Massachusetts Public Higher Education Financial Assessment Project
Agenda

1. Recent Massachusetts higher education context
2. Updated FY21 observations
3. Next steps
Recent Massachusetts Higher Education Context

Massachusetts public institutions have faced increasing pressure due to demographic shifts, shifts in revenue composition, and increased expenses.

Total public and private high school graduates by region, U.S. total, Massachusetts, and Northeast
Indexed to FY10 (FY10=100), FY10 – FY30

Commentary

- Higher education institutions across the Northeast face enrollment pressure due to declining demographics
- From FY08 to FY18, total expenses per FTE have grown at both Massachusetts community colleges and state universities (+2.7% and +3.9%, respectively)
- In the same timeframe, state appropriations have only grown modestly (+1.7% for community colleges and +1.0% for state universities)
- Campuses have proactively implemented spending solutions and shifted some of the burden to students by increasing tuition & fees
- The COVID-19 pandemic has placed increased pressure on enrollment and financial health at institutions across the state

Note: 1) Northeast includes CT, MA, ME, NH, RI, and VT
Source: Western Interstate Commission for Higher Education, Knocking at the College Door
Recent Massachusetts Higher Education Context
The COVID-19 pandemic has caused significant disruptions to campuses operating models and student base

<table>
<thead>
<tr>
<th></th>
<th>Community colleges</th>
<th>State universities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Campus opening</strong></td>
<td>▶ Majority have partially opened campus, mainly to students with lab requirements</td>
<td>▶ All have opened dormitories and some in-person classrooms with distancing measures</td>
</tr>
<tr>
<td></td>
<td>▶ Some have announced remote through spring</td>
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<tr>
<td><strong>Instructional model</strong></td>
<td>▶ Hybrid model, 5% in-person</td>
<td>▶ Approximately 15-25% of classes are in-person; studio and lab classes have priority</td>
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<tr>
<td></td>
<td>▶ Many offer delayed-start term with condensed semester from Oct-Dec</td>
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<tr>
<td><strong>COVID testing</strong></td>
<td>▶ Strongly encouraging everyone who comes to campus to get tested and take precautions</td>
<td>▶ All 9 state universities have implemented campus-specific testing protocols and track number of cases</td>
</tr>
<tr>
<td><strong>Other impacts</strong></td>
<td>▶ Many students are also parents who face limited childcare options during pandemic</td>
<td>▶ Dormitory resident count fell short of forecast for many likely due to public health concerns and/or shift to remote instruction</td>
</tr>
<tr>
<td></td>
<td>▶ Students face challenges with access to technology and / or reliable internet</td>
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</tbody>
</table>
Recent Massachusetts Higher Education Context
Undergraduate enrollment in public institutions has declined, especially among first-time undergrads aged 30+ at 2-year schools and 21-24 at 4-year schools.

U.S. undergraduate enrollment changes\(^1\) by sector,  
As of 10/15/2020 vs. 2019

- Public 2-year: -9.4%
- Public 4-year: -22.7%
- First-time undergraduate: -13.7%
- Total undergraduates (first-time and returning): -22.7%

First-time undergraduate enrollment changes\(^1\) by age,  
As of 10/15/2020 vs. 2019

<table>
<thead>
<tr>
<th>First-time undergraduate age</th>
<th>Public 2-year</th>
<th>Public 4-year</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-20</td>
<td>-19.1%</td>
<td>-12.0%</td>
</tr>
<tr>
<td>21-24</td>
<td>-26.0%</td>
<td>-40.5%</td>
</tr>
<tr>
<td>25-29</td>
<td>-23.1%</td>
<td>-21.3%</td>
</tr>
<tr>
<td>30+</td>
<td>-30.1%</td>
<td>-21.5%</td>
</tr>
</tbody>
</table>

Note: 1). Data represents responses from 54% of Title IV degree-granting institutions participating in the National Student Clearinghouse.  
Source: National Student Clearinghouse Research Center.
Agenda

1. Recent Massachusetts higher education context

2. Updated FY21 observations
   A. Context
   B. Preliminary community college observations
   C. Preliminary state university observations

3. Next steps
# Updated FY21 observations

Today’s presentation will provide a preliminary update on key indicators of fiscal health

## Objectives

<table>
<thead>
<tr>
<th></th>
<th>Key indicators of fiscal health</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Updated sensitivity analysis based on early October indicators</td>
</tr>
<tr>
<td>2</td>
<td>Streamlined fiscal reporting processes</td>
</tr>
<tr>
<td>3</td>
<td>Interviewed campus presidents and CFOs to gain a detailed understanding of current reporting processes and procedures</td>
</tr>
<tr>
<td>3</td>
<td>Cost and value optimization strategies</td>
</tr>
<tr>
<td>3</td>
<td>Extended invitation to campuses to examine synergistic partnerships and alliances on a voluntary basis</td>
</tr>
</tbody>
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**Focus of today’s presentation**

