



**City of Franklin, TN**  
**Capacity Model**  
December 14, 2011



HISTORIC  
**F R A N K L I N**  
TENNESSEE

**The PFM Group**  
530 Oak Court Drive  
Suite 160  
Memphis, TN 38117

# Introduction



HISTORIC  
FRANKLIN  
TENNESSEE

## Policy development Phase:

- Spring 2009 - **Reserve policy** was developed based on comparable city data within the state and outside the state. It was important to establish the right “savings” target prior to discussing pay-go vs. debt financing in the debt policy.
  - Comparable City’s policy levels as well as the actual reserve levels maintained at that time (FY 2008 data) were reviewed.
  - Reserve policy level of 33% was adopted.
- May/June 2009 - **Debt policy** was developed and adopted.
  - The Debt policy outlines the process and criteria for several areas associated with future debt.
  - The Debt policy established affordability ratios that would be considered for future debt and/or use of fund balance. All policy levels were developed based on the City’s FY 2008 financials. The same comparable cities were used in this process.
  - PFM felt It was in the City’s best interest to address the debt policy prior to looking at capacity levels and funding of a future CIP.

# Affordability Ratios



HISTORIC  
FRANKLIN  
TENNESSEE

Several “affordability ratios” are included as part of the City’s Debt Policy:

- **Debt Service as a % of Operating Expenditures** - Measures debt liability relative to total budget resources.
  - Current policy at 8%.
- **Net Debt per Capita** - Measures net debt to population.
  - Current policy at <\$2,000.
- **Per Capita Debt/Per Capita Income** - Measures each person’s estimated ability to back their portion of debt based on personal income per capita.
  - Current policy at 3%.
- **Net Direct Debt as % of Market Value** - Measures the overall debt burden to the taxable property.
  - Current policy at 0.8%.

As part of the Capacity model, we also include the General Fund balance as a % of Revenues. The policy level for this ratio is 33% per the City’s Reserve policy.

# Introduction



HISTORIC  
FRANKLIN  
TENNESSEE

## Capacity development phase:

- In August 2009 (after the Debt policy was established that included affordability ratios), PFM began working with administration and the finance committee to develop a capacity model. The capacity model has continued to be updated to include the following:
  - Historical Revenues and Expenses from FY 2004 through FY 2011
  - Budgeted FY 2012 Revenues and Expenses
  - Growth Rate Assumptions Revenue and Expenditure line items
  - Existing General Obligation/Water and Sewer Debt
  - Reserve Policy Requirement: Fund Balance of at least 33% of General Fund Expenditures
  - Debt affordability ratios (from the Debt policy) and Moody's AAA, AA and A Medians
- PFM felt it was in the City's best interest to establish the debt policy which included affordability ratios prior to the capacity development phase.

# Capacity Model Updates



HISTORIC  
FRANKLIN  
TENNESSEE

- Historical Revenues and Expenses updated to include FY 2011
- Budgeted FY 2012 Revenues and Expenses
- Growth Rate Assumptions Revenue and Expenditure line items
- \$19,430,000 Series 2011 Bank Loan debt service has been included (100% of Water/Sewer debt is fixed rate)
- Moody's Local Government Medians as of September 2011

