

# Evidence-Based Policy Making (EBPM) Advisory Council Meeting

# Agenda

- Overview of Office of Research & Planning and FY24 Priorities
- Education-to-Career (E2C) Hub Update
- Update on Strategic Plan for Racial Equity (SPRE) Targets
- Employment & Earnings Metric Update and Alignment Between Performance Measurement & Strategic Plan for Racial Equity
- Outline for a Research Agenda

# Office of Research & Planning

- **Mario Delci,**  
Associate Commissioner for  
Research & Planning
- **Sarah Mealey,**  
Assistant Commissioner for  
Analytics & Digital Services

### *Data/Research/Analytics Team*

- **Moira Chiong,**  
Assistant Director of  
Academic &  
Workforce Analysis
- **Natasha Martinez,**  
Visual Analytics Specialist
- **Sandy Riley,** Director of Data  
Systems
- **Suzanne Smith,** Director of  
Research & Evaluation

### *Embedded EOE IT Support*

- **Sasha Obraztsova,** Database  
Administrator

### *Digital Services Team*

- **Chinasa Riggins,** Digital  
Communications Specialist
- **Dave Stewart,**  
Web Developer

# Office of Research & Planning

## OUR MISSION

Drive organizational transformation by prioritizing **evidence over intuition**, with **data at the center of every conversation**

## Responsibilities

---

### Data Collection

- Centrally collect student-level data and maintain public postsecondary education data warehouse (HEIRS)
- Ensure data accuracy and relevance

### Research & Evaluation

- Conduct ongoing assessments and accountability, including Performance Measurement Reporting System (PMRS) and monitoring progress on Strategic Plan for Racial Equity (SPRE)
- Collaborate on program and policy development and evaluation
- Contribute to cross-agency research and evaluation efforts related to longitudinal education outcomes
- Provide ad hoc reports, research analyses and forecasts

### Analytics & Digital Services

- Develop and continually improve user-facing tools to meet analytic needs of all stakeholders within DHE/BHE, campuses, Education-to-Career (E2C), public
- Support analytics adoption on campuses
- Hold operational responsibility for the mass.edu web domain, including the implementation and maintenance of content and web applications
- Apply best practices to meet needs of end users, including user-centered design, accessibility, usability and security

- 
- **Protect student privacy and adhere to legal requirements**
  - **Prioritize equity from data collection to research and reporting**
  - **Engage campus partners in system-wide collaboration on data collection, analysis and reporting**
-

# Overview of Office of Research & Planning and FY24 Priorities

## Collaborative Relationships



## Current Objectives

### Data Collection

- Create campus-level efficiencies and ease reporting burden by streamlining HEIRS data collection process
- Improve the quality and expand the scope of HEIRS to better capture and analyze student experience and outcomes and to support broader, meaningful research purposes

### Research & Evaluation

- Ensure cohesion and applicability of new and ongoing accountability efforts
- Ensure effective use of data for development, implementation, and eventual evaluation of numerous new programs (Fair Share funded and other)
- Support and leverage external researchers to contribute to DHE research needs
- Streamline data request process and expand delivery of self-service capabilities where appropriate

### Analytics & Digital Services

- Operationalize alignment of PMRS with SPRE in internal- and external-facing reports and data resources
- Expand internal (DHE, campuses) use case library
- Build external (E2C, public) use case library
- Foster Community of Practice among campus data users
- Build capacity to increase alignment of DHE digital services with agency priorities, including data collection and reporting

## Priority Projects

### Data Collection

- Pilot a new data platform for campus HEIRS development and reporting
- Enhance HEIRS data collections by revising and expanding data dictionaries and modifying collection schedule to capture more non-traditional enrollments (e.g., Early College)
- Collect data pertaining to PMRS earnings metrics

### Research & Evaluation

- Operationalize PMRS earnings metrics
- Complete methodology on SPRE mobility and enrollment goals and develop approach to measuring Sense of Belonging
- Facilitate campus-level target setting to align with SPRE
- Support numerous ongoing and new programs, including MassReconnect, Nursing Initiative, financial aid expansion, SUCCESS, MassTransfer, STEM Starter Academy, MassTeach
- Numerous ongoing and new external research agreements
- Support and participate in Education-to-Career (E2C) Research Advisory Committee
- Develop internal mechanism/documentation to ensure availability of fingertip data for ad hoc analysis

