Reforecasting Budgets in an Uncertain Economy

Connecticut Conference of Municipalities Municipal Training Webinar

April 28, 2020

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All data as of 4/16/2020 unless otherwise noted.
Agenda

I. Uncertain Economy
II. Projecting Revenues
III. Expenditure Impacts
IV. Emerging Practices and Approaches
V. Questions

Copies of our slides will be made available following the call

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Goals and Application

- Even as the COVID-19 pandemic has already generated unprecedented social and economic costs, tremendous uncertainty still remains about the future trajectory of new infections, rates of mortality and morbidity, public policy responses – and the associated economic impact.

- At the same time, governments must continue to provide public services and to protect the health, safety, and welfare of their communities – and must develop budgets to do so.

- This analysis is provided to assist in budget development and planning during these extraordinarily uncertain times, and is grounded in conversations we have been having in recent weeks with our clients around the country. A few notes:

  - Many of you have likely already adopted a number of the approaches and practices we will outline today (some of which we have learned from some of you on this call!)
  - We hope we can nonetheless contribute a few new and useful thoughts along the way and help to validate the important work you are already doing for your communities.
  - While our focus will be primarily on general governments, largely at the local level, we also hope that those of you from other client sectors (e.g. states, utilities, schools, special districts) will find many of the principles we address to be broadly applicable.

- Navigating this ongoing uncertainty will inevitably require an iterative process for months to come; we encourage your ideas and feedback as we all continue to develop responses.
Uncertain Economy
Extraordinarily Sharp Downturn


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Consequences of a Services Sector Recession

Since a services sector recession is not burdened by excess inventory, the recovery could potentially occur more quickly.

With COVID-19, however, recovery depends on:

- a decline in the rate of new infections, and
- sharp increase in testing

Epidemiologists suggest that premature reopening could cause a rebound in infections, delaying the recovery further.

Unprecedented monetary policies and massive fiscal stimulus including $2T (to date) including direct cash grants to families, and credit support to businesses could avert another depression. But fiscal stimulus cannot avoid a sharp recession nor a huge surge in bankruptcies and unemployment.
Comparison of COVID-19 Recession to Past Recessions

- Again, the COVID-19 recession is unique, because it is primarily a services sector recession caused by a pandemic.

- Although the COVID-19 recession could be short in duration, it is projected to cause a spike in the unemployment rate higher than in the Great Recession of 2008-9. Again, this is because this new recession strikes at the services sector of the economy.

- Strong actions by the Federal Reserve and the $2T federal stimulus package (equivalent to 10% of GDP) are intended to prevent cascading sequence of business failures and layoffs from morphing into a financial crisis and more protracted recession or depression.

<table>
<thead>
<tr>
<th></th>
<th>Months of Duration</th>
<th>Total Fall in GDP</th>
<th>Unemployment: Peak Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Great Depression</td>
<td>43</td>
<td>-30.0%</td>
<td>25%</td>
</tr>
<tr>
<td>Great Recession</td>
<td>18</td>
<td>-4.3%</td>
<td>13%</td>
</tr>
<tr>
<td><strong>COVID-19</strong></td>
<td>6</td>
<td>-23.5%</td>
<td>20%</td>
</tr>
</tbody>
</table>

Sources: Moody’s Economy.com and NBER
Economic Uncertainty

V... U... L... W... \ or \\n\n2008 experiences

V-shaped (Canada)

U-shaped (United States)

L-shaped (Greece)

COVID-19 Recession – Overview and Key Assumptions

1. Baseline
   A. Overview – COVID-19 has triggered a severe but potentially short global recession. In the U.S. it is the most severe since the Great Depression
   B. Key Assumptions – Emergency measures remain in place into May 2020, with gradual reopening in some areas thereafter. Normal economic and social activities are delayed until mid-2021 when a vaccine is developed. In between, as testing and quarantine measures ramp up, social distancing remains necessary, dampening economic activity

