# MLDS CENTER
## Maryland Longitudinal Data System

**Better Data • Informed Choices • Improved Results**

# Which Came First? The Dashboard or the Population?

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https://mldscenter.maryland.gov/

# Agenda

- Overview of MLDSC
- Purpose for project
- Evolution of project
- Current status
- Feedback from you!

# About the Center

- Maryland's P20W System
- Independent State Agency with a Governing Board
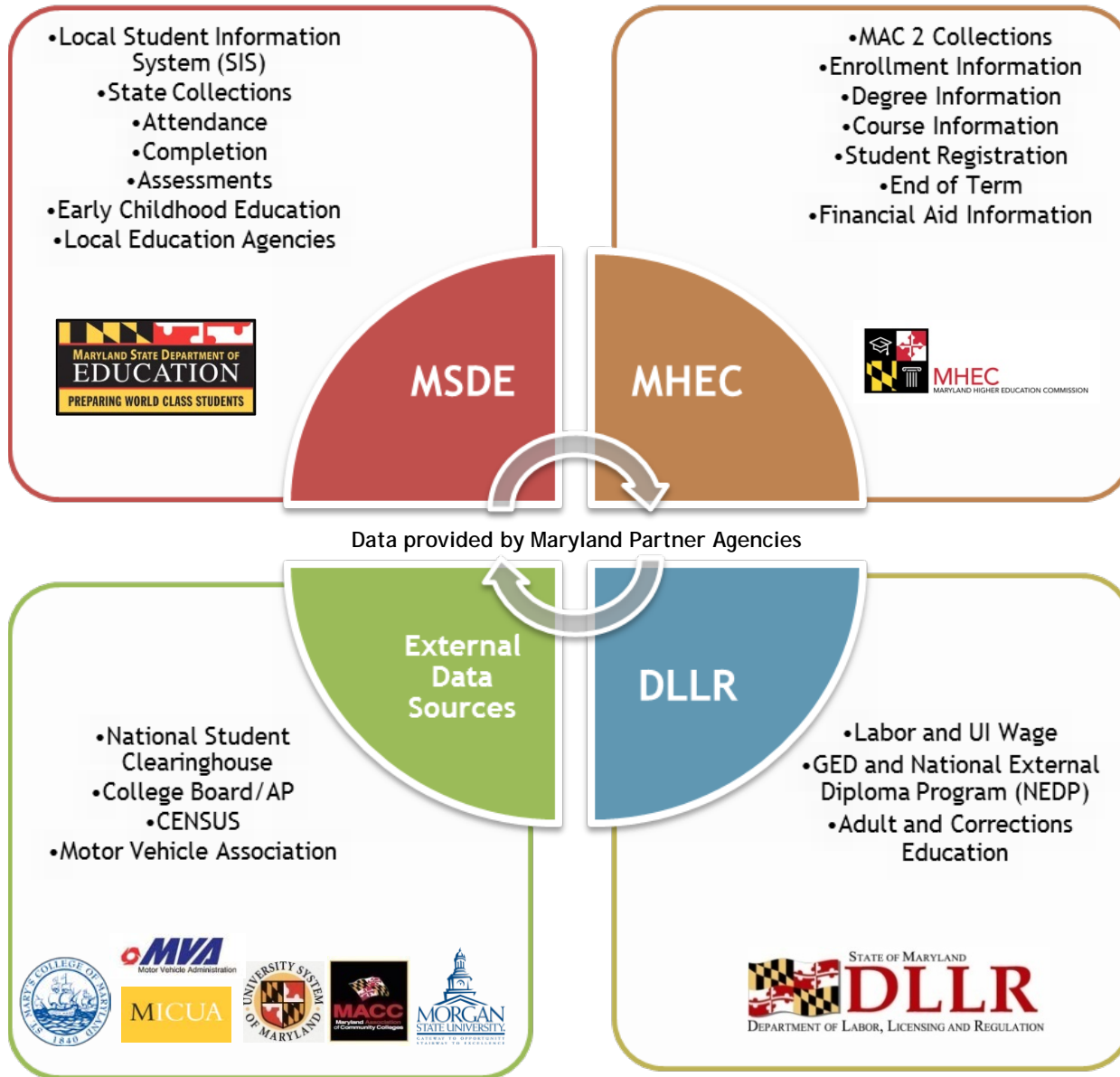- Centralized SLDS system

http://mldscenter.maryland.gov

MLDS Data Overview

**MSDE**
- Local Student Information System (SIS)
- State Collections
  - Attendance
  - Completion
  - Assessments
- Early Childhood Education
- Local Education Agencies

