Debt Capacity and Affordability

Mechanics of a Bond Sale Program
California Debt and Investment Advisory Commission

April 30, 2009
Who Cares about Debt Capacity?

Taxpayers

Elected Officials

Ratepayers

Investors

Municipal Management

Rating Agencies

Credit Enhancement Providers
Why is Debt Capacity an Important Issue?

• Debt can be an effective tool for financial managers

• However, since debt is generally paid by the taxpayer or ratepayer, maintaining affordability is important
  ➢ Unaffordable debt burden can have an adverse impact on the underlying economy
  ➢ It can discourage both residential and business growth

• Excessive debt can negatively impact a municipality’s financial position
  ➢ Reduces financial flexibility
  ➢ May negatively impact credit rating
  ➢ May lead to more difficult and costly borrowing
Why Issue Debt?

- Expedite completion of revenue generating projects
- Assist in funding long-term liabilities
- Improve infrastructure
- Leverage other available funds (State, Federal or Private) for public projects
- Meet regulatory requirements
- Stimulate economic activity
- Achieve public policy goals
  - Intergenerational equity
Challenges to Determining Debt Capacity

• It can be difficult to establish the proper framework for determining debt capacity
  ➢ Legal constraints versus prudent financial management
  ➢ Calculating the true debt burden (net tax-supported or net revenue-supported debt)

• It can also be challenging to align public policy and financial resources
  ➢ Stated policy objectives often exceed limited funding resources

• Ratios can be confusing and difficult to calculate, as they depend on estimates of many factors, including
  ➢ Long-term assumptions of borrowing costs
  ➢ Economic factors such as personal income and assessed values
## Metrics for Measuring Debt

### Tax-Backed
- Debt Per Capita
- Debt as a % of Assessed Value
- Debt as a % of Personal Income
- Debt Service as a % of Revenues or Expenditures
- Amortization
- Growth of debt service as a % of budget

### Revenue-Backed
- Debt to Plant (or Debt to Equity)
- Debt per Customer
- Debt Service as a % of Revenues or Expenditures
- Amortization
- Coverage
- Adjusted Coverage

=> Impact of overlapping debt on the tax or rate base
## Appropriate Debt Levels

### Tax-Supported Example

<table>
<thead>
<tr>
<th></th>
<th>High</th>
<th>Medium</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt per capita ($)</td>
<td>5,000 &amp; above</td>
<td>2,000-5,000</td>
<td>Below 1,500</td>
</tr>
<tr>
<td>Debt as a % of assessed value</td>
<td>Above 8%</td>
<td>3-8%</td>
<td>Below 3%</td>
</tr>
<tr>
<td>Amortization (10-year)</td>
<td>65% &amp; above</td>
<td>40-50%</td>
<td>Less than 25%</td>
</tr>
<tr>
<td>Debt as a % of expenditures</td>
<td>15% &amp; above</td>
<td>7-14%</td>
<td>Below 7%</td>
</tr>
</tbody>
</table>

### Water Revenue Example

<table>
<thead>
<tr>
<th></th>
<th>High</th>
<th>Medium</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coverage</td>
<td>1.50 &amp; above</td>
<td>1.25x-1.50x</td>
<td>1.00x-1.25x</td>
</tr>
<tr>
<td>Debt to plant</td>
<td>75% &amp; above</td>
<td>50-75%</td>
<td>50% &amp; below</td>
</tr>
<tr>
<td>Debt per customer ($)</td>
<td>4,000 &amp; above</td>
<td>1,500-2,000</td>
<td>1,000 &amp; below</td>
</tr>
<tr>
<td>Amortization (10-year)</td>
<td>65% &amp; above</td>
<td>40-50%</td>
<td>Less than 25%</td>
</tr>
</tbody>
</table>
Impact of Overlapping Debt on “Muniland City”

MUNI COUNTY
440,000 residents
$100 mm GO bonds
$100 mm POBs

MUNILAND WATER DISTRICT
$200 mm Revenue Bonds

MUNILAND CITY
220,000 residents
$100 mm GO bonds
$50 mm COPs

MUNI MOSQUITO ABATEMENT DISTRICT
$20 mm Special Tax

MUNILAND FIRE DISTRICT
$50 mm GO bonds

MUNILAND SCHOOL DISTRICT
$50 mm GO bonds

Direct Debt per capita: $682

Overlapping Debt per capita: ~$1,680
Debt Capacity Analysis

Samples of Sound Debt Capacity Studies

• State of California:

• State of Virginia:

• City of New York:

Characteristics of a Well-Structured Debt Capacity Study

• Addresses affordability based on different measures
• Includes assumptions driven by a multi-year comprehensive capital plan
• Links debt decisions to the overall operating budget
• Takes into account policy and economic impacts
• Utilizes conservative forecasting
One Size Does Not Fit All

• Analyzing debt capacity is an important exercise but the appropriate amount of debt cannot be determined by ratio alone

• Debt capacity should be balanced with public policy which can be difficult

• Determining affordability requires challenging forecasting and should be frequently adjusted

• Limited resources demand tough choices as to how and what to debt finance

• Debt needs to be linked to a thorough capital planning process and the overall operating budget