2. Pessimistic
   A. Overview – Infections rebound in the U.S., prompting renewals of lockdown measures preventing a recovery. The result is a prolonged period of below trend economic activity
   B. Key Assumptions – Lockdown measures are abandoned too soon and the epidemic re-erupts in major cities. Extensive monetary and fiscal measures result in a quasi nationalization of major sectors of the economy. These measures fail to restore a meaningful recovery, but they do arrest the downward spiral

Sources: Fitch PFM
Impact of COVID-19 on Real GDP

Sources: Moody’s Economy.com and U.S. Bureau of Economic Analysis
Why Focus on GDP? Because Economies are Linked

- The economies of most cities and counties are highly correlated with U.S. GDP
- The correlation for Hartford is 0.49 and for Stamford 0.62
- This means that 49% to 62% of the variation in GRP for Hartford or Stamford can generally be projected using GDP
- Notice that the amplitude of County GRP is greater than for GDP
- This historical experience indicates that the MSAs’ economies will potentially contract by more than U.S. GDP and may rebound slower
- The economic structure of each place will differ in important ways that must be understood

Sources: U.S. Bureau of Economic Analysis and PFM

In addition to different local and regional economic factors, the level and timing of infections also varies across the country, which may, in turn, impact the timing and pace of economic recovery.
Responding to Uncertainty

- Given high uncertainty regarding the economy’s trajectory and the divergence in mainstream economic forecasts, the development of multiple scenarios to plan for contingencies is now an increasingly prevalent best practice.

- As detailed in an April 2, 2020 Special Report, For example, Fitch Ratings is now evaluating credit under two scenarios – baseline and downside – linked to alternative paths for the pandemic.

<table>
<thead>
<tr>
<th>Baseline</th>
<th>Downside</th>
</tr>
</thead>
<tbody>
<tr>
<td>Following lockdowns, activity resumes slowly amid weak demand.</td>
<td>Extended lockdowns, affecting individuals and companies.</td>
</tr>
<tr>
<td>Healthcare systems continue to cope, though overstretched.</td>
<td>Healthcare systems overwhelmed, with large-scale human impact.</td>
</tr>
<tr>
<td>Remote working implemented wherever possible for 3–4 months.</td>
<td>Business closures cause additional layoffs and bankruptcies.</td>
</tr>
<tr>
<td>Schools/universities closed for 3–4 months, sporadically thereafter.</td>
<td>Prolonged impairment of consumer credit quality and rising non-performance levels.</td>
</tr>
<tr>
<td>Collapse in leisure travel for 3–4 months, returning only gradually.</td>
<td>Widespread disruption to civic life threatens to erode social contract.</td>
</tr>
</tbody>
</table>

- Similarly, Moody’s Analytics released an April 14, 2020 report stress-testing State budgets under both baseline and severe assumptions.

Budget Response to Uncertainty

In turn, individual governments at different levels will have varying tools for navigating among evolving, alternative scenarios, for example:

- Contingent or reserve appropriations
- Reserve fund strategies
- Target budgeting

Through whatever mechanism(s) are available and most appropriate locally, eyeing two or more scenarios can be beneficial for calibrating both an adopted budget and reserve/contingency plans.

In turn, this requires first developing a comprehensive, consistent, and dynamic review of the budget as a whole under each of the economic scenarios selected (e.g., baseline, downside):

- Major Taxes
- Non-Tax Revenues
- Expenditures
Projecting Revenues
# Major Tax Categories: Elasticities and Local Factors