MARYLAND STATE DEPARTMENT OF EDUCATION
PREPARING WORLD CLASS STUDENTS

**MHEC**
- MAC 2 Collections
- Enrollment Information
- Degree Information
- Course Information
- Student Registration
- End of Term
- Financial Aid Information

MHEC
MARYLAND HIGHER EDUCATION COMMISSION

Data provided by Maryland Partner Agencies

**External Data Sources**
- National Student Clearinghouse
- College Board/AP
- CENSUS
- Motor Vehicle Association

ST. MARY'S COLLEGE OF MARYLAND 1840
MVA Motor Vehicle Administration
MICUA
UNIVERSITY SYSTEM OF MARYLAND
MACC Maryland Association of Community Colleges
MORGAN STATE UNIVERSITY GATEWAY TO OPPORTUNITY STAIRWAY TO EXCELLENCE

**DLLR**
- Labor and UI Wage
- GED and National External Diploma Program (NEDP)
- Adult and Corrections Education

STATE OF MARYLAND
DLLR
DEPARTMENT OF LABOR, LICENSING AND REGULATION

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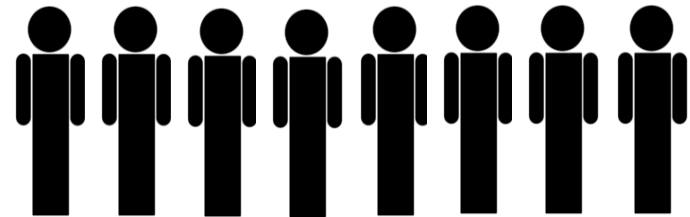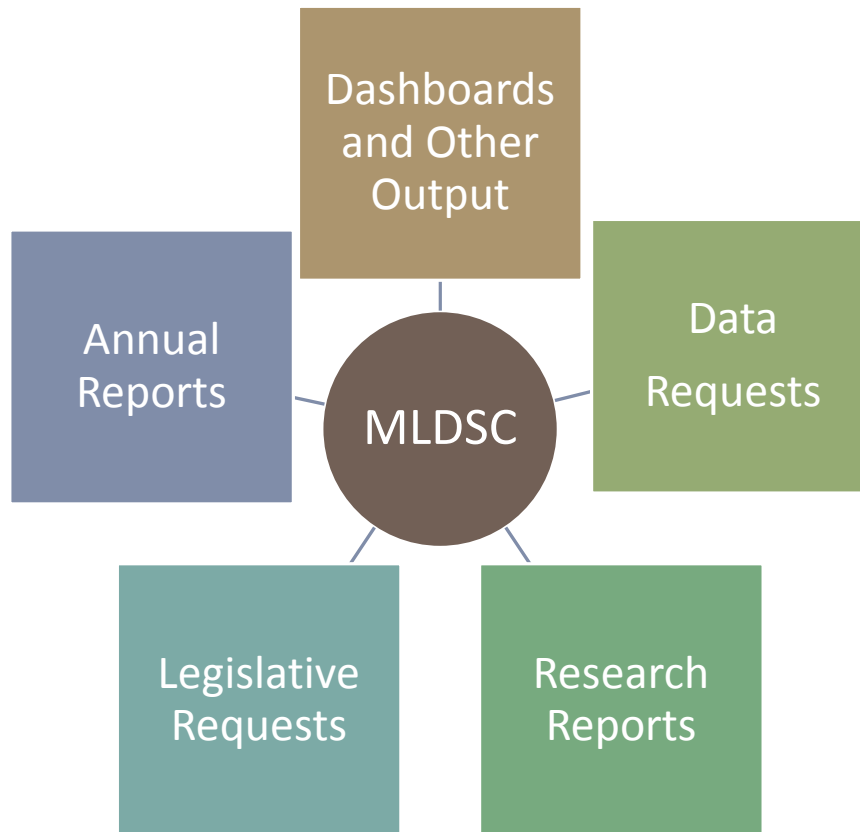# Cross-Sector Analysis



