Two Exogenous Forces Are Still Driving the National and State Economies - and State Revenues

- The Epidemiological Path of the Pandemic
- Unprecedented Federal Fiscal and Monetary Policies Associated With the Pandemic, IIJA and “Build Back Better” Programs

High Levels of Uncertainty Continue to Characterize Both
FY22 Revenues by Fund Through November 2021
Actual Revenues (Green) vs. Targets (Red), Percent Variance by Fund in Box, Source: VT Joint Fiscal Office

General Fund
- Actual: $689.9
- Target: $657.4
- Variance: +4.9%

Transportation Fund
- Actual: $122.4
- Target: $122.7
- Variance: -0.3%

Education Fund (Partial)
- Actual: $283.8
- Target: $278.6
- Variance: +1.9%
Year-To-Date FY22 Revenues Are Solidly Above Expectations, but Uncertainty Persists

- Total Revenues through November (General, Transportation and partial Education Funds) are about 3.5% above targets (about $37M on a base of more than $1B), most of which was booked in the first quarter of the fiscal year, prior to the record infections and hospitalizations caused by the Delta variant. Still, there is solid evidence that society at large is learning to live with the risks associated with COVID and its variants without nearly as much aggregate economic loss as occurred in the earlier phases of the pandemic.

- The revenue strength in the first 5 months of the fiscal year was concentrated in Personal Income, Corporate and Meals & Rooms receipts. With corporate profits at record levels, demand strong and prices rising, income tax liabilities have risen accordingly. Tourism travel continues to be heavily tilted towards short-term rentals, such as AirBnb, but increasing numbers of visitors are venturing out and spending freely. With an aversion to air travel still evident and 50 million people within a 5 hour drive from Vermont, tourism visitation has exceeded expectations, and through the first five months of the fiscal year is 50% above the same period in FY21 and 6% above the same (pre-pandemic) period in FY20.

- Epidemiological developments, however, are still determining the course of the economy, with news of new variants shaking markets and jamming international travel and commerce. This can both retard recovery from the initial pandemic shocks (such as supply chain production and shipping bottlenecks, school openings and attendance, and labor force participation) and introduce new ones.

- There is evidence that some consumption taxes would be higher, but for the shortages of things to consume. Empty car lots at dealers and long delays in ordering many items has reduced taxable receipts. Inflationary price increases will generally result in higher receipts, except with taxes based on physical volumes, such as a large portion of the transportation fuel taxes.

- Both Property Transfer taxes and the Sales & Use tax are very close to targets that assumed strong sustained growth. E-commerce continues to be a significant source of Sales & Use tax growth, after accelerating during the first year of the pandemic. Real estate transactions continue to be robust, as home prices soar, especially in non-metro resort towns. As assets are repriced with plentiful money and low interest rates, we are entering the third major State and regional housing bubble in the past 40 years. Just-released FHFA home price data for the third quarter of 2021 show Vermont year-over-year growth at 17.7%, the highest statistically-valid reading on record - and with more to come.
Epidemiological Issues

- The path of the pandemic will largely determine the path of the economy in 2022
- Despite an extraordinary vaccine development effort that made vaccination freely accessible for the entire eligible U.S. population, uptake remains subaltern with only 64% of those ages 5 and up fully vaccinated. Vermont (at 77%) and 4 of the other 5 regional New England states have the highest rates of vaccination among all U.S. states, with NH at #12, still in the upper tier.
- Per capita rates of infection are about 5 times more likely and hospitalizations and death are about 13 times more likely among those who are unvaccinated. In Vermont and most states, unvaccinated individuals represent the vast majority of hospitalized COVID patients. A Peterson-Kaiser Family Foundation study estimated preventable hospitalization costs for unvaccinated people in the U.S. totaled nearly $6 billion between June and August of 2021 - and based on these rates, could exceed $15 billion by the end of the year.
- The Delta variant became ascendant just as it appeared the pandemic was receding and could be close to ending. Both psychological and healthcare considerations affected the ensuing economic impacts from Delta, with mobility much less affected - especially among vaccinated individuals.
- Vermont had been a standout in managing the pandemic, but recent infectious rates from the Delta variant have been extremely high with the onset of colder temperatures. The biggest benefit to the high vaccination rates and other behavioral mitigation measures in the State has been much lower hospitalization and death rates. In the 7 days ending December 3rd, Vermont had the 7th highest case rate among U.S. states, but the 39th lowest hospitalization rate and the 47th lowest death rate. Over the course of the entire pandemic to date, Vermont has had the second lowest case rate (after Hawaii) and the lowest death rate of any state.
- Regional hospitalizations are now approaching capacity limits, stressing healthcare systems and personnel and threatening acute problems with any further increases from the current Delta and emerging variants.
While the Δδ Wave Has Receded in the U.S. at Large...

Source: NY Times December 6, 2021
It is Raging in the Northeast and Vermont...

