# CAREER PATHWAYS TOOLKIT:

An Enhanced Guide and Workbook for System Development

### **ELEMENT SIX:**

MEASURE SYSTEM CHANGE AND PERFORMANCE





## CAREER PATHWAYS TOOLKIT:

An Enhanced Guide and Workbook for System Development

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## **ELEMENT SIX: Measure System Change and Performance**

Appropriate measures and evaluation methods are in place to support continuous improvement of the career pathways system.

#### **Key Element Components:**

- Define desired system, program, and particpant outcomes.
- Identify the data needed to measure system, program, and participant outcomes.
- Implement a process to collect, store, track, share, and analyze data.
- Design and implement a plan for reporting system and program outcomes.

#### **Introduction to Element Six**

Measuring the impact of comprehensive system change is critical to sustaining the support necessary for carrying out a career pathways approach to education and training. To date, there is no evidence-based research that supports the long-term impact of creating career pathways systems although there are national and other evaluations of career pathways' effectiveness underway. However, many promising practices exist that reveal the effectiveness of some of the components of a specific career pathways program. States have initiatives underway to consistently collect and improve upon the quality of their data to evaluate their systems.

There are two ongoing parallel Federal initiatives to encourage the development of higher-quality data and analysis. ED has launched a Statewide Longitudinal Data System Initiative (SLDS) and USDOL launched a complementary Workforce Data Quality Initiative (WDQI). SLDS emphasis is on the P-20 longitudinal data systems to capture, analyze, and use student data from preschool to high school, postsecondary institutions, and the workforce. WDQI emphasis is on integration of workforce data with education data and on improving the quality of the data. Quality data in an understandable format is essential for students to make an informed choice about a career pathway.

The crucial infrastructure requirements to build and sustain a longitudinal data system are available in a research and evaluation study by IMPAQ International entitled "<u>Using Workforce Data Quality Initiative Databases to Develop and Improve Consumer Report Card Systems.</u>" The infrastructure requirements are:

- Individual-level training data that incudes Social Security numbers;
- · Capacity to match education and training participation data to a State's wage records;
- Clearance and cooperation to match unemployment compensation wage record data held by State Departments of Labor against participant data held by State Departments of Education; and
- Funding and knowledge of how to use the data to produce a report card website.

The data quality of the education and workforce systems will enable states to make accessible performance data available to participants in the form of a Consumer Report Card System (CRCS). CRCSs are State systems for calculating program outcomes based on labor market data (employment, retention, and earnings) for those individuals participating in education and training programs.

#### PROMISING PRACTICE: Florida's Consumer Report Card System

Florida began developing its longitudinal administrative data infrastructure in the 1970s and has continued to expand the system. The Florida CRCS is developed statewide from individual-level workforce and education data. It covers the K-20 education system and workforce data, including unemployment compensation wage records. The assessment and analysis of participation and outcomes of all education and training programs are conducted exclusively through use of individual-level data from the Florida education and workforce systems. Much of the data analysis connected to the CRCS is conducted by the State. For example, to be put on a local Eligible Training Provider List, a training provider must provide a program that trains for an occupation that is on the Targeted Occupations List—termed "demand occupations"—and must be licensed in Florida to be on the list.

The Florida College System has developed a website for parents, students, and interested parties to be able to see recent first-year outcomes by institution and program.

The long-term goal of the SLDS and WDQI is to use their longitudinal data systems to draw information across education and training programs to get a more complete picture of how individuals move through education and training programs and into careers. High-quality and consistent data that are available by integrating education and workforce data are more conducive to research and analysis that leads to program improvement, system change, and policy reform. Measuring the impact of a career pathways initiative will not only support efforts to improve program design but will also communicate to stakeholders the value of their investment.

The career pathways leadership team will set system-level goals for change and identify desired participant and program outcomes to guide career pathways development. The team will use these established goals and desired outcomes as benchmarks for measuring the performance of affiliated education programs, training programs, and supportive services. The team may want to utilize both external and internal evaluation tools and use data to inform continuous improvement. Sharing the evaluation results with partners (especially employers) and the broader community will solicit support for and understanding of the career pathways system.

Any data the team can derive from employer-driven standards will serve to expand employer engagement. Providing measurable evidence that the skill sets of the local labor force are improving will certainly glean support from local businesses. Such evidence-based practices can assist the team in maintaining current funding and garner new funding sources. Outcome data serves to support continuous improvement of program design by showing what program components work best for targeted populations and what components may require redesign. Finally, analysis of outcome data informs the policy and procedural adjustments that may be necessary for maintaining alignment within the system.

#### CAREER PATHWAYS FYI: Improving Strategies

Career pathways system development offers a unique opportunity to improve strategies for measuring the impact of efforts across systems and programs.

## Component 6.1: Define Desired System, Program, and Participant Outcomes

System-level career pathways need the support of State and local partnerships, both in the design phase and in their implementation. Clearly defining the anticipated system interfaces and desired changes associated with an effective career pathways design is an important first step in developing a measurement and evaluation process for the overall pathways effort.

Examples of system-level changes and outcomes include the development of cross-agency leadership and oversight structures; blending or braiding resources, including human and capital; use of shared participant and program data; and alignment between partnering systems of participant activities, such as recruitment, placement, assessment, and curriculum.