<table>
<thead>
<tr>
<th>Tax Category</th>
<th>Likely Impact</th>
<th>Local Factors</th>
</tr>
</thead>
</table>
| **Property**               | • Low impact for residential; new construction slowed (down 22.3% in March year over year), but assessments for many in place and mortgage companies typically holding in escrow  
  • Commercials may see appeals, and bankruptcies could drive nonpayment | • Frequency of reassessment  
  • Commercial/residential mix  
  • Collections difficulty |
| **Real Estate Transfer**   | • Temporary slowdown in sales due to stay at home restrictions  
  • Longer-term cooldown in market possible | • Local housing market composition |
| **Sales**                  | • Varies by sector, but near-term impact high                                 | • Industry mix  
  • What is covered  
  • “Wayfair” law coverage (all but FL and, for now, MO) |
| **Hotel, Meals, Rental Car** | • Tourism and hospitality taxes hit hard  
  • Timing, pace, and extent of recovery TBD | • Concentration of tourism and hospitality sector |
| **Income**                 | • Decline expected with rising unemployment, furloughs  
  • Capital gains and other unearned income also likely to fall (partial offsets possible from liquidations) | • Nexus issues for some non-resident (commuter) taxes |
| **Business**               | • Widespread impacts, concentrated on small businesses and certain sectors | • Industry mix |
| **Excise**                 | • Gas tax hit hard; energy and other commercially/industrially driven taxes slowed  
  • Cable and “sin” taxes (alcohol, tobacco) likely more stable | • Industry mix |

Source: CNBC, “US home construction collapsed 22.3% in March,” April 16, 2020
## User Charges, Licenses, Fines: Function by Function Reviews

<table>
<thead>
<tr>
<th></th>
<th>Examples</th>
<th>Has activity changed due to COVID-19?</th>
<th>How is activity likely to change after initial restrictions lifted?</th>
<th>Is there the potential for “catch up” post-COVID?</th>
<th>Impact if economic downturn continues after public health conditions improve?</th>
<th>Potential longer-term impacts (post-recession)?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>User Charges</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parking Meters</td>
<td>Yes; much lower; sometimes waived</td>
<td>Likely slow recovery</td>
<td>No</td>
<td>Lower</td>
<td></td>
<td>More WFH?</td>
</tr>
<tr>
<td>Recreation classes</td>
<td>Cancelled</td>
<td>Recovery</td>
<td>No</td>
<td>--</td>
<td></td>
<td>From Zumba to Zoom-ba?</td>
</tr>
<tr>
<td>Plan review</td>
<td>Slowed or cancelled</td>
<td>Likely slow recovery</td>
<td>Partial</td>
<td>Lower</td>
<td></td>
<td>On-line?</td>
</tr>
<tr>
<td>EMS transport</td>
<td>Unclear; new COVID-19 emergency calls, but other calls slowed</td>
<td>--</td>
<td>Partial</td>
<td>--</td>
<td></td>
<td>Telemedicine?</td>
</tr>
<tr>
<td><strong>Licenses</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>Varies by timing of cycle; some waivers</td>
<td>Return to cycle</td>
<td>Yes</td>
<td>Fewer businesses</td>
<td></td>
<td>More on-line</td>
</tr>
<tr>
<td>Marriage</td>
<td>Much deferred</td>
<td>Recovery</td>
<td>Yes</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fines</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Court fines</td>
<td>Lower activity</td>
<td>Likely gradual return</td>
<td>Limited</td>
<td>--</td>
<td></td>
<td>Policy review of alternatives</td>
</tr>
</tbody>
</table>
Intergovernmental Revenues (State to Local)

- **Formula or distributions based on an underlying source linked to social restrictions and/or the economy**
  
  For example:
  - Gaming revenue distributions
  - Gas taxes and motor vehicle registrations

- **Discretionary grants and even formula-driven funding based on State policy (and, indirectly, budget and balance sheet health)**
  
  For example:
  - Many economic development programs
  - Discretionary criminal justice or environmental grants
  - State formula-based aid to schools and municipalities

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**States Face Significant Budget Pressures**

- In many states, revenue shortfalls have already begun to emerge as sales, income, and other major tax categories have started to decline

- An April 14, 2020 Moody's Analytics study projects potential revenue losses across the 50 states through FY2021 equivalent to 14.8% to 19.5% of General Fund revenues