New reported cases

<table>
<thead>
<tr>
<th>All time</th>
<th>Last 90 days</th>
</tr>
</thead>
</table>

400 cases

Tests

Hospitalized

Deaths

Source: NY Times December 6, 2021
Statewide Covid-19 Hospitalizations

18% increase in the 7-Day hospitalization average over the past week

74% of hospitalizations among the unvaccinated over the last 7 days

Source: Vermont Department of Health—November 30, 2021
Statewide Covid-19 Critical Care Usage

- **24% Increase** in the 7-Day ICU average over the past week
- **81%** of critical care stays among the unvaccinated over the last 7 days

Source: Vermont Department of Health—November 30, 2021
Vermont ICU Metrics
(7-Day Averages)

9% Increase
Over last 7 days

24% Increase
Over last 7 days

4% Decrease
Over last 7 days

ICU Beds Available

COVID-19 ICU Beds Occupied

Non-COVID-19 ICU Beds Occupied

Source: Vermont Department of Health—December 7, 2021
Percentage of New Positive Tests

Source: Vermont Department of Health; 7-day positivity calculated as positive tests last seven days/tests last seven days
Case rates increased in 13 of 14 counties this week.

Elevated case rates across Vermont, with Bennington reporting highest rates, nearly doubling in the past week.
GMP Residential Electricity Sales in Vermont
(Normalized Actual vs. Baseline, Sources: Vermont Utilities, Itron, KRA)
GMP represents approximately 77% of the total Vermont electricity load
GMP Small Commercial & Industrial Electricity Sales in Vermont
(Normalized Actual vs. Baseline, Vermont Utilities, Itron, KRA)
GMP represents approximately 77% of the total Vermont electricity load
Pandemic and Other Federal Fiscal and Monetary Stimulus is Coursing Through the Economy

### Federal Government Fiscal & Monetary Policies - Pandemic Response

<table>
<thead>
<tr>
<th></th>
<th>ALLOWED</th>
<th>COMMITTED/DISBURSED</th>
<th>DEFICIT IMPACT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FISCAL POLICY</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legislative</td>
<td>$5.92 trillion</td>
<td>$4.84 trillion</td>
<td>$5.19 trillion</td>
</tr>
<tr>
<td>Loan and Grant Programs</td>
<td>$1.56 trillion</td>
<td>$1.32 trillion</td>
<td>$1.05 trillion</td>
</tr>
<tr>
<td>Income Support</td>
<td>$906 billion</td>
<td>$850 billion</td>
<td>$872 billion</td>
</tr>
<tr>
<td>State &amp; Local Funding</td>
<td>$884 billion</td>
<td>$723 billion</td>
<td>$882 billion</td>
</tr>
<tr>
<td>Direct Payments</td>
<td>$869 billion</td>
<td>$815 billion</td>
<td>$869 billion</td>
</tr>
<tr>
<td>Health Spending</td>
<td>$662 billion</td>
<td>$410 billion</td>
<td>$652 billion</td>
</tr>
<tr>
<td>Tax Policy</td>
<td>$580 billion</td>
<td>$437 billion</td>
<td>$430 billion</td>
</tr>
<tr>
<td>Other Spending</td>
<td>$465 billion</td>
<td>$276 billion</td>
<td>$439 billion</td>
</tr>
<tr>
<td>Administrative</td>
<td>$861 billion</td>
<td>$714 billion</td>
<td>$125 billion</td>
</tr>
<tr>
<td>Trump Administration</td>
<td>$598 billion</td>
<td>$477 billion</td>
<td>$78.5 billion</td>
</tr>
<tr>
<td>Biden Administration</td>
<td>$288 billion</td>
<td>$261 billion</td>
<td>$64.7 billion</td>
</tr>
<tr>
<td><strong>MONETARY POLICY</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal Reserve</td>
<td>$6.83 trillion</td>
<td>$3.82 trillion</td>
<td>N/A</td>
</tr>
<tr>
<td>Asset Purchases</td>
<td>$3.74 trillion</td>
<td>$3.68 trillion</td>
<td>N/A</td>
</tr>
<tr>
<td>Liquidity Measures</td>
<td>$2.14 trillion</td>
<td>$328 million</td>
<td>N/A</td>
</tr>
<tr>
<td>Other Loan Purchase Programs</td>
<td>$806 billion</td>
<td>$90.4 billion</td>
<td>N/A</td>
</tr>
<tr>
<td>Lending Facilities</td>
<td>$141 billion</td>
<td>$41.8 billion</td>
<td>N/A</td>
</tr>
<tr>
<td>Interest Rate &amp; Reserve Requirement Changes</td>
<td></td>
<td>cut federal funds rate to near-zero and reduced reserve requirements to zero</td>
<td></td>
</tr>
</tbody>
</table>