# Capacity Model Input Tab



HISTORIC  
FRANKLIN  
TENNESSEE

	Actual	Budget	Forecasted	Forecasted	Forecasted
CASH FLOW PROJECTIONS	2011	2012	2013	2014	2015
<b>ESTIMATED REVENUES:</b>					
<i>Local Taxes:</i>					
Real and personal property taxes	6,352,288	6,685,767	6,919,769	7,196,560	7,484,422
Interest & Penalty Collected	59,533	45,000	46,575	48,438	50,376
In Lieu of Tax	341,652	347,000	360,880	375,315	390,328
Local option sales tax	22,720,666	23,353,466	24,287,605	25,380,547	26,649,574
Beer & Liquor Taxes	2,865,433	2,905,800	3,051,090	3,234,155	3,492,888
Business Tax	2,523,241	2,495,000	2,569,850	2,646,946	2,726,354
Other taxes	-	-	-	-	-
<b>Total Local Taxes</b>	<b>34,862,813</b>	<b>35,832,033</b>	<b>37,235,768</b>	<b>38,881,961</b>	<b>40,793,941</b>
<i>Intergovernmental</i>					
State excise tax	13,498	55,000	56,925	58,917	60,979
State beer tax	29,329	30,000	31,200	32,448	33,746
Sales tax	3,767,317	3,900,000	4,056,000	4,218,240	4,429,152
State income tax	1,228,236	1,200,000	1,236,000	1,285,440	1,349,712
Water & Sewer - administrative services	2,016,083	2,144,913	2,209,260	2,275,538	2,343,804
Federal & State financial assistance program	2,346,617	2,530,603	2,530,603	2,530,603	2,530,603
Other Intergovernmental	632,821	910,000	910,000	910,000	910,000
<b>Total Intergovernmental</b>	<b>10,033,901</b>	<b>10,770,516</b>	<b>11,029,988</b>	<b>11,311,187</b>	<b>11,657,997</b>
<i>Licenses &amp; Permits:</i>					
Franchise Taxes	2,030,529	2,295,000	2,421,225	2,554,392	2,694,884
Building Permits	820,111	730,000	770,150	812,508	857,196
Other L&P	880,924	861,600	904,680	949,914	997,410
<b>Total Licenses &amp; Permits</b>	<b>3,731,564</b>	<b>3,886,600</b>	<b>4,096,055</b>	<b>4,316,815</b>	<b>4,549,490</b>
<i>Charges for Services:</i>					
Charges for Services	62,779	47,000	-	-	-
Other Charges	-	-	-	-	-
<b>Total Charges for Services</b>	<b>62,779</b>	<b>47,000</b>	<b>51,230</b>	<b>56,353</b>	<b>61,988</b>
<i>Fines and fees</i>					
Fines and Fees	807,620	1,012,500	-	-	-
Other Fines and fees	-	-	-	-	-
<b>Total Fines &amp; Fees</b>	<b>807,620</b>	<b>1,012,500</b>	<b>1,073,250</b>	<b>1,137,645</b>	<b>1,205,904</b>
<i>Other Revenue:</i>					
Use of money and property	562,305	650,001	689,001	730,341	774,162
Miscellaneous	98,290	100,000	106,000	112,360	119,102
<b>Total Other Revenue</b>	<b>660,595</b>	<b>750,001</b>	<b>795,001</b>	<b>842,701</b>	<b>893,263</b>
<b>TOTAL REVENUE:</b>	<b>50,159,272</b>	<b>52,298,650</b>	<b>54,281,293</b>	<b>56,546,661</b>	<b>59,162,583</b>

Sample Screen Shot of  
CAFR DATA Input Tab  
Inclusive of growth rate  
(Forecasted)

# Capacity Model Functionality



HISTORIC  
FRANKLIN  
TENNESSEE

Model allows for flexibility by allowing...

- Modification on growth rate assumptions for revenues and expenditures line items for each year through 2041
- Sources of funding the CIP:
  - Replace existing debt as it matures
  - Issue new debt as long-term or short-term
  - Pay-as-you go financing - draw on GF Balance
  - Consider additional income from other sources (impact fees, hotel taxes, user charges, state and federal subsidized and stimulus funding)
- Estimated borrowing rate, debt structure (level debt service or level principal) and borrowing term
- Modify existing debt service as it relates to the overall debt picture
- Determine the optimal debt structure on future debt issues

# How the Capacity Model Works



HISTORIC  
FRANKLIN  
TENNESSEE

PFM will utilize the Model to assist the City:

- Determine Capacity for funding CIP projects
- Provide funding options for selected projects in the CIP
- Monitor ratios as they relate to funding options
- Affordability ratios will be presented to rating agencies on a total debt basis vs. total debt less self supporting
- Execute optimal financing vehicle



# Top 10 Priority of Projects list as of 6/29/11



HISTORIC  
FRANKLIN  
TENNESSEE

THE FOLLOWING IS THE PRIORITIZATION OF PROJECTS AS CALCULATED  
FROM THE PRIORITY RANKING VOTING BY THE BOMA

\* Those projects listed below indicated with an asterick next to the BOMA's priority rank are the projects as recommended by the Administration staff in April for funding based on the City's needs and being able to fit within the City's Funding Plan.

\*\* The project listed below indicated with two astericks next to the BOMA's priority rank is the project recommended by the Administration staff in April as an alternate for funding should the Water/Street/Fleet Facility (Admin 1) project not be considered as a priority.

