
System
Primary


Washington
Actuarial Accrued Liability
Actuarial Value of Assets
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$100,000,000
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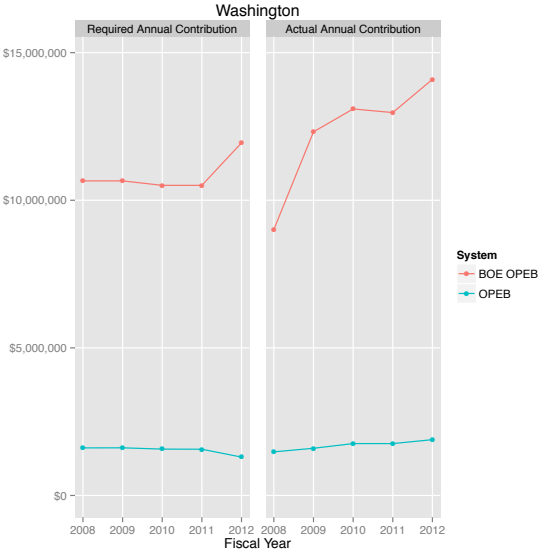
2008 2009 2010 2011 2012 2013
Fiscal Year
System
BOE OPEB
OPEB


Washington
Required Annual Contribution
Actual Annual Contribution
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$10,000,000
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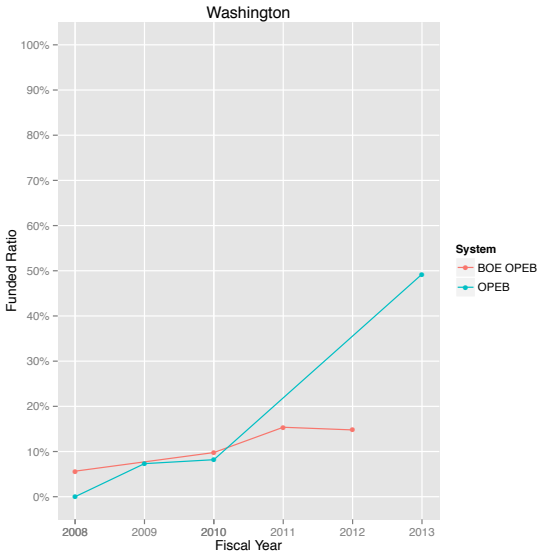
Fiscal Year
System
BOE OPEB
OPEB


Washington
Funded Ratio
100%
90%
80%
70%
60%
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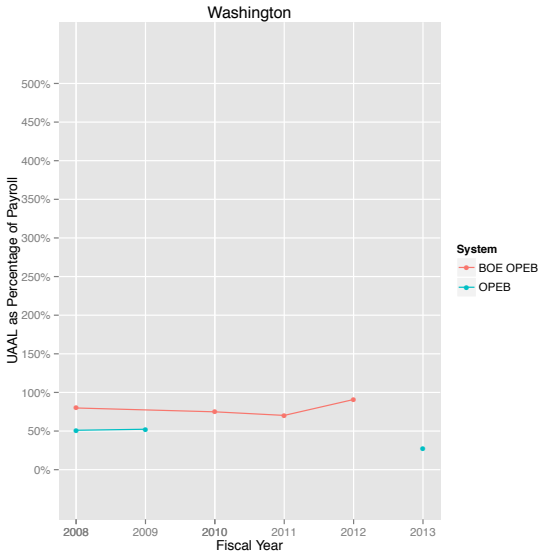
2008 2009 2010 2011 2012 2013
Fiscal Year
System
BOE OPEB
OPEB


Washington
UAAL as Percentage of Payroll
500%
450%
400%
350%
300%
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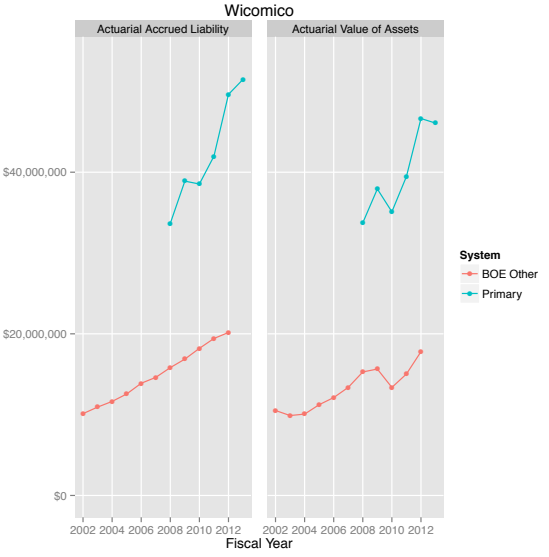
2008 2009 2010 2011 2012 2013
Fiscal Year
System
BOE OPEB
OPEB