- Prelim. community college observations
- Prelim. state university observations
Updated FY21 observations
Updated FY21 enrollment forecasts reflect significant decreases from FY20 at both institution types

- Enrollment is down across all campuses
- Remote learning poses barriers, especially for students with limited access to technology or children in virtual K-12

COVID-19 has potential to positively impact higher education
- Higher education enrollment has traditionally been countercyclical with economic recessions
- Move toward remote learning offers more flexibility, which could increase available student base

However, next few months may bring further clarity
- Many community campuses added a condensed October-start term
- Forecasting based on trends and early indicators may not hold as this year has been an anomaly

Fall enrollment is down, and not expected to increase in spring
- Enrollment is down across all campuses

Note: does not include 5 UMass institutions, enrollment estimate provided by campuses based on fall actuals and individual spring projection
Source: Internal data, interviews with campus presidents and CFOs
Updated FY21 observations
June 2020 sensitivities showed some institutions at risk of liquidity shortfall, updated data shows action to mitigate

June 2020 sensitivity observations
► In June, enrollment and appropriations were uncertain, sensitivity analysis tested impacts of potential adverse revenue scenarios
► June observations showed community colleges and state universities could deplete ~50% of reserves in a pessimistic scenario
► In a pessimistic scenario, as many as 8 institutions (4 community colleges, 4 state universities) could have faced liquidity challenges

October preliminary update
► Enrollment actuals for fall 2020 align with previous sensitivity analysis’s downside or pessimistic scenarios at most campuses
► State appropriations are not yet finalized, most state colleges and universities have planned for a reduction in state aid
► Campuses have taken considerable action to contain costs and manage liquidity in order to preserve operating cash and mitigate against further action in FY22

While campuses have taken action to preserve liquidity, they will continue to monitor operating revenue and expenses in order to build resiliency going into FY22

Source: internal data
Updated FY21 observations
Public colleges and universities (excl. UMass) serve ~79k FTE students with operating budgets of ~$732 & $827m

Context

Prelim. community college observations
Prelim. state university observations

Community colleges

| Number of institutions: | 15 |
| FY20 undergraduate fall FTE enrollment: | ~45k |
| FY20 operating expense (excl. non-cash items) | ~($732)m |

State universities

| Number of institutions: | 9 |
| FY20 undergraduate fall FTE enrollment: | ~34k |
| FY20 operating expense (excl. non-cash items) | ~($827)m |

Note: for colleges with multiple campuses, only main campus shown on map
Source: internal data, DHE data center, MassBudget.gov; IPEDs; college and university websites
Updated FY21 observations: Community colleges show a ~$13m decrease in net cash flow vs. June base case primarily due to expectations for state appropriations.

Aggregate net cash flow for community colleges,
(as-reported in June and October 2020; for 12 months ended June 30, 2021)

- Net cash flow does not consider beginning balances of cash and investment liquidity.
- Aggregated net cash flow is illustrative; does not reflect inability to consolidate/pool cash across the system.

FY21 net cash flow forecast (as-of June):
- Reduced revenue from tuition & fees, grants, other:
  - $7.3m
- State appropriations assumption:
  - -$5.3m
- Cost savings:
  - -$29.9m
- FY21 net cash flow re-forecast (as-of October):
  - $20.0m
- Cost savings:
  - -$1.7m
- Reductions in debt service, capital spending:
  - -$6.3m

Context:
- Prelim. community college observations
- Prelim. state university observations

Source: internal data
Updated FY21 observations
Community colleges preserve cash through FY21 due to significant cost savings measures

Note: cash and investment liquidity includes cash, short-term and other investments which may or may not be quickly convertible to cash, as provided by the institutions; cash threshold calculated as projected average 30 days of cash operating expenditures (varies slightly by scenario due to effect of enrollment assumptions on scholarship expense) actual minimum cash needs of the individual institutions may vary and should be considered by each institution
Source: internal data

Context
Prelim. community college observations
Prelim. state university observations

Total liquidity is illustrative, does not reflect inability to consolidate/pool cash across system (refer to note in footer)
Updated FY21 observations

In the updated analysis, all community colleges end FY21 with positive liquidity, though some have a <3 mo. buffer