- Moody’s Analytics also anticipates potentially significant spikes in state Medicaid costs based largely on increased unemployment

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**Connecticut Among Better Prepared States?**

*(All data as % of fiscal 2019 revenues)*

<table>
<thead>
<tr>
<th></th>
<th>Rainy-Day Balance</th>
<th>Total Balance</th>
<th>Fiscal shock – moderate recession</th>
<th>Fiscal shock – severe recession</th>
</tr>
</thead>
<tbody>
<tr>
<td>Datapoint</td>
<td>12.8%</td>
<td>14.6%</td>
<td>-13.5% (-$2.6B)</td>
<td>-17.4% (-$3.4B)</td>
</tr>
<tr>
<td>State Ranking</td>
<td>9</td>
<td>23</td>
<td>T-35</td>
<td>35</td>
</tr>
</tbody>
</table>

Intergovernmental Revenues (Federal to Local)

- **Existing federal grant and formula-driven funding**

  For example:
  - Community Development Block Grants (CDBG)
  - Department of Justice grants (e.g. DEA task force)

- **Special Federal Assistance**

  - To date, multiple categories of potential federal assistance have been established or expanded

  - These include:
    - FEMA funding
    - CDBG expansion
    - Emergency Solutions Grants (homelessness services)
    - Economic Adjustment Assistance Program
    - Emergency Education Relief Fund
    - Coronavirus Relief Fund
    - Federal Reserve Municipal Liquidity Facility

  - Full analysis of these (and any future rounds of opportunities) will be important for comprehensive projections, particularly on a multi-year basis
Other Non-Tax Revenues

- **Investment income**
  - Lower interest rates
  - Greater draw downs on reserves / weaker cash flow

- **Voluntary contributions from nonprofits / Payments In Lieu of Taxes (PILOTs)**
  - At risk due to nonprofit fiscal challenges

- **Utility transfers**
  - Where present, may see some pressure due to commercial/industrial declines and/or concentrated impacts of certain large users (e.g. universities)

- **Other miscellaneous**
  - Lease of City properties; heightened risk of nonpayment
  - Reduced property sales
  - Concessions may decline
Filing Delays / Collections Issues

- Widespread property tax filing delays
  - Are discounts for early payment still in place?
  - Potential longer-term collection risk, e.g. due to small business bankruptcies

- Impact of other tax filing delays at higher levels of government, for example:
  - Maryland “piggyback” income tax
  - California small business sales tax reprieve

- Potential programs to waive penalties and/or interest for late payment

- General exposure to heightened nonpayment and collection risk

Both a fiscal year timing issue and an absolute dollar issue
Expenditure Impacts
Expenditure Impact Overview

- Extraordinary costs… and some, partial offsetting savings… related directly to COVID-19 effects on service needs and demands

- Broader indirect spending impacts across the budget
  - Active employee wages and benefits
  - Future pension and OPEB costs
  - Capital Improvement Programs (CIP) and debt
  - Other non-personnel costs – from contracts to claims to criminal justice
  - Interagency and nonprofit funding

- Effects of cost containment initiatives
Extraordinary COVID-19 Expenses

- Front-line worker overtime, premium pays, supports (e.g. temporary housing)
- PPE, test kits
- Public health outreach
- Special population supports (e.g. homeless, nursing homes)
- Cleaning costs
- Technology for remote access
- Specialized professional services
- Business / resident relief programs
- *Tracking for potential future reimbursement is critical*

Quantifying “Organic” Savings

Some savings will likely be achieved “organically” as a result of restrictions on social activity (and may also, in some cases, be maximized through management action):

- Reduced costs from cancellation of special events
- Reduced overtime in active, but non-essential or slowed functional areas (e.g. plans review and new construction permitting and inspection)
- Lower facility and other costs for closed operations (utilities, some maintenance, some materials and supplies)
- Lower fuel and maintenance costs for the non-essential fleet
- Reduced travel costs (e.g. training and conference attendance)
- Deferred pay-go capital costs with construction halted
Active Employee Workforce Costs

- Hiring freezes
  - Funded vacancies
  - Attrition savings
  - Early retirement programs (payroll savings less incentive costs)
- Reduced part-time and/or seasonal hiring (e.g. tax season, summer recreation)
- Furloughs and layoffs? Unemployment insurance? Accrued leave payouts?
- Compensation changes
  - Deferred pay increases and/or upward adjustments?
  - Overtime and/or premium pay impacts
- Healthcare claims costs?
- Workers’ compensation costs?