### Analytics & Digital Services

- Redesign PMRS to reflect SPRE alignment, including earnings/mobility metrics
- Complete set of 12 high-priority internal use cases, providing Tableau dashboards and data sources, Snowflake views, selected Tableau starter workbooks
- Adapt selected internal use cases for external use
- Provide orientation, technical assistance, and opportunities for peer collaboration across DHE and campuses
- Provide professional development on equity-minded data use and analysis



# Potential EBPM AC Areas of Focus

Area of Focus	EBPM AC Consideration
<b>Strategic Plan for Racial Equity (SPRE)</b>	<ul style="list-style-type: none"><li>▪ Review metrics and target-setting methodology</li><li>▪ Advise on adequacy of draft targets and plans for implementation: Are the goals and targets meeting the accountability objective of SPRE?</li></ul>
<b>Performance Measurement Reporting System (PMRS)</b>	<ul style="list-style-type: none"><li>▪ Ensure the employment and earnings metrics are meaningful and are usable for accountability</li><li>▪ Guide on the revisiting of PMRS especially in light of SPRE and Strategic Finance</li></ul>
<b>Analytics and Public Informing</b>	<ul style="list-style-type: none"><li>▪ Advocate for the importance of investment in analytics and data access</li><li>▪ Review and guide developments in DHE Data Center and E2C Hub visualizations and data sources</li></ul>
<b>Research and Evaluation</b>	<ul style="list-style-type: none"><li>▪ Serve as thought partners on evaluation of public higher education programs and initiatives</li><li>▪ Continue to identify best practices in evaluation and accountability and data-based decision making, including inviting external experts to present at EBPM</li></ul>

# Education-to-Career (E2C) Hub Update

# Education-to-Career Research and Data Hub (E2C Hub)

## Our Vision

Increasing data access to promote equity

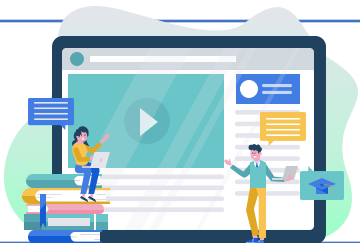
### A Cross-agency effort between six agencies:



#### Early Childhood



#### Education



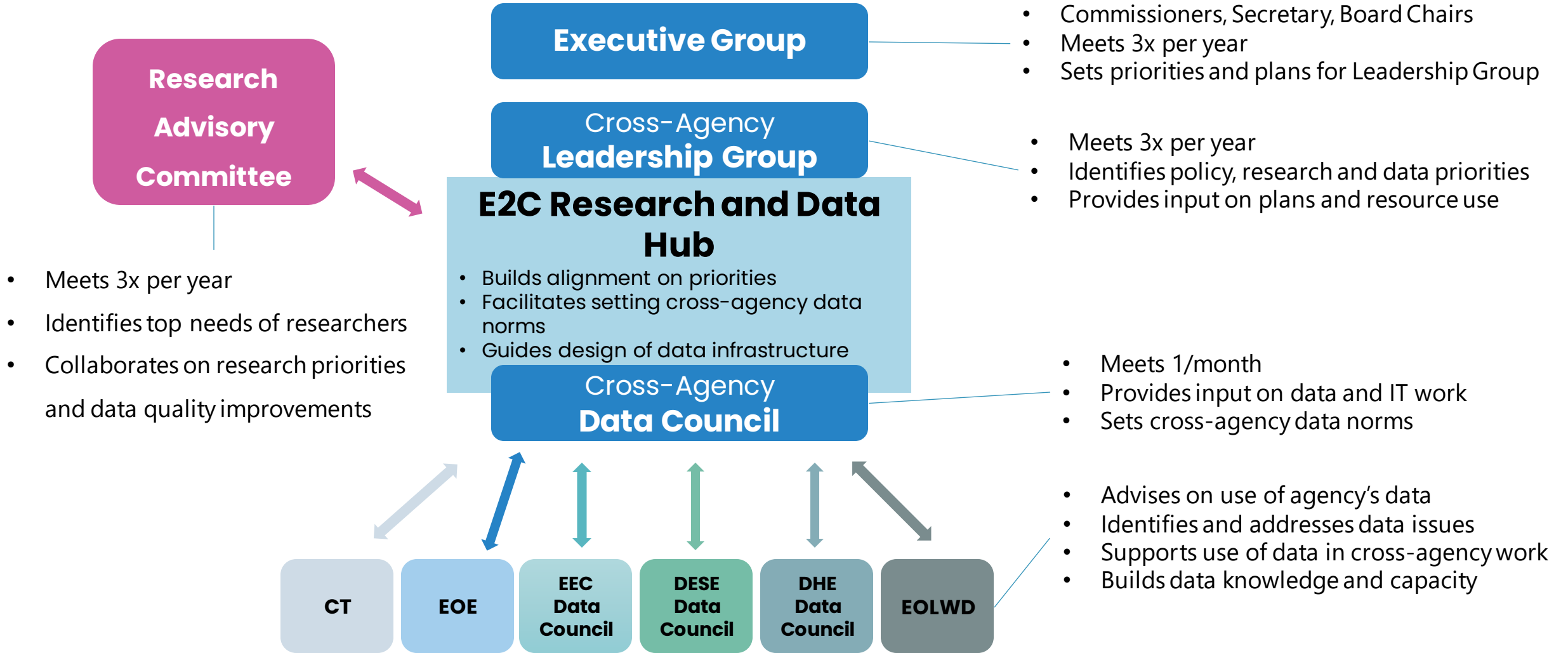
#### Career

1. Children's Trust
2. Early Education and Care
3. Department of Elementary and Secondary Education
4. **Department of Higher Education**
5. Executive Office of Education
6. Executive Office of Labor and Workforce

### E2C Hub Goals

1. Promote shared ownership for progress on state goals for education and career
2. Produce actionable research on what leads to progress on long-term outcomes
3. Increase access to more complete data
4. Enable more efficient, effective and transparent reporting and data use.

# E2C Hub Governance Structure



# E2C Hub New Website Features

## Massachusetts Education-to-Career Research and Data Hub

Increasing data access to promote equity

Search for data, e.g. graduation rates, MCAS...

Welcome! Our website is new, and we'd love your feedback. Take this [3 minute survey](#)

Search

Authority

Official

Community

Categories

College and Career

Data Stories

Early Education and Care

K-12

News

Show All...

View Types

Calendars

Charts

Data Lens pages

Datasets

External Datasets

Files and Documents

Filtered Views

### Browse open datasets

#### Featured Content

Next Generation MCAS Achievement Results

September 21, 2023

288 Views



This dataset contains Next Generation MCAS results by school since 2017, including achievement level, participation rate, average sca...

Funded and Licensed Child Care Providers

July 27, 2023

229 Views



The following dataset includes programs of different types that are licensed and/or funded. The dataset encompasses data pulled quarterly f...

MA Public Postsecondary Fall Enrollment by Race and Gen...

July 31, 2023

102 Views



Total undergraduate fall enrollment headcount and percentage by race and gender. Data appear as reported to the Massachusetts Department of Hi...

27 Results

Sort by Most Relevant

#### Educators

Story

Compare K-12 students, schools and districts

Updated

July 5, 2023

Tags No tags assigned

Views

914

#### Students & Families

Story

Evaluate options for school, childcare, and college.

Updated

August 10, 2023

Tags No tags assigned

Views

639

## Data catalog allows users to:

- Search and filter to find datasets, reports, research, and more.
- Analyze and export multi-year and multi-student group files.
- Find merged cross-agency data sets (wage, early college, etc.)
- Explore built-in visualization tools linked to raw datasets.
- Flexible download export tool

User pages with curated data tools and resources for different audiences

Data Stories on high demand areas

Tools and tips for making the most of public data

Find and explore data tools and dashboards more quickly

Visit the [New E2C Hub Website](#)

# **Update on Strategic Plan for Racial Equity (SPRE) Targets**

# Update on Strategic Plan for Racial Equity (SPRE) Targets

## SPRE Targets

The targets are to be met or exceeded by 2033:

Targets differ for each segment; meeting the targets at the segment level will ensure that system-level targets are met

		System	
		Baseline	Target
Early Momentum	On-Time Credit Accumulation	44%	55%
	Timely Completion of Gateway Courses	35%	40%
	Persistence	76%	80%
Long-Term Outcomes	Transfer Rates	22%	25%
	Completion After Transfer	60%	65%
	Degree/Certificate Completion	56%	60%