CIP Book Page Number	PROJECT	Priority Rank	Proposed: Debt Service Paid By	Funds Spent * and/or Committed by Contract/Budget	CIP FY 2011	CIP FY 2012	CIP FY 2013	CIP FY 2014	CIP FY 2015	TOTAL
Parks 3	Eastern Flank Battlefield Improvements - other than Access Roadway	1	General - Bond & Hotel/Motel	\$ 2,280,416	\$ 463,000			\$ 25,000	\$ 25,000	\$ 2,793,416
Street 47	South Carothers Pkwy Improvements (Falcon Creek to Harpeth River)	2*	General - Bond	\$ 2,020,000	\$ 1,685,000	\$ 10,200,300	\$ 4,371,700			\$ 18,277,000
Street 43	McEwen Dr, Phase IV from Cool Springs Blvd to Wilson Pike	3*	General - Bond, Road Impact	\$ 514,697		\$ 377,580	\$ 4,000,000	\$ 6,450,000	\$ 6,450,000	\$ 17,792,277
Public Safety 2	Fire Station #8 to be located in the Westhaven Development	4*	Facilities Tax		\$ 156,000	\$ 1,875,000	\$ 962,000			\$ 2,993,000
Street 9	Century Court/Beasley Drive Connector	5*	General - Bond	\$ 162,096	\$ 5,505	\$ 457,000				\$ 624,601
Street 7	Carlisle Lane/Boyd Mill Ave @ Highway 96 West Signalization	6**	General - Bond & Development Contribution	\$ 176,380	\$ 5,240	\$ 2,062,952				\$ 2,244,572
Admin 1	Consolidated Public Works Facility	7*			\$ 3,400,000	\$ 250,000	\$ 250,000	\$ 250,000		\$ 4,150,000
Street 11	Clovercroft Road & Wilson Pike Intersection Improvements	8	General - Bond		\$ 60,000	\$ 25,000	\$ 365,000			\$ 450,000
Street 12	Columbia Ave Improvements from Downs Blvd to Mack Hatcher Pkwy	9	General - Bond, State & Road Impact	\$ 21,500			\$ 821,500	\$ 6,000,000	\$ 12,200,000	\$ 19,043,000
Parks 6	The Park at Harlinsdale Farm Improvements	10*	General - Bond & Hotel/Motel	\$ 2,759,388	\$ 215,000	\$ 245,000	\$ 290,000	\$ 250,000	\$ 275,000	\$ 4,034,388

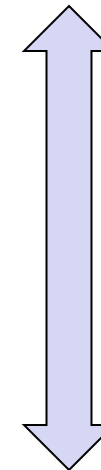
# Scenario Summary



HISTORIC  
FRANKLIN  
TENNESSEE

The following scenarios are included in the update to the capacity model:

Scenario Summary	
<b>Base Case</b>	Committed Projects Only
<b>Scenario 1</b>	Top 5 Projects without Phasing
<b>Scenario 2</b>	Top 5 Projects with Phasing on McEwen & Carothers-Ladd Park
<b>Scenario 3</b>	Top 3 Projects without Phasing (Plus McEwen design)
<b>Scenario 4</b>	Top 3 Projects with Phasing on McEwen & Carothers-Ladd Park
<b>Scenario 5</b>	Staff Project Recommendation



Committed  
Projects are  
included in all  
scenarios

# Staff Recommended Scenarios



HISTORIC  
FRANKLIN  
TENNESSEE

## Scenario 5 Details:

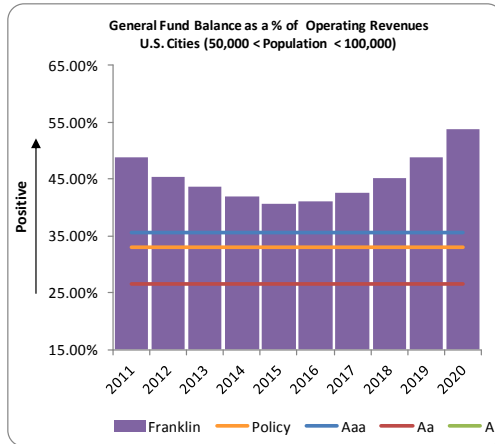
Scenario 5						
Staff Project Recommendation						
2012-16 CIP Work Sheet						
Priority	Project Description	2012	2013	2014	2015	2016
Committed						
Project 1	Hillsboro Road	1,000,000	5,000,000	5,000,000	-	-
Committed						
Project 2	Consolidated Public Works Facility	2,500,000	2,500,000	-	-	-
	<b>Total Committed Projects</b>	<b>3,500,000</b>	<b>7,500,000</b>	<b>5,000,000</b>	-	-
Priority Projects:						
<b>1</b>	Consolidated Public Works Facility	-	-	-	-	-
	Net Funding Needs	-	-	-	-	-
<b>2</b>	Fire Station Design #7 & #8 Westhaven	225,000	-	-	-	-
	Net Funding Needs	225,000	-	-	-	-
<b>3</b>	Park @ Harlinsdale Farm Improvements	131,300	-	-	-	-
	Net Funding Needs	131,300	-	-	-	-
<b>4</b>	McEwen Drive, Wilson Pike to City Limit	240,000	-	-	-	-
	Net Funding Needs	240,000	-	-	-	-
<b>5</b>	McEwen Drive @ Wilson Pike Intersection	450,000	-	-	-	-
	Net Funding Needs	450,000	-	-	-	-
<b>6</b>	McEwen Drive Cool Springs to Wilson Pike	680,000	-	-	-	-
	Net Funding Needs	680,000	-	-	-	-
<b>7</b>	South Carothers Parkway (north segment)	-	3,600,000	3,600,000	-	-
	Net Funding Needs	-	3,600,000	3,600,000	-	-
<b>8</b>	Century Court/Beasley Drive Connector	5,505	457,000	-	-	-
	Net Funding Needs	5,505	457,000	-	-	-