- Focus on what happens to students before and after *critical transitions*
- Single agency research restriction
  - All research must be cross-sector utilizing data from a minimum of two agencies
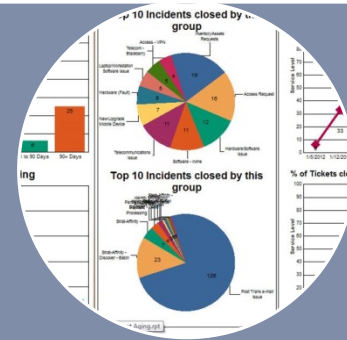
# Output Goals vs Staff Capacity

Dashboards and Other Output

Annual Reports

MLDSC

Data Requests

Legislative Requests

Research Reports

# Is there a better way?

**Data and Legislative Requests**
- Repeat requests for similar data

**Reports**
- Recurring annual

**Dashboard Development**
- Expanding content
- Adding new years of data

Limited Resources (Time and Staff)

# Couture vs. Ready-Made? Gourmet vs. Fast Food?

## Define Unique Populations

- *Pro:* Focus in on specific groups defined by specific attributes

- *Con:* Extends production time by requiring populations to be built each time before analysis

## Pre-define Key Populations

- *Pro:* Pre-defined populations already established, streamlines production and analysis

- *Con:* May exclude observations and reduce completeness of results

# First Step . . . Sorting Populations

- What are the characteristics of the populations that are of interest?

- Is there a logical way to organize demographic variables, academic indicators, and outcomes?

Find Out How Well You Fit Each House at Hogwarts

Let's Start

Time.com; June 26, 2017
The Ultimate Harry Potter Quiz: Find Out Which House You Truly Belong In

# Identified Major Sector Transitions

Early Childhood to Primary

High School to College

High School to Workforce

High School to Workforce to College

College to Workforce

# What do we want to know about the transitions between sectors?

## High School to College Transitions

| Who goes to college? | Where do they go? | When do they go? | What degrees do they pursue and at what rate? | How long do they study? |
|---|---|---|---|---|

What do we want to know about the *who, what, where, when*, etc. within a transition?

## Who goes to college from High School?

| Gender | Race/ Ethnicity | Age | FARMS | High School Completion Type | LEA/ District | Other Characteristics (AP, Dual Enrollment, etc.) |
|---|---|---|---|---|---|---|
| | | | | | | |