### Federal Government Fiscal Policies - Infrastructure/Other

<table>
<thead>
<tr>
<th></th>
<th>PROPOSED</th>
<th>APPROVED</th>
<th>DEFICIT IMPACT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FISCAL POLICY</strong></td>
<td>(static basis)</td>
<td>(static)</td>
<td>(static basis)</td>
</tr>
<tr>
<td>Legislative Total</td>
<td>$2.43 trillion</td>
<td>$1.2 trillion ($550b new)</td>
<td>$416 - 616 billion</td>
</tr>
<tr>
<td>Bipartisan Infrastructure Investment &amp; Jobs Act</td>
<td>$2.43 trillion</td>
<td>$1.2 trillion ($550b new)</td>
<td>$256 billion</td>
</tr>
<tr>
<td>Reconciliation &quot;Build Back Better&quot; (House Passed)</td>
<td>$2.43 trillion</td>
<td>$1.2 trillion ($550b new)</td>
<td>$160 - $360 billion</td>
</tr>
</tbody>
</table>

Sources: Committee for a Responsible Federal Budget, Moody’s Analytics, The White House, Congressional Budget Office
Federal Pandemic Transfer Payments to Vermont = $10.1 Billion

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECONOMIC IMPACT PAYMENTS</td>
<td>$1,643 Million</td>
</tr>
<tr>
<td>Economic Impact Payments</td>
<td>$1,643 Million</td>
</tr>
<tr>
<td>UNEMPLOYMENT</td>
<td>$1,272 Million</td>
</tr>
<tr>
<td>Federal Pandemic Unemployment Compensation</td>
<td>$886 Million</td>
</tr>
<tr>
<td>Pandemic Emergency Unemployment Compensation</td>
<td>$165 Million</td>
</tr>
<tr>
<td>Pandemic Unemployment Assistance</td>
<td>$191 Million</td>
</tr>
<tr>
<td>Other Emergency Unemployment Funding</td>
<td>$30 Million</td>
</tr>
<tr>
<td>SMALL BUSINESS SUPPORT</td>
<td>$2,373 Million</td>
</tr>
<tr>
<td>Paycheck Protection Program</td>
<td>$1,765 Million</td>
</tr>
<tr>
<td>Restaurant Revitalization Fund</td>
<td>$77 Million</td>
</tr>
<tr>
<td>Shuttered Venue Operators Grant</td>
<td>$28 Million</td>
</tr>
<tr>
<td>Emergency Injury Disaster Loan Advances</td>
<td>$41 Million</td>
</tr>
<tr>
<td>Emergency Injury Disaster Loans</td>
<td>$462 Million</td>
</tr>
<tr>
<td>PUBLIC HEALTH AID</td>
<td>$864 Million</td>
</tr>
<tr>
<td>Provider Relief Fund</td>
<td>$260 Million</td>
</tr>
<tr>
<td>HHS COVID-19 Appropriations</td>
<td>$419 Million</td>
</tr>
<tr>
<td>Medicare Accelerated and Advance Payments</td>
<td>$185 Million</td>
</tr>
<tr>
<td>DIRECT AID TO STATES</td>
<td>$2,500 Million</td>
</tr>
<tr>
<td>Coronavirus Relief Fund</td>
<td>$1,250 Million</td>
</tr>
<tr>
<td>Coronavirus State and Local Fiscal Recovery Fund</td>
<td>$1,250 Million</td>
</tr>
<tr>
<td>OTHER</td>
<td>$852 Million</td>
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<tr>
<td>FEMA Disaster Relief Fund</td>
<td>$385 Million</td>
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<tr>
<td>Infrastructure Grants</td>
<td>$65 Million</td>
</tr>
<tr>
<td>Rental Assistance</td>
<td>$352 Million</td>
</tr>
<tr>
<td>Homeowner Assistance Fund</td>
<td>$50 Million</td>
</tr>
<tr>
<td>EDUCATIONAL SUPPORT</td>
<td>$584 Million</td>
</tr>
<tr>
<td>Governor’s Emergency Education Relief Fund</td>
<td>$17 Million</td>
</tr>
<tr>
<td>Elementary and Secondary School Emergency Relief Fund</td>
<td>$443 Million</td>
</tr>
<tr>
<td>Higher Education Emergency Relief Fund</td>
<td>$124 Million</td>
</tr>
</tbody>
</table>

Total Per Capita (third highest in the nation, after Washington, DC and New York): $16,167

Source: Peter G. Peterson Foundation, estimates through December 2, 2021
Per Capita Pandemic-Related Federal Transfer Payments
Based on Expenditures from 22 Major COVID-19 Relief Programs Totaling $3.95 Trillion, Through December 2, 2021, Source: Peter G. Peterson Foundation