Wicomico
Actuarial Accrued Liability
Actuarial Value of Assets
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$20,000,000
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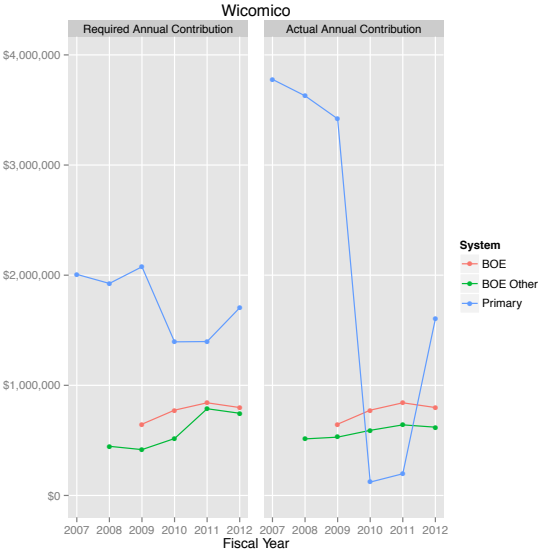
2002 2004 2006 2008 2010 2012
Fiscal Year
System
BOE Other
Primary


Wicomico
Required Annual Contribution
Actual Annual Contribution
$4,000,000
$3,000,000
$2,000,000
$1,000,000
$0
2007 2008 2009 2010 2011 2012
Fiscal Year
System
BOE
BOE Other
Primary

Wicomico
Funded Ratio
110%
100%
90%
80%
70%
60%
50%
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30%
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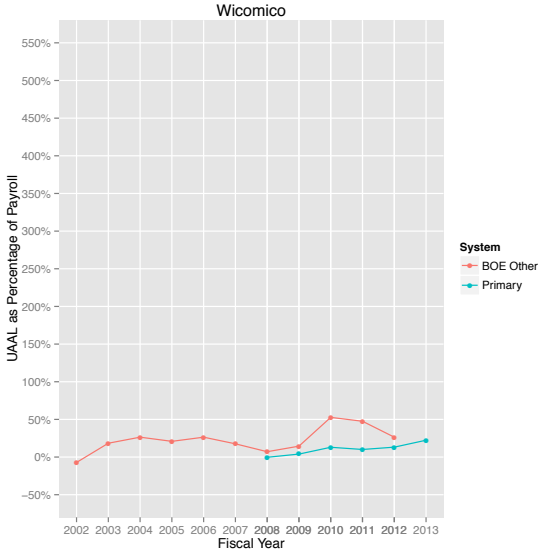
0%
2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013
Fiscal Year
System
BOE Other
Primary


Wicomico
UAAL as Percentage of Payroll
550%
500%
450%
400%
350%
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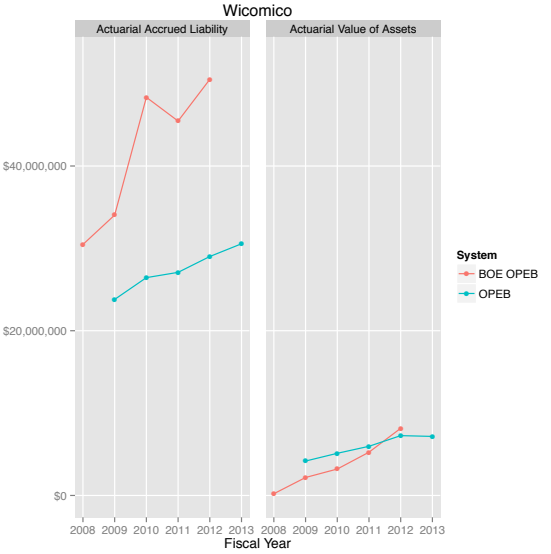
−50%
2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013
Fiscal Year
System
BOE Other
Primary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Actuarial Accrued Liability
Actuarial Value of Assets
$40,000,000
$20,000,000
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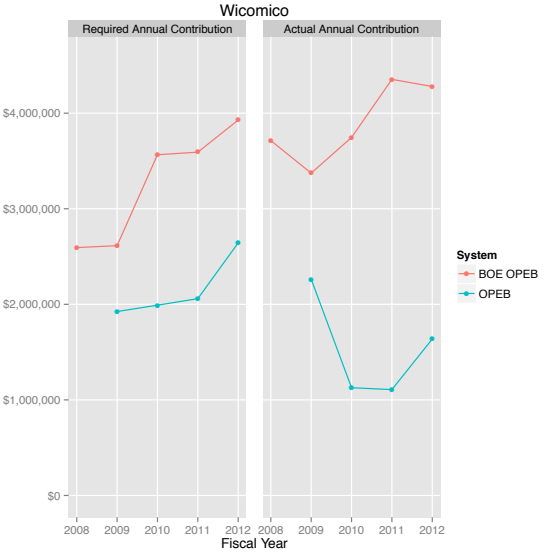
2008 2009 2010 2011 2012 2013
Fiscal Year
System
BOE OPEB
OPEB