Health Insurance Cost Factors

As with other dimensions of the COVID-19 crisis, the impact on health care costs is yet to be determined, and will likely vary significantly for different public employers.

An early study by Covered California ("The Potential National Health Cost Impacts to Consumers, Employers and Insurers Due to the Coronavirus (COVID-19)," March 22, 2020) projected potential 2021 premium cost increases due to the virus alone ranging from 4% to more than 40%, based on factors including:

- Number of infections, cost of testing, and cost of treatments
- The degree to which COVID-19 testing and treatment costs are continuing into 2021
- Impact in 2020 on insurer capital reserves and the need to rebuild reserves prospectively
- Extent of elective surgeries and other treatments deferred into 2021
- Further federal action, if any, to support health insurers

Self-insured employers will see similar factors play out at a more localized level, with potential pressures on future rates for any stop-loss coverage maintained.

While many of the factors will hopefully become clearer over the months ahead, engaging early with health benefits advisors may help to assess potential impacts.
Pensions and OPEB

Pensions

• Generally not an immediate issue
  ▪ Lag from actuarial valuation to budgeting
  ▪ Extent of market declines still to be determined
  ▪ Smoothing practices and investment return assumptions vary
• Poorly funded plans may have near-term concerns about liquidating assets in a down market to pay benefits
• Most plans will likely face large intermediate and long-term increased funding pressures

OPEB

• Impact on pay-go claims and premium costs may parallel active employee cost trends
• Consider effect on pre-funding plans and strategies
• Not likely the ideal time to liquidate OPEB trust assets to fund current pay-go costs (“selling low”)

Source (Figure 4): Center for Retirement Research at Boston College, “The Funding of State and Local Pensions” 2013-2017 (June 2014)
Non-Personnel Costs

- **Vendor management**
  - Purchasing controls
  - Revisiting contract escalators/terms
- **Liability insurance and third-party claims** (e.g. auto)
- **Enterprises and other special funds / community concerns?**
  - Because of the concentrated risks for certain dedicated funding streams (e.g. hotel taxes dedicated toward visitors’ bureaus and convention facilities, or transit ridership losses), how will general governments be called on to help address such shortfalls?
  - Schools and community colleges?
  - Museums and other arts, culture, and community nonprofits?
  - Other?

**Consumer Price Index Trends**

- Across the four most-recent U.S. recessions (starting with 1981-82), the 12-month change in in CPI from the business expansion peak to the recession trough averaged \(-3.2\%\)
- In March 2020, the CPI nationally (all Urban Consumers, seasonally adjusted) fell by 0.4\%, the largest monthly decline in over five years
- While a portion of this decline was driven by falling energy prices not directly related to COVID-19… in just this one month:
  - Airline fares declined 12.6\%
  - Hotel/motel costs fell 7.7\%
  - Apparel costs dropped 2.0\%
- The cost of household cleaning products, however, increased 1.1\%

CIP / Debt Service

- Existing debt
  - Variable rate impacts?
  - Swap impacts?
  - Refinancing opportunities?

- CIP decisions
  - Continue to defer after restrictions ease?
  - Impact on costs (and timing) for pay-go, new issuance, future operations
  - Evaluate potential Stimulus acceleration? Use of engineers and planners not now on the front lines to prepare projects to be shovel-ready?