District of Columbia
New York
Vermont
Alaska
Rhode Island
Massachusetts
Hawaii
North Dakota
Wyoming
New Jersey
California
Michigan
Pennsylvania
Nevada
South Dakota
Louisiana
Illinois
Delaware
Wisconsin
Kentucky
Tennessee
Missouri
Virginia
Indiana
Kansas
Iowa
West Virginia
Florida
Ohio
Texas
Mississippi
New Mexico
Nebraska
Idaho
Oklahoma
Arizona
New Hampshire
MINNESOTA
Washington
Georgia
Oregon
Washington
Florida
Colorado
Ohio
Texas
Mississippi
New Mexico
Nebraska
Idaho
Oklahoma
Arizona
West Virginia
Iowa
Kansas
Indiana
Virginia
Missouri
Tennessee
Kentucky
Wisconsin
Alabama
Arkansas
North Carolina
South Carolina
Utah

Per Capita Payments:
- $21,723 (District of Columbia)
- $16,834 (New York)
- $15,939 (Vermont)
- $15,067 (Alaska)
- $14,872 (Rhode Island)
- $14,873 (Massachusetts)
- $14,818 (Hawaii)
- $14,699 (North Dakota)
- $14,400 (Wyoming)
- $14,018 (New Jersey)
- $13,888 (California)
- $13,784 (Michigan)
- $13,595 (Pennsylvania)
- $13,546 (South Carolina)
- $13,505 (North Carolina)
- $13,438 (Arkansas)
- $13,221 (Alabama)
- $13,210 (Wisconsin)
- $13,087 (Kentucky)
- $13,075 (Tennessee)
- $13,009 (Missouri)
- $12,957 (Virginia)
- $12,918 (Indiana)
- $12,888 (Kansas)
- $12,885 (Iowa)
- $12,884 (West Virginia)
- $12,841 (Florida)
- $12,840 (Oklahoma)
- $12,790 (Idaho)
- $12,777 (Nebraska)
- $12,755 (New Mexico)
- $12,739 (Mississippi)
- $12,684 (Texas)
- $12,660 (Ohio)
- $12,640 (Colorado)
- $12,638 (Florida)
- $12,613 (Oregon)
- $12,610 (Georgia)
- $12,606 (Washington)
- $12,591 (Minnesota)
- $12,505 (Connecticut)
- $12,480 (Maryland)
- $12,412 (Montana)
- $12,358 (New Hampshire)
- $12,317 (Massachusetts)
- $12,282 (South Dakota)
- $12,265 (Louisiana)
- $12,214 (Illinois)
- $12,210 (Delaware)
- $12,142 (Wisconsin)
- $12,137 (Kentucky)
- $12,131 (Tennessee)
- $12,112 (Missouri)
- $12,103 (Virginia)
- $12,088 (Indiana)
- $12,075 (Kansas)
- $12,053 (Iowa)
- $12,029 (West Virginia)
- $11,990 (Florida)
- $11,960 (Oklahoma)
- $11,864 (Idaho)
- $11,856 (Nebraska)
- $11,834 (New Mexico)
- $11,803 (Mississippi)
- $11,718 (Texas)
- $11,694 (Ohio)
- $11,606 (Colorado)
- $11,596 (Florida)
- $11,577 (Oregon)
- $11,440 (Georgia)
- $11,426 (Washington)
- $11,412 (Minnesota)
- $11,400 (Connecticut)
- $11,341 (Maryland)
- $11,265 (Montana)
- $11,250 (New Hampshire)
- $11,203 (Massachusetts)
- $11,178 (South Dakota)
- $11,160 (Louisiana)
- $11,142 (Illinois)
- $11,137 (Delaware)
- $11,123 (Wisconsin)
- $11,112 (Kentucky)
- $11,103 (Tennessee)
- $11,100 (Missouri)
- $11,058 (Virginia)
- $11,006 (Indiana)
- $10,934 (Kansas)
- $10,918 (Iowa)
- $10,884 (West Virginia)
- $10,875 (Ohio)
- $10,830 (Texas)
- $10,726 (Mississippi)
- $10,705 (New Mexico)
- $10,700 (Idaho)
- $10,656 (Nebraska)
- $10,626 (New Mexico)
- $10,606 (Mississippi)
- $10,588 (Texas)
- $10,558 (Ohio)
- $10,529 (Colorado)
- $10,482 (Oklahoma)
- $10,463 (Alaska)
- $10,453 (New Jersey)
- $10,438 (Arkansas)
- $10,429 (Washington)
- $10,412 (Minnesota)
- $10,400 (Rhode Island)
- $10,391 (South Carolina)
- $10,363 (North Carolina)
- $10,265 (Wyoming)
- $10,229 (Georgia)
- $10,203 (New Mexico)
- $10,178 (Arizona)
- $10,142 (West Virginia)
- $10,126 (Iowa)
- $10,106 (Kansas)
- $10,058 (Mississippi)
- $10,006 (Ohio)
- $9,985 (Colorado)
- $9,977 (Missouri)
- $9,974 (Tennessee)
- $9,975 (Kentucky)
- $9,974 (Wisconsin)
- $9,956 (Alabama)
- $9,946 (Arkansas)
- $9,943 (North Carolina)
- $9,903 (South Carolina)
- $9,873 (Utah)
- $9,858 (Kansas)
- $9,829 (Virginia)
- $9,778 (Ohio)
- $9,769 (Texas)
- $9,755 (Ohio)
- $9,742 (Wisconsin)
- $9,483 (Alabama)
- $9,477 (Arkansas)
- $9,453 (North Carolina)
- $9,383 (South Carolina)
- $9,298 (Utah)
New Spending in the Bipartisan Infrastructure Investment and Jobs Act Will Add More Stimulus Over the Next 5-10 Years