# Can we account for everyone? Who gets lost?
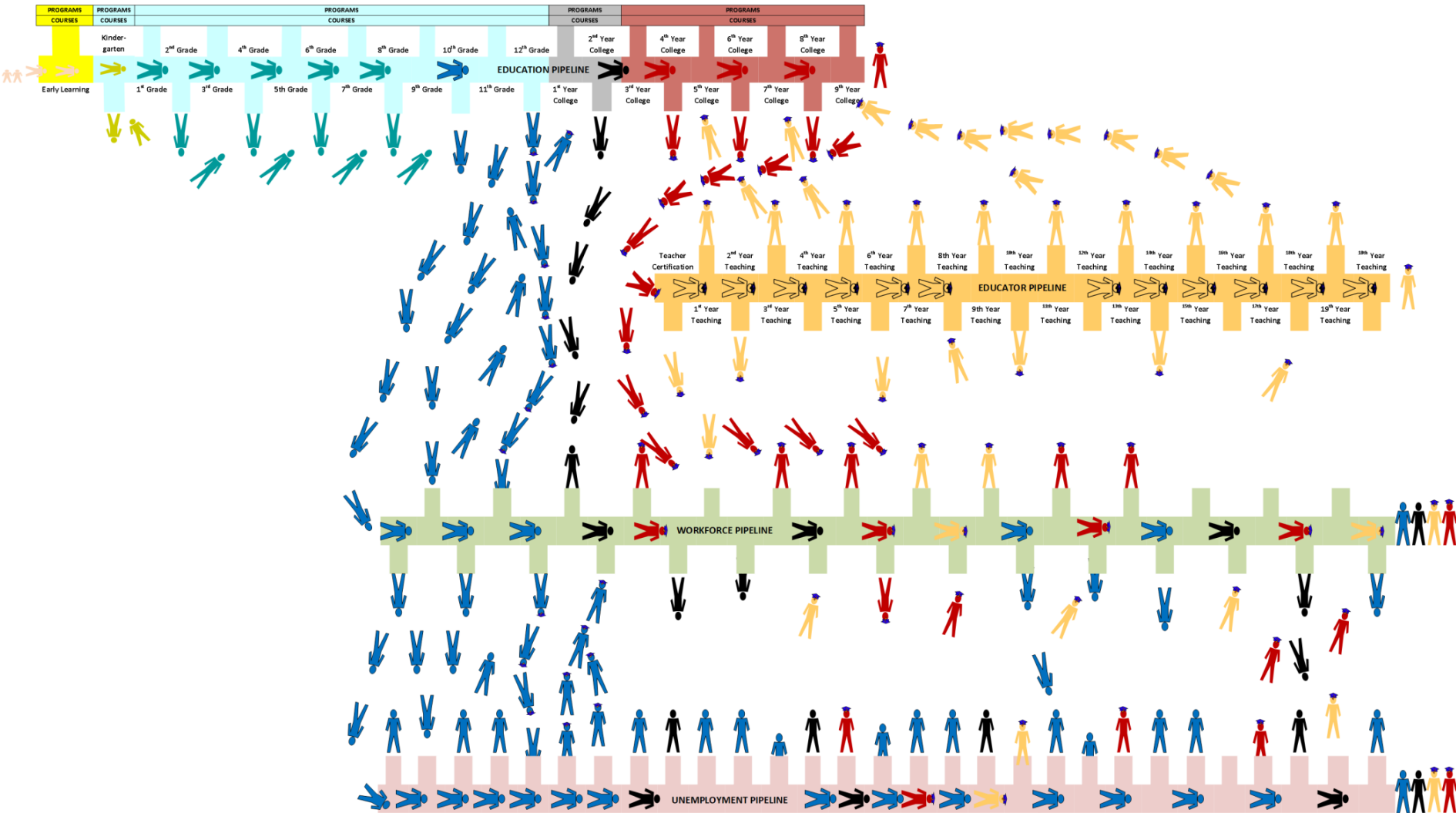
# Can we account for everyone? Who gets lost?

## High School to College Transition Open Items

| Who goes to college? | Where do they go? | When do they go? | What degrees do they pursue? | How long do they study? |
|---|---|---|---|---|
| • None | • What about out-of-state students<br>• What about transfers-in?<br>• What if student is concurrently enrolled at two or more colleges?<br>• IF out-of-state is 1st initial, do we count in-state as "initial" too? | • What intervals matter?<br>• Do we only consider data points against "initial enrollment"? What about change of majors?<br>• What about students who leave and return? | • Do we use major categories – Undergraduate vs Graduate?<br>• Degree types – Associates, Bachelors, etc.?<br>• Degrees – BBA, BFA, BS, etc.? | • Is transferring an outcome?<br>• How do we count stop-out period for students who return and graduate? |