Wicomico
Required Annual Contribution
Actual Annual Contribution
$4,000,000
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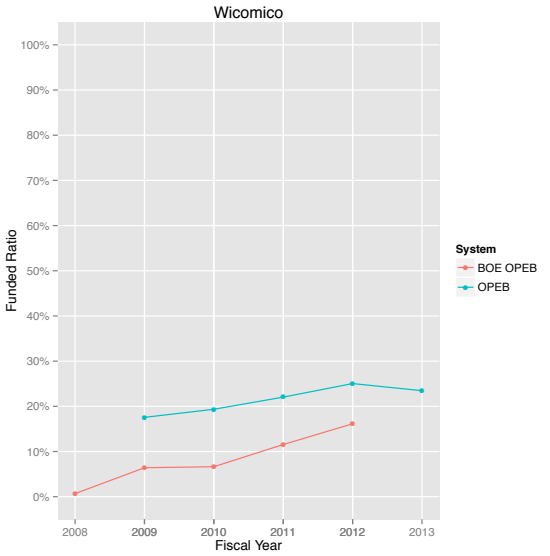
$2,000,000
$1,000,000
$0
2008 2009 2010 2011 2012
Fiscal Year
System
BOE OPEB
OPEB


Wicomico
Funded Ratio
100%
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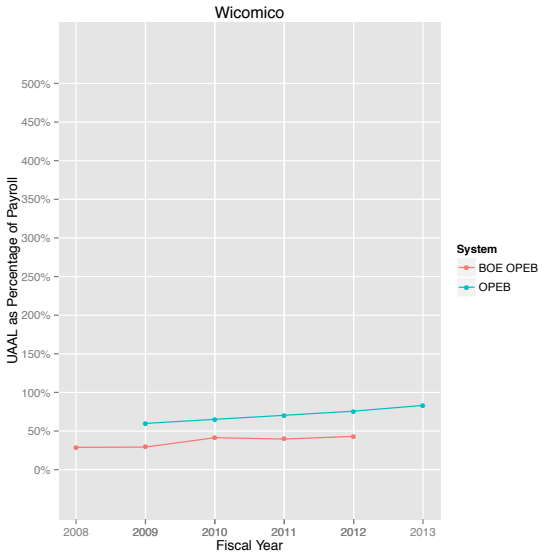
2008 2009 2010 2011 2012 2013
Fiscal Year
System
BOE OPEB
OPEB


Wicomico
UAAL as Percentage of Payroll
500%
450%
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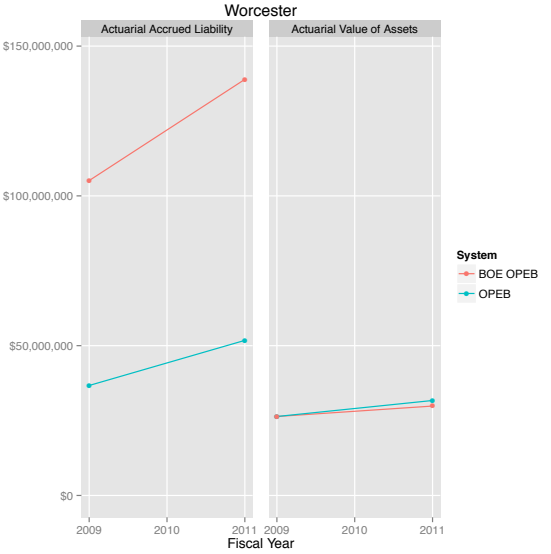
2008 2009 2010 2011 2012 2013
Fiscal Year
System
BOE OPEB
OPEB