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>TOTAL U.S.</th>
<th>Vermont (partial)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roads, Bridges and major Projects</td>
<td>$110 Billion</td>
<td>$1.625 Billion</td>
</tr>
<tr>
<td>Power Infrastructure</td>
<td>$73 Billion</td>
<td>Billion</td>
</tr>
<tr>
<td>Passenger and Freight Rail</td>
<td>$66 Billion</td>
<td>Billion</td>
</tr>
<tr>
<td>Broadband Infrastructure</td>
<td>$65 Billion</td>
<td>$0.100 Billion</td>
</tr>
<tr>
<td>Water Infrastructure</td>
<td>$55 Billion</td>
<td>$0.355 Billion</td>
</tr>
<tr>
<td>Infrastructure Resiliency to Climate Change and Cyber Attacks</td>
<td>$50 Billion</td>
<td>$0.180 Billion</td>
</tr>
<tr>
<td>Public Transit</td>
<td>$39 Billion</td>
<td>$0.077 Billion</td>
</tr>
<tr>
<td>Airports</td>
<td>$25 Billion</td>
<td>$0.028 Billion</td>
</tr>
<tr>
<td>Ports and Waterways</td>
<td>$17 Billion</td>
<td>Billion</td>
</tr>
<tr>
<td>Other Infrastructure-Related Items Such as Electric Buses and Transportation Safety</td>
<td>$50 Billion</td>
<td>$0.021 Billion</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$550 Billion</strong></td>
<td><strong>$2.386 Billion</strong></td>
</tr>
</tbody>
</table>

**Total Per Capita:**

- $1,659
- $3,710

(Vermont is estimated to be the fifth highest in the nation on a per capita basis, after Washington DC, Alaska, Wyoming and Montana)

*Includes $650 billion in reauthorized surface transportation programs; Source: The White House, as of December 2, 2021*
## What's In the Build Back Better Act?

(Costs)

<table>
<thead>
<tr>
<th>Policy</th>
<th>Cost/Savings (-)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Family Benefits</strong></td>
<td>$585 billion</td>
</tr>
<tr>
<td>Establish an affordable child care program (6 years)</td>
<td>$270 billion</td>
</tr>
<tr>
<td>Establish a paid family and medical leave program</td>
<td>$205 billion</td>
</tr>
<tr>
<td>Provide universal pre-K to all three-and four-year olds (6 years)</td>
<td>$110 billion</td>
</tr>
<tr>
<td><strong>Climate &amp; Infrastructure</strong></td>
<td>$570 billion</td>
</tr>
<tr>
<td>Invest in clean energy &amp; climate resilience</td>
<td>$235 billion</td>
</tr>
<tr>
<td>Establish or expand clean energy &amp; electric tax credits</td>
<td>$190 billion</td>
</tr>
<tr>
<td>Establish or expand clean fuel &amp; vehicle tax credits</td>
<td>$60 billion</td>
</tr>
<tr>
<td>Establish or expand other climate-related tax benefits</td>
<td>$75 billion</td>
</tr>
<tr>
<td>Enact infrastructure &amp; related tax breaks</td>
<td>$10 billion</td>
</tr>
<tr>
<td><strong>Individual Tax Credits &amp; Cuts</strong></td>
<td>$215 billion</td>
</tr>
<tr>
<td>Extend Child Tax Credit (CTC) increase to $3,000 ($3,600 for kids under 6) for one year; make CTC fully refundable permanently</td>
<td>$190 billion</td>
</tr>
<tr>
<td>Extend expanded Earned Income Tax Credit (EITC) for one year</td>
<td>$15 billion</td>
</tr>
<tr>
<td>Other individual tax changes</td>
<td>$10 billion</td>
</tr>
<tr>
<td><strong>Health Care</strong></td>
<td>$340 billion</td>
</tr>
<tr>
<td>Strengthen Medicaid home- and community-based services</td>
<td>$150 billion</td>
</tr>
<tr>
<td>Extend expanded Affordable Care Act (ACA) premium tax credits &amp; make premium tax credits available to those in Medicaid coverage gap through 2025</td>
<td>$130 billion</td>
</tr>
<tr>
<td>Establish Medicare hearing benefit</td>
<td>$35 billion</td>
</tr>
<tr>
<td>Invest in the health care workforce</td>
<td>$25 billion</td>
</tr>
<tr>
<td><strong>Other Spending &amp; Tax Cuts</strong></td>
<td>$325 billion</td>
</tr>
<tr>
<td>Build &amp; support affordable housing</td>
<td>$175 billion</td>
</tr>
<tr>
<td>Increase higher education &amp; workforce spending</td>
<td>$40 billion</td>
</tr>
<tr>
<td>Other spending &amp; investments</td>
<td>$110 billion</td>
</tr>
<tr>
<td><strong>Reduce or Delay TCJA Base Broadening</strong></td>
<td>$280 billion</td>
</tr>
<tr>
<td>Increase SALT deduction cap to $80,000 through 2025</td>
<td>$275 billion</td>
</tr>
<tr>
<td>Delay amortization of research &amp; experimentation expenses until 2026</td>
<td>$5 billion</td>
</tr>
<tr>
<td><strong>Enact Immigration Reform</strong></td>
<td>$110 billion</td>
</tr>
<tr>
<td><strong>Subtotal, Build Back Better Act Spending &amp; Tax Breaks</strong></td>
<td>$2.43 trillion</td>
</tr>
</tbody>
</table>