		Community Colleges		State Universities		UMass Campuses	
		Baseline	Target	Baseline	Target	Baseline	Target
Early Momentum	On-Time Credit Accumulation	30%	40%	67%	80%	N/A	N/A
	Timely Completion of Gateway Courses	25%	30%	57%	65%	N/A	N/A
	Persistence	59%	65%	83%	90%	88%	95%
Long-Term Outcomes	Transfer Rates	22%	25%	N/A	N/A	N/A	N/A
	Completion After Transfer	N/A	N/A	60%	65%	59%	65%
	Degree/Certificate Completion	35%	40%	72%	80%	78%	85%

# Engaging Metric Working Groups

## Enrollment

- Engaged UMDI for a new set of projections to inform target-setting, allow disaggregation, and calculation of participation rates in MA public higher ed by race and ethnicity
- New projections, delivered in September, will be shared with Enrollment Working Group to review and begin drafting targets in October

## Sense of Belonging

- Reviewed literature, definitions, survey instruments, and current campus-level practice
- Campuses use a variety survey instrument and administer surveys on timelines that make sense for each institution and need time to act on results
- For nascent campus efforts, working group to create set of belonging questions for use with existing climate or engagement surveys
- Working group to develop method to track measurement efforts and outcomes across system

## Social & Economic Mobility

- Potential definitions and methods gathered from Carnegie, Chetty, Third Way, Dallas College and Mathematica presented
- Explored operationalization of metrics, including racial/ethnic dimensions of social and economic mobility
- Working Group recently met to discuss mobility metric methodologies and PMRS/SPRE alignment



# FY24 Work



- Continue to convene **Enrollment, Sense of Belonging, and Social and Economic Mobility** Working Groups through FY24 to develop and finalize metrics and targets
- Seek BHE approval of the metrics and targets in Fall 2024

# **Alignment of PMRS to SPRE: Employment and Earnings**

# Role of Foundational Metrics



# BHE Charge

- On June 20, 2023, the Board of Higher Education (BHE), along with approving targets for the Strategic Plan for Racial Equity (SPRE) metrics, moved to align the goals and targets of SPRE and existing accountability efforts, including but not limited to:
  - Performance Measurement Reporting System (PMRS)
  - Campus strategic planning
  - Presidential evaluation criteria
- PMRS Metric Alignment is up first:
  - Content and methodological differences
  - Workforce Alignment / Social & Economic Mobility will be addressed first

# Measuring Social & Economic Mobility

- Increase Students of Color's social and economic mobility as measured against an accepted nationwide measure of social and economic mobility  
*Strategic Plan for Racial Equity (SPRE), 2022*

# Social & Economic Mobility Status Update

- Detailed research into methods of Raj Chetty, Third Way, Dallas College, Postsecondary Value Commission (PVC) and Mathematica has been performed
- Convening and discussion of mobility metrics in Data Council, Steering Committee, and Social and Economic Mobility Working Group is in process

# Mobility Measures in the Research

Mobility Measure	Definition
<b>Chetty Mobility Rate (MR)</b>	Fraction of students who come from bottom quintile and end up in top quintile  <b>Mobility Rate</b> = Success Rate x Access
<b>Third Way Economic Mobility Index (EMI)</b>	<b>EMI</b> = PEP Percentile Rank x Proportion of Pell Grant students  PEP Rank: Total average net price / (Post-enrollment earnings - Typical salary of a high school graduate) = <b>(Number of years to recoup Net Cost)</b> , among Title IV students and students with family income <30k
<b>Dallas College Economic Mobility Index 2 (EMI2)</b>	<b>EMI2</b> = (Percentile Rank of <b>ROI</b> + Percentile Rank of <b>Debt</b> + Percentile Rank of <b>Transfer/Completion Rates</b> ) / 3 (average), based on data for low-income students
<b>Mathematica Economic Mobility Indicator</b>	Percentage of individuals who reach the level of earnings needed to enter the fourth (60th to 80th percentile) income quintile in their state or above 1, 3, 5, 10, and 15 years after completing their highest degree or leaving education (high school or postsecondary)

# Challenges to Implementing Mobility Metric

- Access to intergenerational and household income data is limited
- Metrics may need to be specified according to the sector (2-year, 4-year) or program studied
- Current mobility metrics in the highlighted research **do not account** directly for race/ethnicity nor disaggregate by race/ethnicity