# Stakeholder Engagement

- Reviewed preliminary plans
- Solicited feedback on
    - Common nomenclature
    - Align to agency reporting
    - Completeness
    - Hierarchy
    - Level of detail
- Output capacity
    - Shifting staff focus to data organize rather than output production
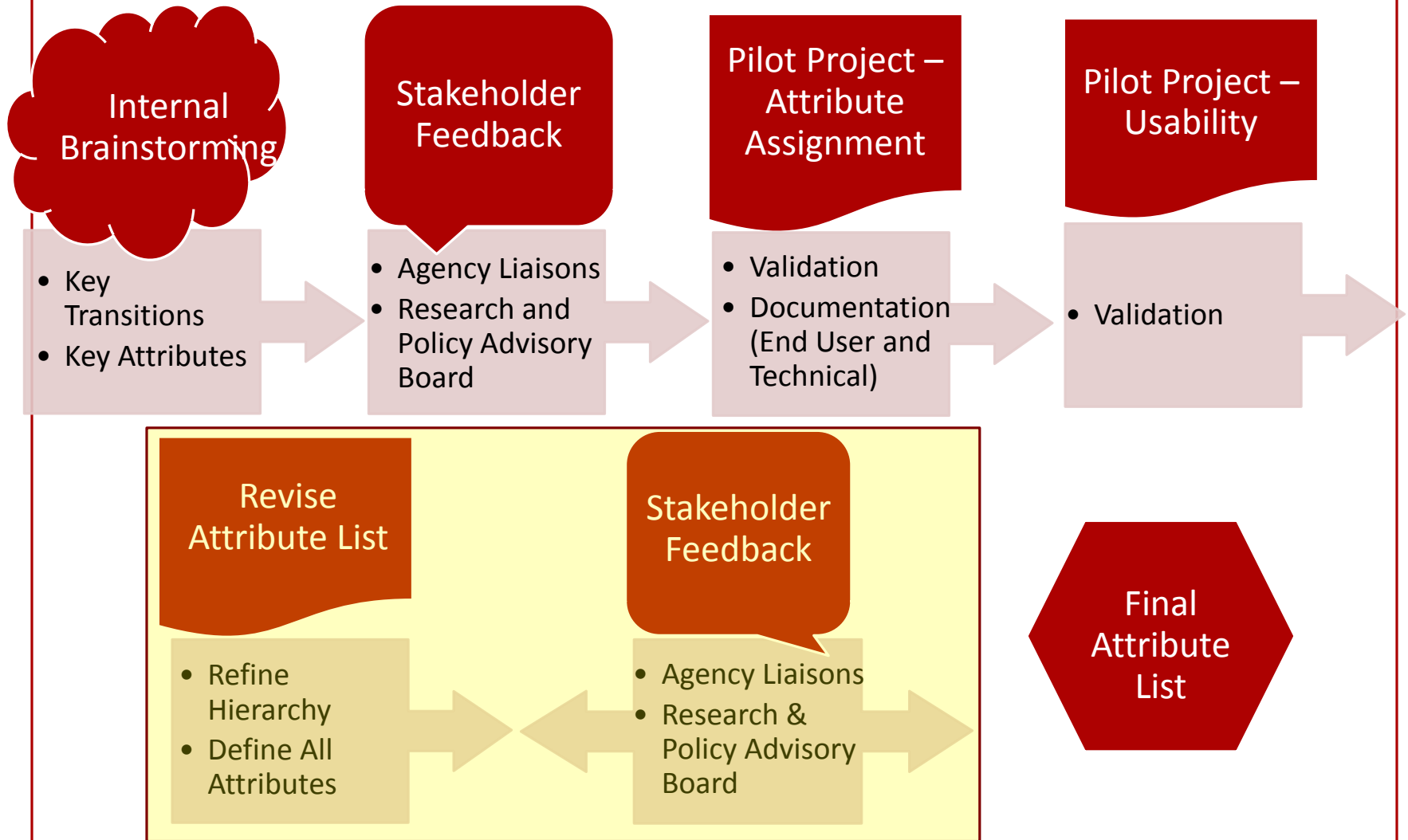
# Pilot Phase

## Pilot 1

- Selected one population of interest
  - Could we identify everyone?
  - How long would it take?
  - What decisions needed to be made? How could those decisions be documented?
  - How could we validate our results?
  - How could we document the limitations on the population we've identified?

## Pilot 2

- A fortunate opportunity . . .
- A data request on high school graduates who completed a career and technical program
- Repeated population exercise
- Then. . .
  - Could the population be used to answer the data request?
  - Were there gaps?
  - Was this faster?