Sources: Congressional Budget Office, Joint Committee on Taxation, and Committee for a Responsible Federal Budget.
## What's In the Build Back Better Act? (Savings)

<table>
<thead>
<tr>
<th>Policy</th>
<th>Cost/Savings (-)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Increase Corporate Taxes</strong></td>
<td></td>
</tr>
<tr>
<td>Increase Corporate Taxes</td>
<td>-$830 billion</td>
</tr>
<tr>
<td>Impose a 15 percent domestic minimum tax on large corporations</td>
<td>-$320 billion</td>
</tr>
<tr>
<td>Impose a 15 percent global minimum tax &amp; reform international taxation</td>
<td>-$280 billion</td>
</tr>
<tr>
<td>Impose a 1 percent surcharge on corporate stock buybacks</td>
<td>-$125 billion</td>
</tr>
<tr>
<td>Enact other corporate tax reforms</td>
<td>-$105 billion</td>
</tr>
<tr>
<td><strong>Increase Individual Taxes on High Earners</strong></td>
<td>-$640 billion</td>
</tr>
<tr>
<td>Expand the 3.8 percent Net Investment Income Tax</td>
<td>-$250 billion</td>
</tr>
<tr>
<td>Impose a 5 percent surtax on income above $10 million &amp; an 8 percent</td>
<td></td>
</tr>
<tr>
<td>surtax on income above $25 million</td>
<td></td>
</tr>
<tr>
<td>Extend and expand limits on deductibility of business losses</td>
<td>-$160 billion</td>
</tr>
<tr>
<td><strong>Other Revenue</strong></td>
<td>-$180 billion</td>
</tr>
<tr>
<td>Reduce the tax gap by funding IRS &amp; other measures</td>
<td>-$130 billion</td>
</tr>
<tr>
<td>Reinstate superfund taxes on oil &amp; impose methane fee</td>
<td>-$20 billion</td>
</tr>
<tr>
<td>Expand nicotine taxes</td>
<td>-$10 billion</td>
</tr>
<tr>
<td>Reform tax treatment of retirement accounts</td>
<td>-$10 billion</td>
</tr>
<tr>
<td>Other receipts</td>
<td>-$10 billion</td>
</tr>
<tr>
<td><strong>Health Care</strong></td>
<td>-$325 billion</td>
</tr>
<tr>
<td>Repeal Trump Administration drug rebate rule</td>
<td>-$145 billion</td>
</tr>
<tr>
<td>Reform Part D formula, cap drug price growth, &amp; allow targeted drug</td>
<td></td>
</tr>
<tr>
<td>price negotiations</td>
<td>-$160 billion</td>
</tr>
<tr>
<td>Reduce DSH payments beyond 2025</td>
<td>-$20 billion</td>
</tr>
<tr>
<td>Establish $80,000 SALT deduction cap from 2026 through 2030 &amp; $10,000</td>
<td>-$290 billion</td>
</tr>
<tr>
<td>cap in 2031</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal, Build Back Better Act Offsets</strong></td>
<td>-$2.27 trillion</td>
</tr>
<tr>
<td><strong>Net Deficit Increase, House Build Back Better Act</strong></td>
<td>-$160 billion</td>
</tr>
</tbody>
</table>

Sources: Congressional Budget Office, Joint Committee on Taxation, and Committee for a Responsible Federal Budget.
IF the Pandemic Recedes, the State Economy in 2022 is poised to Grow at its Fastest Rate in 30 Years