# PMRS Update: Earnings & Employment

- **December 2018:** PMRS metrics, Equity Agenda approved by BHE
- **May 2019:** Launch of PMRS (without earnings metrics)
- **Spring 2020 – Summer 2022:** Pandemic + SPRE development
- **June 2022:** SPRE and Student Success Framework approved by BHE
- **December 2022:** SHEF approved by BHE
- **January 2023 – Present:** Development of earnings metrics and methodology, in consultation with Data Council

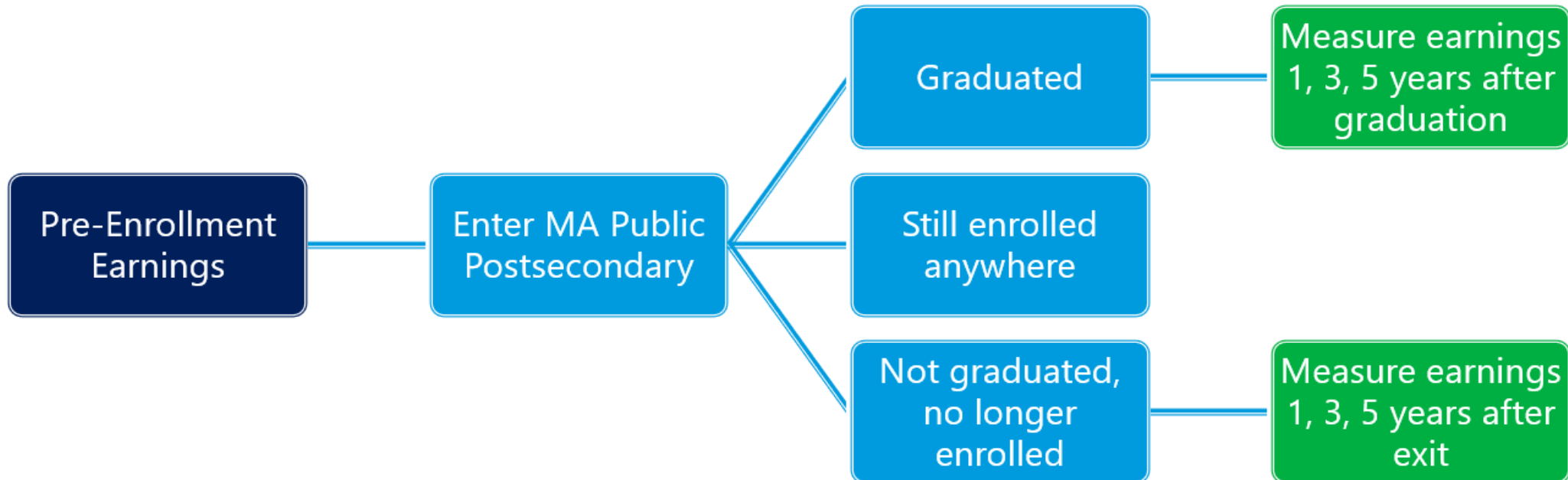
# PMRS Earnings Measures

## Measuring Pre/Post Enrollment Earnings

**Cohort:** New "Non-Traditional" (Ages 25+) first-time and transfer-in students

**The Question:** How do a student's annual earnings prior to enrollment compare to their earnings after graduation or, for non-traditional students, after their last known date of enrollment?