# The Process – Iterative and Organic – But Planned!

**Internal Brainstorming**
- Key Transitions
- Key Attributes

**Stakeholder Feedback**
- Agency Liaisons
- Research and Policy Advisory Board

**Pilot Project – Attribute Assignment**
- Validation
- Documentation (End User and Technical)

**Pilot Project – Usability**
- Validation

**Revise Attribute List**
- Refine Hierarchy
- Define All Attributes

**Stakeholder Feedback**
- Agency Liaisons
- Research & Policy Advisory Board

**Final Attribute List**

# Hierarchy

- How can we structure for data we have and data we may some day get?

- Can structures be parallel across all agencies?

- When it is too much? What is the right number of attributes? How deep do we go?

# Hierarchy – Select Examples

| Agency | Sector | Sub-Sector | Category | Sub-category | Attribute | Sub-Attribute |
|---|---|---|---|---|---|---|
| MDSE | PreK-12 | Secondary Education (9th-12th) | Cohort Types | Exiters by Academic Year | 9th Grade | None |
| MDSE | PreK-12 | Secondary Education (9th-12th) | Cohort Types | Exiters by Academic Year | 10th Grade | None |
| MHEC | Postsecondary Education | Postsecondary Degree Seeking Students | Cohort Types | Initial Enrollment | Fall after secondary outcome | None |
| MHEC | Postsecondary Education | Postsecondary Degree Seeking Students | Enrollment Attributes | Academic Level | Undergraduate | Bachelor's |
| DLLR | Workforce | Labor and UI Wage Data | Wage Data | Quarterly earnings | <=$7500 | None |

# Roundtables

- Pick a sub-sector
    - Review population attribute map
    - What's missing?
    - What's weedy?
- What about PreK? K-8th?
  We haven't started . . .
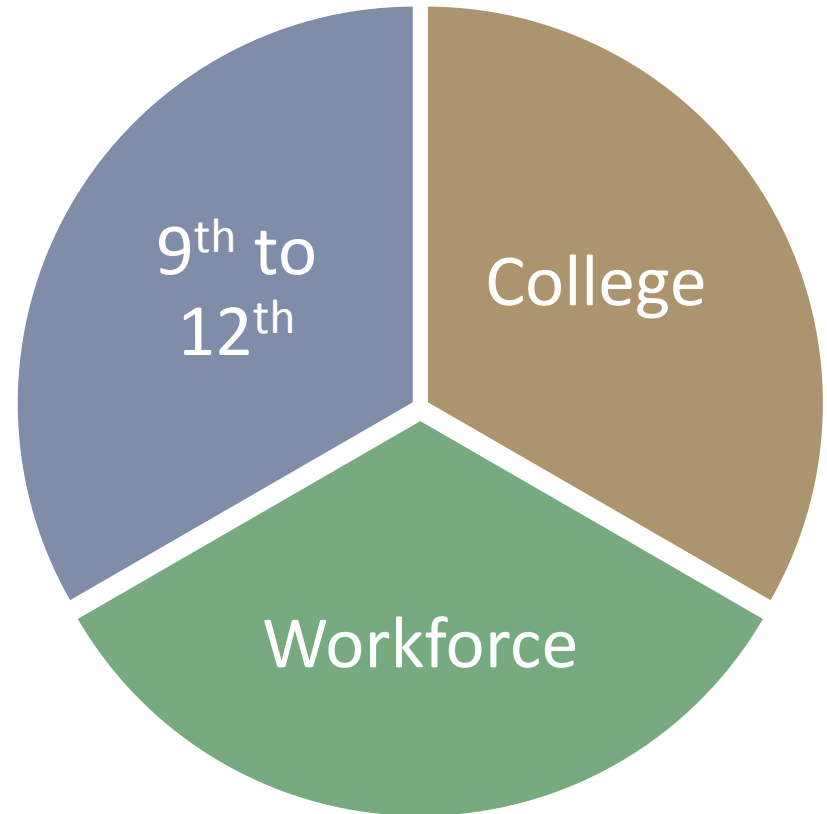
# Discussion & Questions

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# Acknowledgement