- If the pandemic recedes, extraordinary demand and improving labor markets could generate State nominal dollar GDP growth of nearly 10% - the highest since 1989.
- Expect significantly higher and more persistent inflation, with 4-5% CPI growth both this year and next. Some sectors will likely experience much higher or much lower rates, as supply chain bottlenecks develop and resolve and supply and demand extremes also emerge as consumers shift purchasing preferences.
- State real estate markets appear to be entering their third major cyclical upswing in the past 40 years, with home price gains in double digits likely throughout 2022. With interest rates low, plentiful capital, and a decade of underinvestment in new housing, all the ingredients are in place for record price growth until supply catches up or incomes falter - probably not for several years.
- Unlike any other previous state or NE regional real estate cycle, there will be several nonresidential commercial building categories that will not share in the upswing. Office, retail and, especially, hotel/motel valuations and new construction demand will be subdued by lingering pandemic effects.
- Some beneficial (for Vermont) pandemic effects are likely to persist into 2022 and possibly beyond, with positive net migration population effects from continued remote work options at many national and regional firms. Huge federal broadband investments will likely create the infrastructure necessary to sustain and possibly expand these gains.
- Some negative pandemic effects are also likely to persist, including earlier retirement ages for older workers, and its resultant reduction in the available labor force. Pandemics have had some of these effects, to greater or lesser extents, for centuries.
Downside Risks Abound As Equity Markets Soar
(Data Through November 2021, S&P 500 Monthly Average, Source: FRED data from S&P Global)
Awash in Excess Savings, Federal Largess Also Funds "Play" Money as Bitcoin Hits Record High

Weekly Bitcoin Value With Sunday End of Week Average Value, Source: Coinbase
• Pandemic shifts in building demand: Less retail, hotel, office and multi-family residential - More single family residential (both primary residence and second homes), esp. renovation/expansion and warehouses. Regional shifts away from most densely populated urban areas to suburbs and more rural areas with good broadband and recreational amenities.

• Massive infrastructure spending means more nonbuilding construction, especially roads, highways, bridges, electric infrastructure, broadband development, airports, public transit, climate-related investments to buildings (efficiency upgrades) and electric grid.

• Price bubbles may emerge as supply/demand imbalances occur and assets are repriced - such as is now occurring with housing. Home valuations increased by double-digit rates in the most recent quarter (2021Q3) for every U.S. state except ND, LA and DC. Growth in Vermont was 17.7%, the highest in more than 30 years. This will affect Grand List valuations and E-Fund tax rates.

• As long as the pandemic is in play, these price fluctuations and supply chain disruptions will continue to make project timing and bidding challenging.

• Labor availability and cost will also be a constraint, with strong project demand and continued limitations on labor force participation, especially skilled workers.
Vermont is Now Entering Its Third Major Real Estate Cycle in the Past 40 Years

(FHFA Vermont Housing Price Index Percent Change Vs. Year Ago, Historical Data - Red, JFO Forecast Data - Green)
Another Housing Price Bubble Emerges as Asset Repricing Spreads to Real Estate

Percent Change, Third Quarter of 2021 vs. Third Quarter of 2020, Source: FHFA Home Price Index
Real Estate Update: Housing Values Relative to Last Peak (pink) and Trough (grey)
Percent Change, 2021Q3 vs. Peak Price by State Reached Between 2005Q3 and 2009Q3 - Pink and 2021Q3 vs. Trough Price Reached Between 2009Q3 and 2014Q1 - Grey
Source: FHFA Home Price Index
The Pandemic Accelerates Vermont Housing Price Growth
Especially in Affluent Non-Metro Resort Areas
(Source: FHFA Home Price Index)

Burlington MSA
+39.6% since prior peak

Non-MSA
+26.6% since prior peak
**VERMONT COMMERCIAL CONSTRUCTION STARTS IN 2020**
Based on Total Square Footage of New Construction
(Source: Kavet, Rockler & Associates, Dodge Data & Analytics)

**THE BAD NEWS:**

2020 Percent Change vs. Five Year Average from 2015 to 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>2020 Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Store &amp; Restaurant</td>
<td>-84.8%</td>
</tr>
<tr>
<td>Office &amp; Bank</td>
<td>-53.5%</td>
</tr>
<tr>
<td>Garage &amp; Service Station</td>
<td>-65.6%</td>
</tr>
<tr>
<td>Hotel &amp; Motel</td>
<td>-100.0%</td>
</tr>
</tbody>
</table>

**THE GOOD NEWS:**

2020 Percent Change vs. Five Year Average from 2015 to 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>2020 Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warehouse (Excl Mfg)</td>
<td>119.9%</td>
</tr>
</tbody>
</table>
Pandemic Tilts Vermont Single Family Share of New Housing Units to Highest Levels in 16 Years
(Residential Housing Starts, Shares of Dwelling Units, 12 Month Moving Totals, Source: Dodge Data and Analytics)
Inflation

• The CPI spiked to its highest level in 30 years in October, at 6.2% year-over-year growth, and will probably top this rate in November, before receding.