# Debt Affordability Ratios – General Fund Balance as a % of Operating Revenues

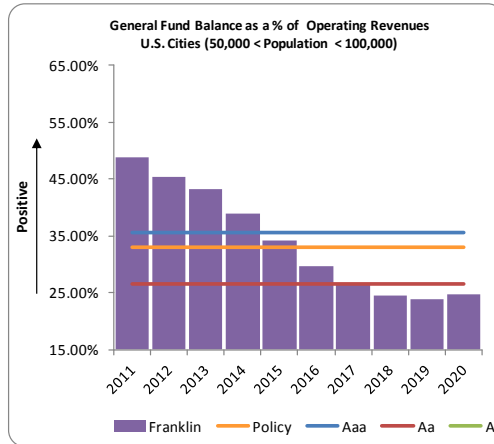


HISTORIC  
FRANKLIN  
TENNESSEE

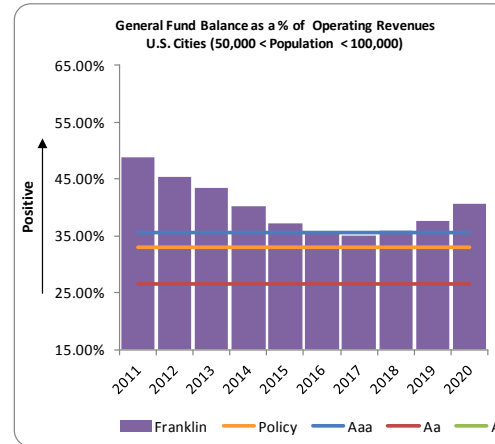
**Base  
(Committed)**



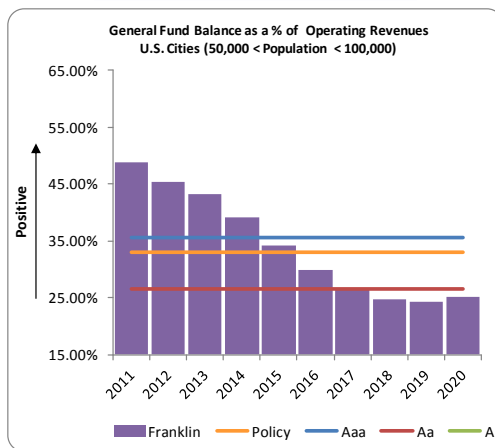
**Scenario 1  
(Top 5)**



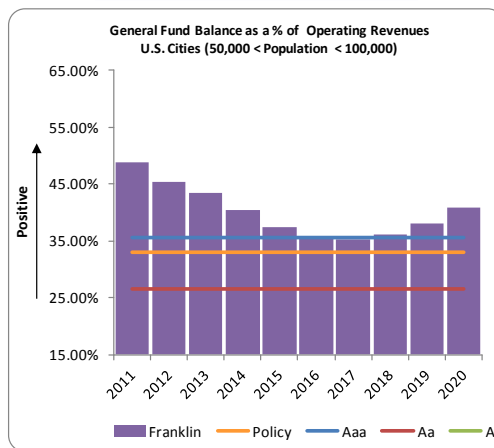
**Scenario 2  
(Top 5 w/phasing)**



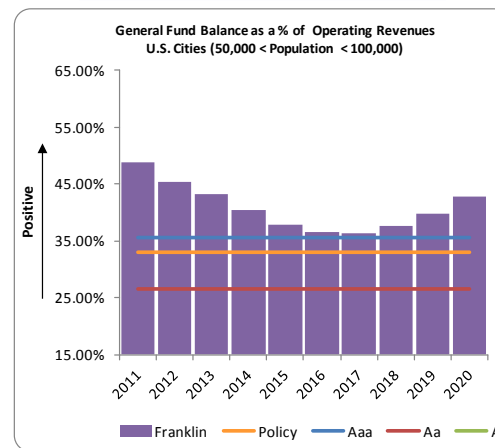
**Scenario 3  
(Top 3)**



**Scenario 4  
(Top 3 w/phasing)**



**Scenario 5  
(Staff Recommendation)**

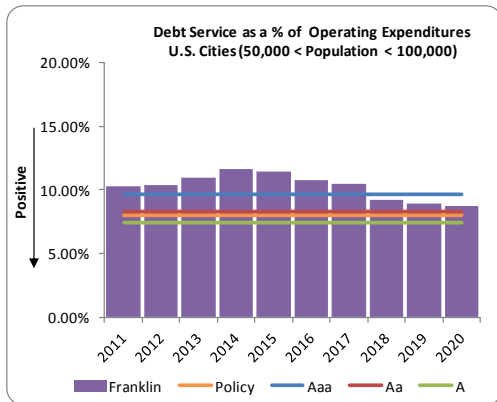