<table>
<thead>
<tr>
<th>Shortfalls below 3-mo threshold</th>
<th>Months below 3-mo threshold</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 2020</td>
<td>5</td>
<td>Some to all of year</td>
</tr>
<tr>
<td>normalized base case</td>
<td></td>
<td>▶ 14 colleges end FY21 with positive liquidity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▶ 1 college ends FY21 in a negative cash position</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▶ 5 fall below a 3-month threshold for 1+ months</td>
</tr>
</tbody>
</table>

| October 2020                   | 4                          | Some to all of year |
| as-reported                    |                            | ▶ All 15 end FY21 in positive liquidity position |
| (campus forecast)              |                            | ▶ 4 fall below a 3-month threshold for 1+ months |

Cash and investment liquidity includes cash, short-term and other investments which may or may not be quickly convertible to cash, as provided by the institutions; cash threshold calculated as projected average 90 days of cash operating expenditures (varies slightly by scenario due to effect of enrollment assumptions on scholarship expense) actual minimum cash needs of the individual institutions may vary and should be considered by each institution

Source: internal data
Updated FY21 observations
State universities show a ~$13m increase in net cash flow vs. June base case mainly from debt restructure

Aggregate net cash flow for state universities\(^1\),
(as-reported in June and October 2020; for 12 months ended June 30, 2021)

FY21 net cash flow forecast (as-of June)

- $31.0m
- $24.8m
- $11.4m
- $7.2m
- $6.3m

State appropriations assumptions
Changes in grants, auxiliary revenue, and other
Capital spending
Debt restructuring
Tuition and fee revenue
Cost savings

FY21 net cash flow re-forecast (as-of October)

- $17.6m
- $9.4m
- $14.3m
- $39.4m

Context

Prelim. community college observations
Prelim. state university observations

Note: 1). excludes UMass system 2). June assumed a level of social distancing in dormitories, decrease reflects decline in student residents beyond distancing policies
Source: internal data
Updated FY21 observations
State universities preserve cash through FY21 largely due to effects of debt restructuring and cost savings

Note: cash and investment liquidity includes cash, short-term and other investments which may or may not be quickly convertible to cash, as provided by the institutions; cash threshold calculated as projected average 30 days of cash operating expenditures (varies slightly by scenario due to effect of enrollment assumptions on scholarship expense) actual minimum cash needs of the individual institutions may vary and should be considered by each institution

*excludes UMass system

Source: internal data

Context
Prelim. community college observations
Prelim. state university observations

Projected aggregated liquidity in months cash operating spend for state universities*, FY21F

- Appropriations as proposed in House Bill 2
- Oct 2020 update (normalized to FY20 GAA appropriations)
- Oct 2020 update (as-reported)
- 5% decrease in appropriations
- 10% decrease in appropriations

Total liquidity is illustrative, does not reflect inability to consolidate/pool cash across system (refer to note in footer)
Updated FY21 observations
In the updated analysis, three of nine state universities have less than a 6-month liquidity buffer

<table>
<thead>
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<th>Shortfalls below 6-mo threshold</th>
<th>Months below 6-mo threshold</th>
<th>Observations</th>
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<tbody>
<tr>
<td><strong>June 2020</strong></td>
<td><strong>Some to all of year</strong></td>
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<td>normalized base case</td>
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<td>► All 9 end FY21 in positive liquidity position</td>
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<tr>
<td></td>
<td></td>
<td>► 4 fall below cash threshold of 6-months operating spend, some for the full year and others for the spring semester</td>
</tr>
</tbody>
</table>

| **October 2020**               | **Some to all of year**      |              |
| as-reported                     |                               | ► All 9 end FY21 in positive liquidity position |
| (campus forecast)              |                               | ► 3 fall below cash threshold of 6-months operating spend, some for all of year others for one month |

Note: cash and investment liquidity includes cash, short-term and other investments which may or may not be quickly convertible to cash, as provided by the institutions; cash threshold calculated as projected average 30 days of cash operating expenditures (varies slightly by scenario due to effect of enrollment assumptions on scholarship expense) actual minimum cash needs of the individual institutions may vary and should be considered by each institution

*excludes UMass system
Source: internal data
Agenda

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Additional FY21 Sensitivities
Next steps include working closely with campuses to understand how to manage through potential adverse scenarios and financial challenges

Next steps

1. Oct-20
   - Preliminary indicators show campuses have taken significant action to contain costs and preserve cash
     - State appropriations will continue to play a large role in future

2. Nov-20 to n-21
   - Work collaboratively with campuses who may face liquidity challenges to understand risk mitigation plan
     - Support the continued sharing of strategies among campuses

3. Beyond
   - Provide a December update on financial health including any revised cost decisions and options for continued reporting and tracking
     - Continue to support campuses through FY21 and FY22
Questions?