• Still, inflationary pressures will remain well into 2022, as the pandemic affects global manufacturing, transportation, and consumer preferences. While markets will eventually adjust - they cannot turn on a dime - and prices will reflect supply/demand imbalances.

• Some of the acceleration in price growth has been due to rapid and extreme swings in demand during various phases of the pandemic. Such as during the early phase of the pandemic, when consumers reduced expenditures on many items (such as services) and shifted it to others (such as goods), creating extraordinary market disruptions. At one point in time, the sudden reduction in motor fuel demand resulted in negative future prices for crude oil. Now, prices are spiking as demand roars back.

• A great deal of what happens to rates of inflation in 2022 will also be psychological and behavioral. When people think something will be in short supply, they often turn a potential shortage into a real one by quickly elevating demand via hoarding. This happens among both households and businesses and can create wild price swings until markets can respond and behavior shifts. Some of the current port congestion has been caused by early seasonal product ordering and the absence of warehouse space to hold these goods.
Inflation in Perspective
(Consumer Price Index - Urban, All Items, Percent Change vs. Year Ago)

October 2021
+6.2%
Like Everything Else, Pandemic Skews Inflationary Impacts by Sector
Percent Change in Rate of Inflation Relative to October 2019 by Selected Component, Source: BLS

- Used cars and trucks
- Meats
- Major appliances
- Cigarettes
- Gasoline (all types)
- Food and beverages
- All Items
- Housing
- Apparel
- Airline fares
- Men's suits, sport coats, and outerwear
- Women's dresses

Used Cars and trucks
Gasoline
Meats
Major Appliances
Cigarettes
Food and Beverage
All Items
Housing
Apparel
Women's dresses
Men's suits, sport coats, and outerwear
Airline fares
Recent Inflation Rates Relative to Pre-Pandemic 2019 Base

Items with 10% or more growth in October 2021, Inflation rates 2021 vs. 2020 (blue) and vs. 2019, Annualized (red), Source: BLS
Recent Inflation Rates Relative to Pre-Pandemic 2019 Base

Items with less than 2% growth in October 2021, Inflation rates 2021 vs. 2020 (blue) and vs. 2019, Annualized (red), Source: BLS
Real Oil Prices in Context: Up - But From All Time Record Low During Pandemic
(West Texas Intermediate Crude Oil, PPB in November 2021 Constant Dollars)

Sources: St. Louis Federal Reserve, Moody's Analytics, KRA

Real Oil Prices in Context: Up - But From All Time Record Low During Pandemic
(West Texas Intermediate Crude Oil, PPB in November 2021 Constant Dollars)

Sources: St. Louis Federal Reserve, Moody's Analytics, KRA
Labor Markets

• Labor markets are gradually healing, with average U.S. monthly job growth of about 500,000 per month. At this rate, total U.S. payroll employment should regain pre-pandemic levels in late 2022.

• The latest U.S. unemployment rate dipped to 4.2% in November, with Vermont’s rate steady at 2.8% in October (the latest available), the fourth lowest in the nation and lowest in New England.

• Job openings currently exceed the number of unemployed individuals, indicating both job mismatches and a large number of workers who have still not rejoined the labor force.

• The combination of strong demand for goods and services and fewer workers in the labor force has pushed wages significantly higher, driven the quit rate to record highs and dropped layoff rates to record lows.

• Many of the most severe economic impacts from the pandemic have been evident in, or caused by, labor force disruptions. Millions were out of work for extended periods, re-evaluated their jobs and places of work, and made changes. Early retirements among older workers, most vulnerable to COVID risks, may permanently reduce labor force participation rates.
Employment Still Not Back to Pre-Pandemic Levels


U.S. Job losses between February 2020 and October 2021 totaled about 4.12 million, a 2.7% decline.

Vermont job losses totaled 19.1 thousand over the same period, a decline of 6.1%.

The Great Recession
Unemployment Rates Improve Amidst Pandemic Measurement Anomolies

(Seasonally adjusted data, Source: Bureau of Labor Statistics, U.S. Department of Labor)
Unemployment Rate by State - October 2021
Seasonally Adjusted Data, Source: U.S. Bureau of Labor Statistics
Job Openings Now Exceed Number Unemployed, Reflecting Tight Labor Market

(Number of Persons)

(Seasonally adjusted data, Source: Bureau of Labor Statistics, U.S. Department of Labor)
Employment to Population Ratio For Ages 25-54 Moves Closer to "Full Employment" Level

(Seasonally adjusted data, Source: Bureau of Labor Statistics, U.S. Department of Labor)
I CAN GO AROUND THE WORLD IN ONE NIGHT!

HERE... HOLD MY BEER.
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Dr. Nicolas O. Rockler, CEO
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to the Vermont State Legislature

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