# Debt Affordability Ratios – Debt Service as a % of Operating Expenditures

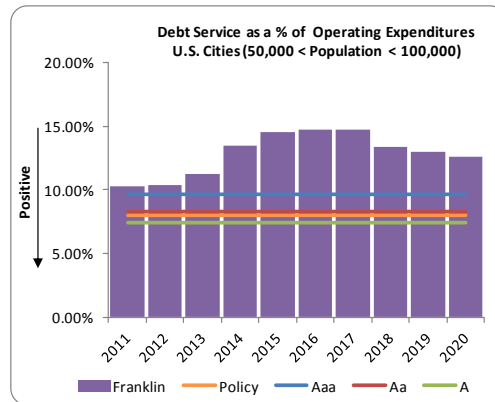


HISTORIC  
FRANKLIN  
TENNESSEE

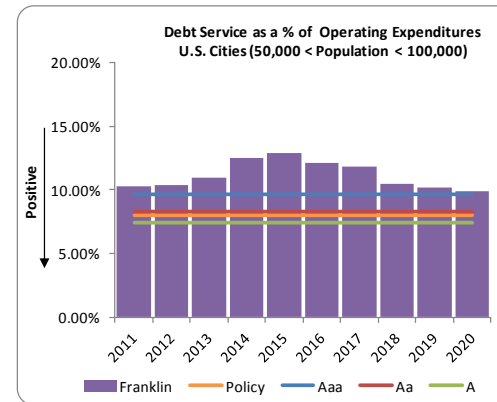
Base  
(Committed)



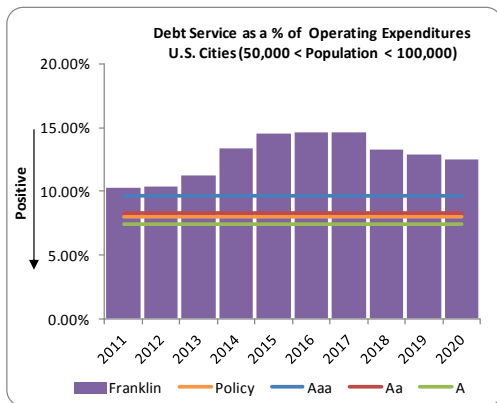
Scenario 1  
(Top 5)



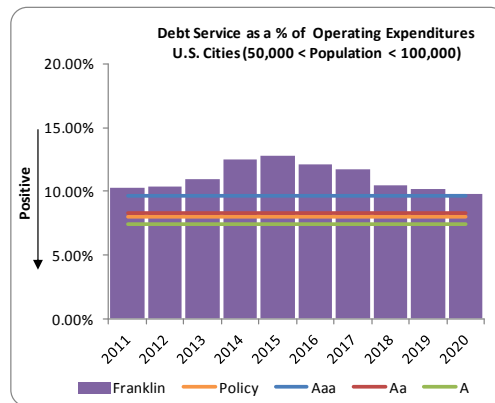
Scenario 2  
(Top 5 w/phasing)



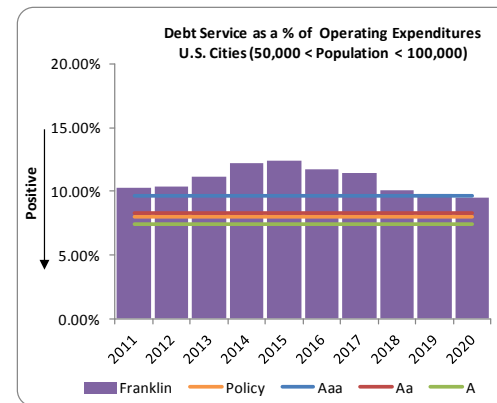
Scenario 3  
(Top 3)



Scenario 4  
(Top 3 w/phasing)



Scenario 5  
(Staff Recommendation)



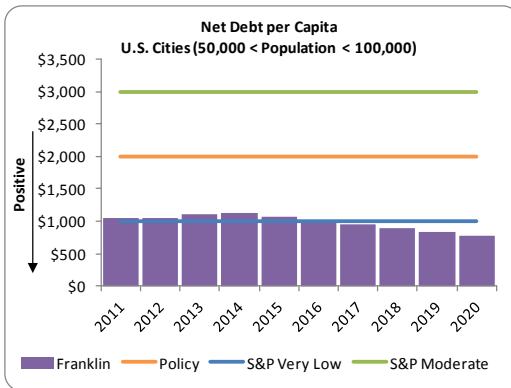
# Debt Affordability Ratios – Net Debt per Capita