- New issuance
  - More or less?
  - Structure?
  - Market dynamics

As your forward-looking picture becomes clearer, there are many considerations to be worked through with your registered municipal advisor.
Cost Containment / Departmental and Strategic Engagement

- As already noted, many governments have already initiated initial cost reduction efforts (e.g. hiring freezes, pay-go CIP deferrals, etc.) and, if not already launched, are commonly evaluating more severe measures (e.g. furloughs and service cuts).

- At a technical level, it is important that any such measures be fully and realistically quantified as part of a budget reforecast.

- At a practical level, early **department and stakeholder engagement** can help to identify smarter and more enduring opportunities than across-the-board reductions.

- Departmental engagement can also help to identify and capture the more immediate “organic” savings from social restrictions and a slowed economy, as well as (potentially reimbursable) direct COVID-19 response costs.

- Many communities are also finding benefits from peer-to-peer coordination within regions and/or sectors.
Emerging Practices and Approaches
Transparent Budget Assumptions

- Clarity for elected officials, senior policymakers, and other stakeholders regarding the underlying basis for economic projections (particularly around the path of the virus and return toward normalcy)

- Opportunity for informed buy-in around the approach and/or recalibration as warranted

- Provides a record of assumptions at key junctures, to contextualize future post-hoc reviews of forecast accuracy

Example: City and County of San Francisco (3/31/2020)

Ultimately, the duration and depth of the downturn will correlate with both the measures required to contain the spread of the virus and the economic dislocation that occurs during this period, both of which are unknown at this time. Given this uncertainty, we have projected General Fund tax revenues under two scenarios:

- **More Limited Impact.** A severe but more limited scenario resulting from a better-case, limited duration recession in which the economy experiences a short, six-month shock and then rapidly recovers by the end of calendar year 2020.

- **More Extended Impact.** A more severe and extended scenario where the economy experiences a more severe six-month shock, followed by a slower period of recovery that extends through the end of calendar year 2020 and through 2021. For FY 2019-20, extended impact scenario projections represent a deeper shock than limited impact projections.
Budget Delays and Controls

- Extended fiscal year (e.g., State of New Jersey)
- Appropriation controls
  - Partial year appropriation (e.g. Q1 only)
  - Target budgets; hold-backs, formal (or informal)
- Budgeted contingencies
- Planning for Amended Budgets
Use of Reserves

- There is no one-size-fits-all approach to reserves
- The best approaches are risk-based and policy-driven specific to each governmental entity
- Some general thoughts:
  - If you have a “Rainy Day Fund” or equivalent reserve for budget stabilization… well… it is pouring
  - At the same time, other risks and contingencies remain in place even beyond the current storm (e.g., natural disasters, public health and economic conditions worse than a baseline projection, etc.)
  - Look to your current policy
  - Where possible, the use of reserves for one-time costs or impacts (e.g. fiscal year timing concerns from tax filing delays) is preferable to use for ongoing shortfalls
  - If drawdowns are needed, articulate a thoughtful approach, inclusive of plans for regaining structural balance and ultimately replenishing reserves (inclusive of how any federal cost reimbursements are used)
Multi-Year Perspective

- If you have a June 30 / July 1 fiscal year, all dimensions of this challenge will be multi-year.
- Even with a calendar year fiscal year, the economic impacts (and other effects, as well) will likely carry forward into FY2021 and potentially well beyond.
- As you move from triage to stability...
- The next step toward sustainability is to refresh (or establish, if not already in place) your multi-year financial plan to take into account concerns such as:
  - Multi-year revenue effects
  - Increased long-term pension costs
  - Capital program strategy
  - New emergency preparedness requirements
  - (Lasting?) changes in how people work and live (e.g. more working from home leading to different office space requirements – and commercial property valuations – and/or less transit ridership and commuter parking demand; potential new constituent expectations for on-line public services, etc.)
Thank You!
Questions?

- Due to time constraints, not all questions may be handled live on the call.
- You can e-mail after the call or reach out through your primary PFM contact.
- A copy of these slides will be emailed to all registrants.

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