Worcester
Actuarial Accrued Liability
Actuarial Value of Assets
$150,000,000
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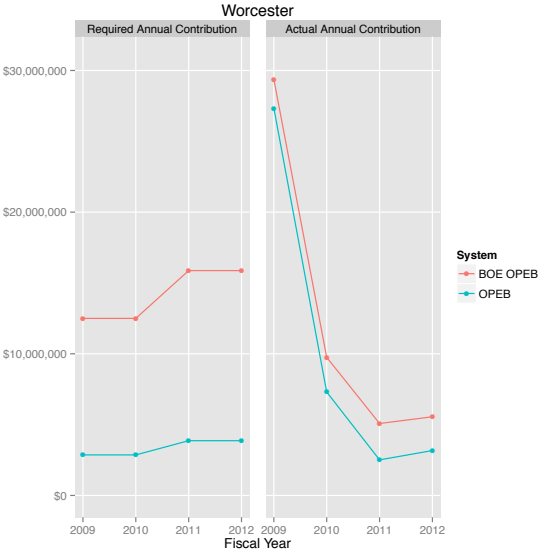
2009
2010
2011
Fiscal Year
System
BOE OPEB
OPEB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Required Annual Contribution
Actual Annual Contribution
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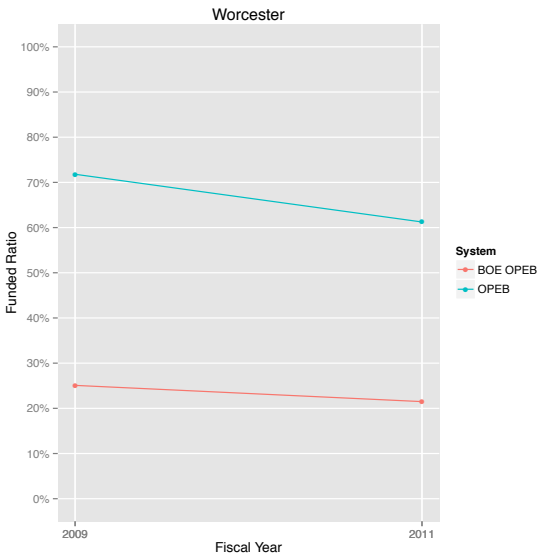
$10,000,000
$0
2009
2010
2011
2012
Fiscal Year
System
BOE OPEB
OPEB


Worcester
100%
90%
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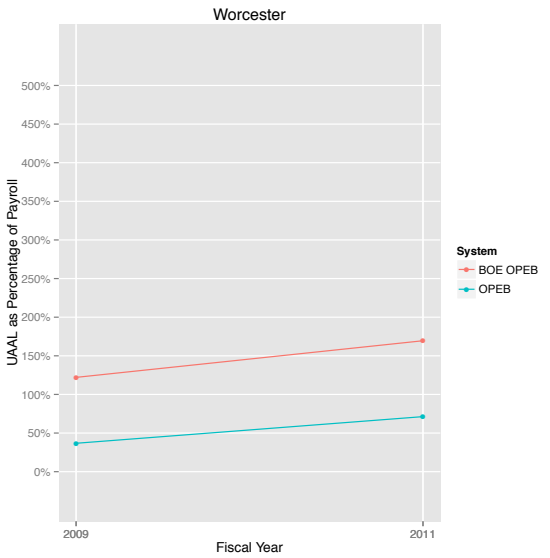
Funded Ratio
2009
2011
Fiscal Year
System
BOE OPEB
OPEB


Worcester
500%
450%
400%
350%
300%
250%
200%
150%
100%
50%
0%
UAAL as Percentage of Payroll
2009
2011
Fiscal Year
System
BOE OPEB
OPEB

LIST OF ABBREVIATIONS

BOE	Board of Education	**OPEB**	Other Post-Employment Benefits
ERPS	Employees' Retirement and Pension System	**SRPS**	State Retirement and Pension System
LEOPS	Law Enforcement Officers' Pension System	**TRPS**	Teachers' Retirement and Pension System
MTA	Maryland Transit Administration		

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