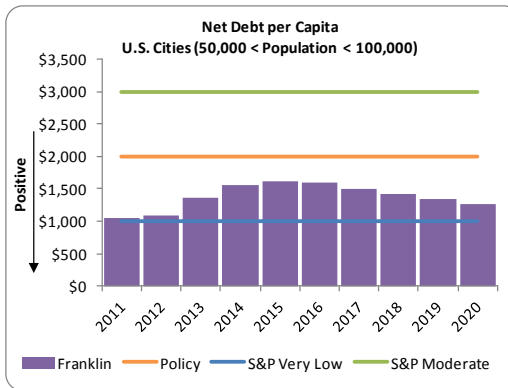
HISTORIC  
FRANKLIN  
TENNESSEE

Population Grows at 2%

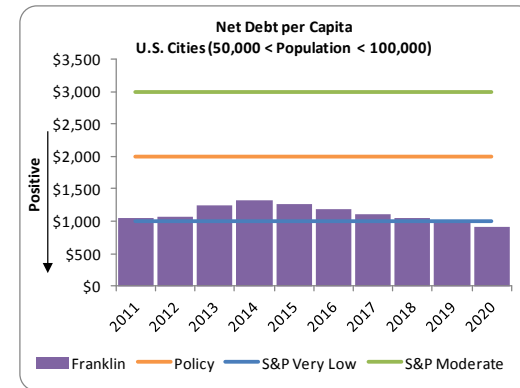
Base  
(Committed)



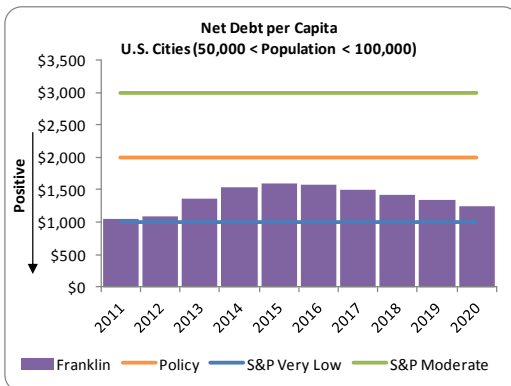
Scenario 1  
(Top 5)



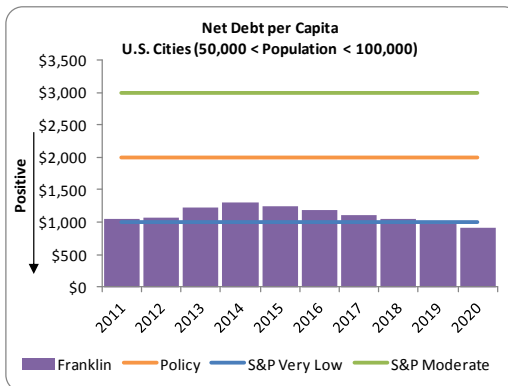
Scenario 2  
(Top 5 w/phasing)



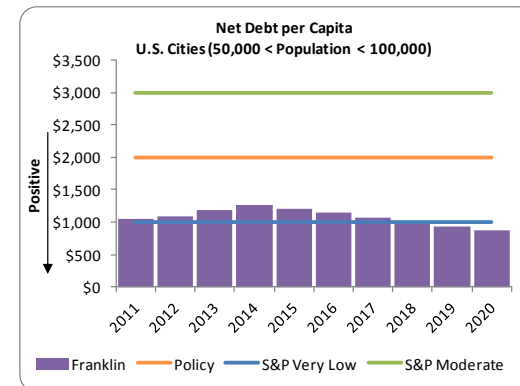
Scenario 3  
(Top 3)



Scenario 4  
(Top 3 w/phasing)



Scenario 5  
(Staff Recommendation)



# Debt Affordability Ratios – Per Capita Debt/Per Capita Income



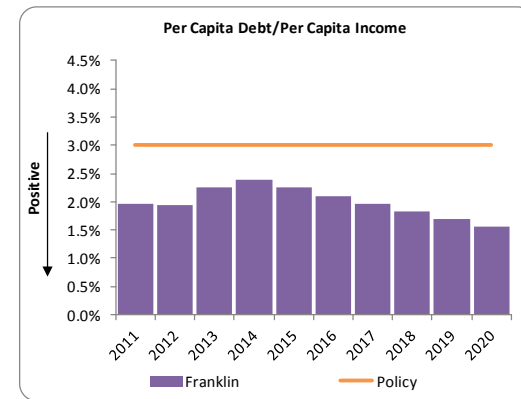
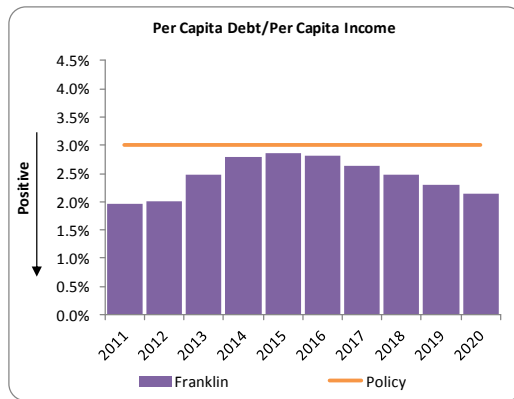
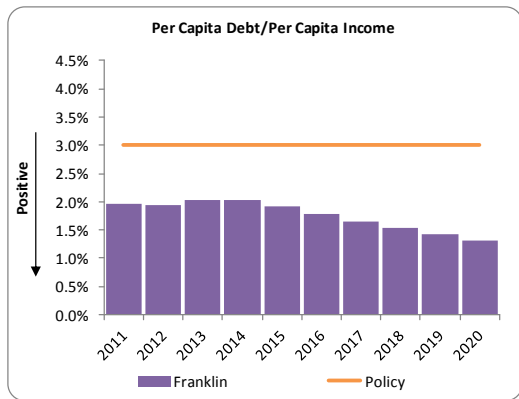
HISTORIC  
FRANKLIN  
TENNESSEE