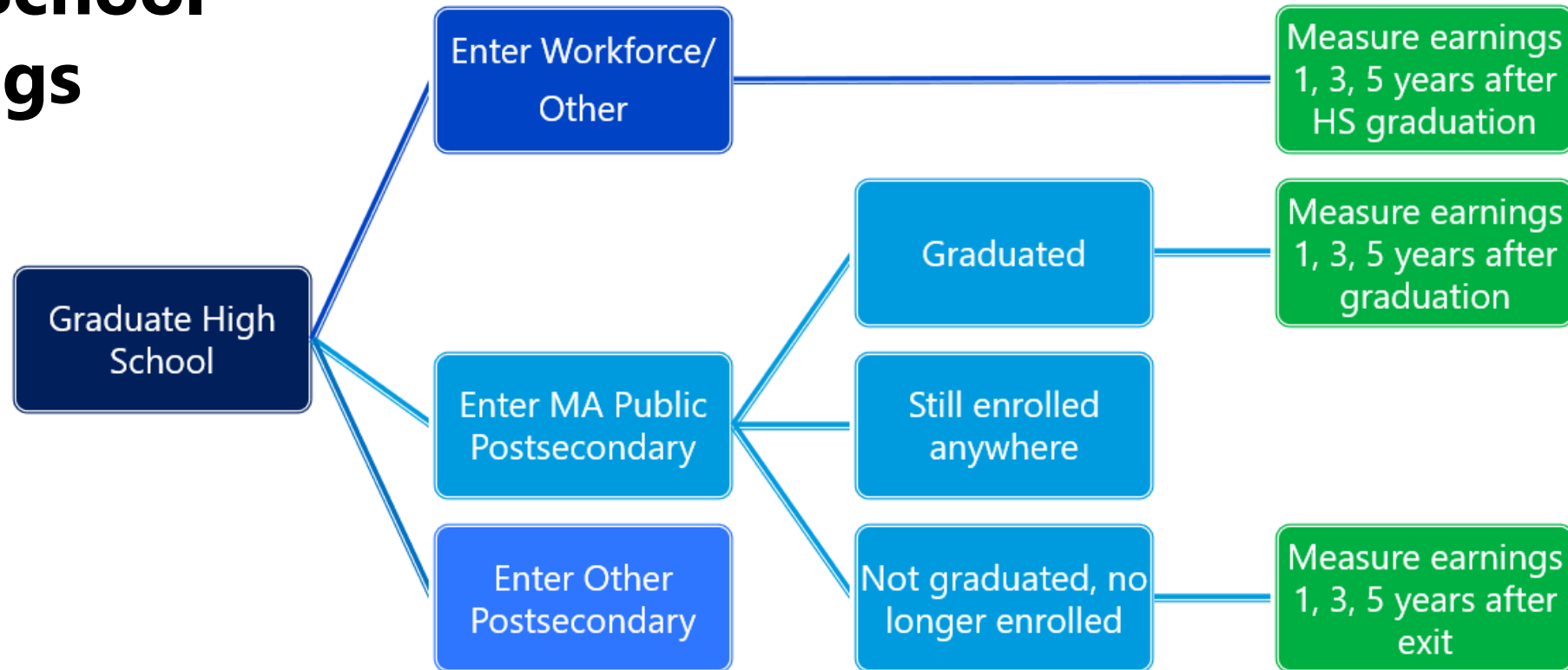
**Timeline:**  
CCs: Up to 4 years  
State U: Up to 6 years



## PMRS Earnings Measures

### Measuring Post High School Earnings

**The Question:** For students who entered postsecondary education immediately after graduating high school, what are their average annual earnings one and five years after graduation or their last known date of enrollment, compared with earnings of high school graduates with no postsecondary education?



# PMRS Alignment with Mobility

- PMRS earnings measures can potentially serve as building blocks of mobility measures
- Mobility metrics can be extensions of PMRS earnings metrics through the use of income thresholds
- Both Pre/Post Enrollment Earnings and Post High School Earnings are relevant
- Final stage of decision trees align with mobility

## Alignment of PMRS to SPRE: Employment and Earnings

# Advantages & Disadvantages

Factors	Mobility Metrics	PMRS Earnings Metrics
Ability to disaggregate by race and ethnicity	✗	✓
Ability to disaggregate by program and institution	✗	✓
Ability to tailor metric to sector (two-year, four-year) and/or program area	✗	✓
Ability to update annually	✗	✓
Incorporates Pell status	✓	✓
Incorporates debt and/or cost of attendance	✓	✗
Incorporates outcomes outside of earnings	✓	✗
Ability to compare with parental or childhood socioeconomic status	✓	✗
Ability to make national comparisons	✓	✗

# Next Steps

### ■ **In Progress:**

- Data models developed for PMRS Earnings Metrics will be instrumental to the development of mobility metrics

### ■ **Next:**

- Modeling and extraction of data from data warehouse (Edwin)
- Operationalize, test, and vet the metrics
- Incorporate new metrics into the SPRE target setting work with disaggregation by race/ethnicity
- Continue to survey the landscape for national social and economic mobility metrics that incorporate race/ethnicity

# **EBPM AC Discussion: Establishing an Outline of a Research Agenda**

# Discussion Questions

- What information do we wish we had to drive governance?
- What information do institutions need to drive improvement?
- What information do individuals need to inform their decision making?
- Is there additional membership that would strengthen the EBPM AC as it considers these questions?