Population & Per Capita  
Income Grows at 2%

Base  
(Committed)

Scenario 1  
(Top 5)

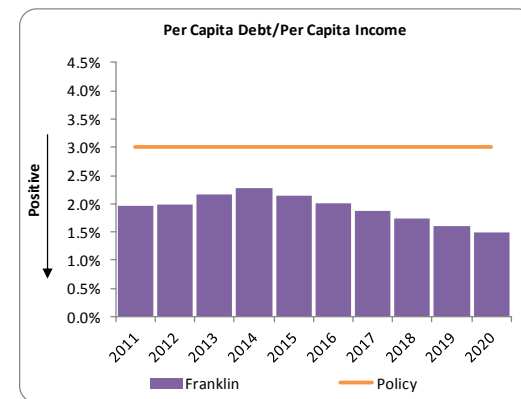
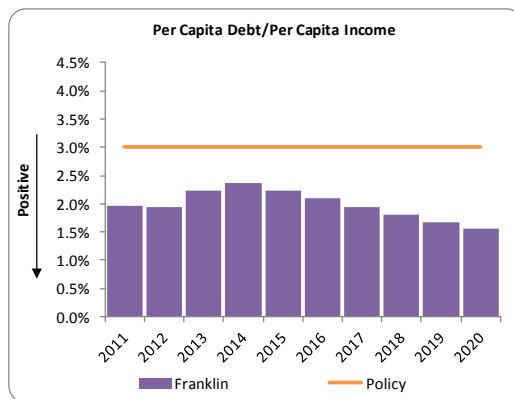
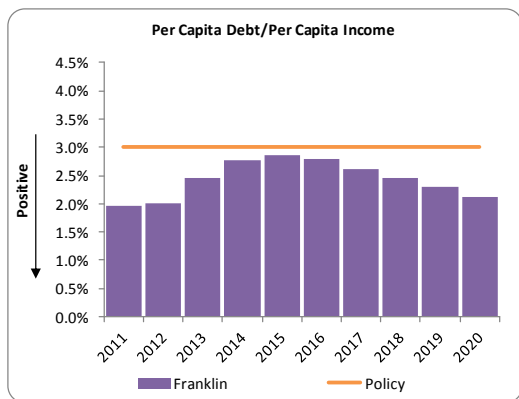
Scenario 2  
(Top 5 w/phasing)



Scenario 3  
(Top 3)

Scenario 4  
(Top 3 w/phasing)

Scenario 5  
(Staff Recommendation)



# Debt Affordability Ratios – Net Direct Debt as a % of Market Value



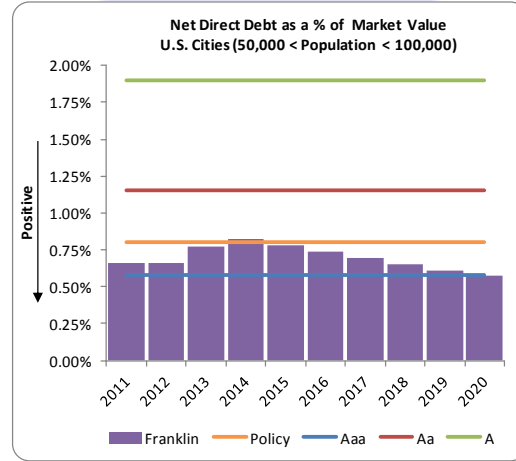
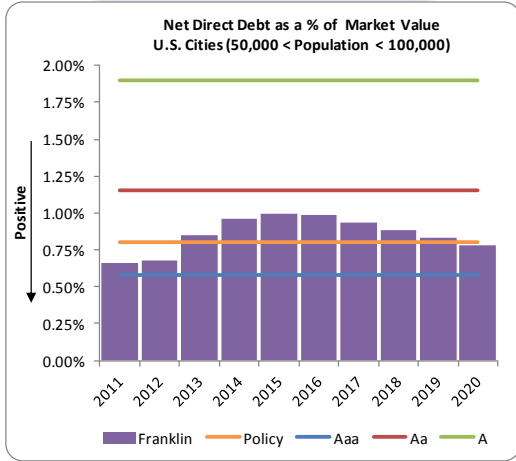
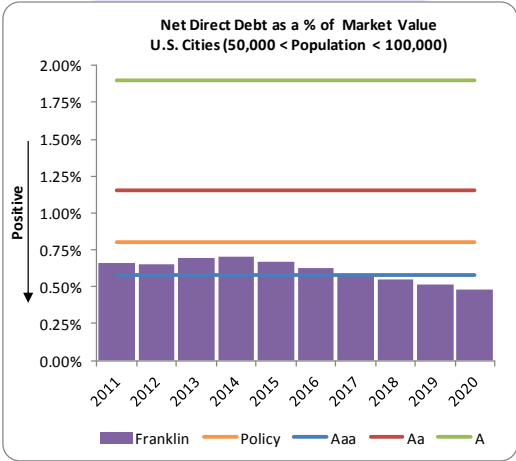
HISTORIC  
FRANKLIN  
TENNESSEE

Market Value Grows at 2%

Base  
(Committed)

Scenario 1  
(Top 5)

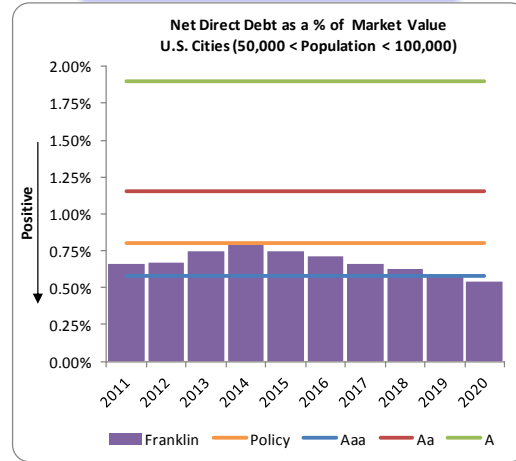
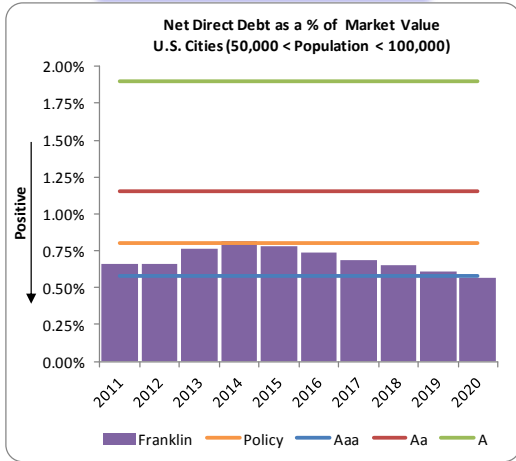
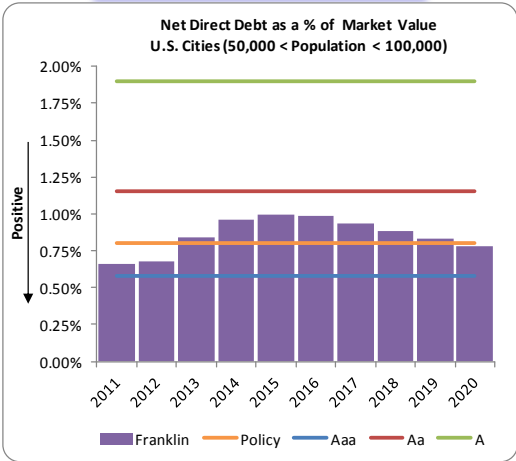
Scenario 2  
(Top 5 w/phasing)



Scenario 3  
(Top 3)

Scenario 4  
(Top 3 w/phasing)

Scenario 5  
(Staff Recommendation)





# Scenario Summary



HISTORIC  
FRANKLIN  
TENNESSEE

Affordability Matrix - \$52.3 Million Budget (FY 2012)

	General Fund Balance as a % of Operating Revenues		Debt Service as a % of Operating Expenditures		Net Debt per Capita		Per Capita Debt/Per Capita Income		Net Direct Debt as a % of Market Value	
<b>Base</b> <i>(Committed)</i>				Yrs 2011-2020 Ratio is above policy						
<b>Scenario 1</b> <i>(Top 5)</i>		Yrs 2016 - 2020 Ratio is below policy		Yrs 2011-2020 Ratio is above policy						Yrs 2013-2019 Ratio is above policy
<b>Scenario 2</b> <i>(Top 5 w/phasing)</i>				Yrs 2011-2020 Ratio is above policy						Yrs 2014 Ratio is weak
<b>Scenario 3</b> <i>(Top 3)</i>		Yrs 2016 - 2020 Ratio is below policy		Yrs 2011-2020 Ratio is above policy						Yrs 2013-2019 Ratio is above policy
<b>Scenario 4</b> <i>(Top 3 w/phasing)</i>				Yrs 2011-2020 Ratio is above policy						
<b>Scenario 5</b> <i>(Staff Recommendation)</i>				Yrs 2011-2020 Ratio is above policy						