The leadership team should identify desired program and participant outcomes and related measures during early strategic planning sessions to ensure that the activities carried forth will support long-term goals. Although WIOA clearly articulates the participant outcomes for the WIOA core partners, other measures may be critical to evaluate the system and program design. All partners inform the strategies used for evaluating progress and actively assess the system.

#### **SYSTEM**

#### **PROGRAM**

#### **PARTICIPANT**

The leadership team should consider both short-term and long-term outcome measures. Short-term outcomes may include "interim" measures, which serve as benchmarks along a career pathway. For example, interim measures could be midterm grades; retention indicators such as class attendance, employability, or soft skills attainment; or attainment of a digital literacy or high school equivalency certificate. These interim measures are short-term outcomes and are useful for making program adjustments; they are motivational markers for the learner in achieving a long-term goal.

The team should assess the types of measurements used on a regular basis to ensure the team is measuring what it needs to know. System outcomes focus on the impact that the career pathways approach is having on the overall community, as well as on the citizens and/or partners engaged within the system. Program outcomes focus on the impact a particular funding source is having on a specific population. This module provides templates for a Program and System Logic Model (Worksheet 6.1a) that will help the leadership team evaluate the effectiveness of a specific program, as well as the larger impact of an integrated career pathways system. The Logic Model incorporated in this module was adapted from the Kellogg Foundation's Logic Model Development Guide. The templates provided in the worksheets of this module will help the team analyze the impact of its strategies (activities, services, and actions you employ) on short- and long-term outcomes.

### HOW TO: Design a list of questions to increase effectiveness of program evaluation. Example questions include:

- What are we trying to accomplish?
- Should we measure transition points toward our goals?
- What data do we need to evaluate system change?
- How do we access the information we need for evaluation?

Thoughtful questions may serve as a framework for program evaluation. Having a framework increases your evaluation's effectiveness by focusing on questions that have real value to stakeholders. The Logic Model aids in the development of evaluation questions from a variety of program vantage points: context, implementation, and results (outputs, outcomes, and impact). It depicts a set of rules or relationships that govern how to reach a specific destination, and it can help the leadership team specify what causes what—and in what sequence. It can help the leadership team define the problem or opportunity and show how intervention services/activities will contribute to short- and long-term outcomes. The team may find that the services/activities may need to be different for specific populations. It can also help the team identify what data to collect to measure outcomes. The intent of the templates in this module is to spur thoughts and provoke questions that may lead to the development of a framework for an evaluation process.

#### 6.1a PROGRAM AND SYSTEM LOGIC MODEL

The Logic Model consists of four sequential templates that may be completed at the program and/or system level. Illustrative program and system templates provide examples of information that may be included in each template. They are not an exhaustive list of what should be included in the four templates. A blank template is included after each illustrative template so that the leadership team can build their own template. Each template builds upon the information provided in the previous template. The four templates are:

- 1. Components Template
- 2. Theory of Change Template
- 3. Evaluation Template
- 4. Indicators Development Template

Instructions for completing the four templates:

#### **Template 1: Components Template**

- Funding Resources and Partners: The funding resources/partners and/or barriers that
  potentially enable or limit program effectiveness. For example, WIOA may be an enabling
  piece of legislation that moves career pathways forward. List the collaborating partners
  that will comprise the career pathways leadership team as resources in addition to the
  funding sources. Do not forget employers. Resources may also include facilities,
  equipment, etc.
- 2. **Activities:** The processes, services, and actions to direct the course of change. These are the processes and services that are believed to bring about the desired results. The activities are the interventions that, when implemented, create a result (outputs).
- 3. **Outputs:** The direct results of program activities. This is a quantitative measure that reveals that an action occurred. An illustrative example of an activity is to enroll participants. The output is the number of participants enrolled.
- 4. **Outcomes:** Specific changes in level of knowledge or level of functioning resulting from activities. Outcomes should be expressed in the short-term (e.g., one to three years) and long-term (e.g., four to six years). List outcomes at the individual program, participant, or system level. Although the program outcome measures should align with WIOA program outcome measures, the leadership team may wish to add additional participant or program measures. The system outcome measures should be broader in scope and portray outcomes that may result from a change in policy, practice, or strategy.
- 5. **Impacts:** System-level, organizational-level, or community-level change expected to result from program activities (e.g., seven to ten years).



Funding Resources/ Partners	Activities	Outputs	Short- and Long- Term Outcomes	Impact
Youth, or Dislocated Worker  • Adult Basic Education  • Wagner-Peyser  • Rehabilitation Services  • TANF  • SNAP E & T  • Perkins Act Secondary	<ul> <li>Determine eligibility &amp; enroll applicants</li> <li>Develop bridge programs</li> <li>Enroll participant in some type of postsecondary education</li> <li>Provide supportive services</li> <li>Provide educational opportunities</li> <li>Enter employment</li> </ul>	<ul> <li># of participants enrolled in a program</li> <li># of bridge program enrollees</li> <li># of bridge program enrollees</li> <li># of bridge program completers going on to postsecondary education</li> <li># of participant completers</li> <li># of participants receiving dual credit</li> <li># of participants receiving credit for prior learning</li> <li># of participants receiving supportive services</li> <li># high school completers going on to postsecondary education</li> <li># of participants entering unsubsidized employment</li> </ul>	<ul> <li>WIOA measures for adults</li> <li>% of participants in unsubsidized employment 2nd qtr. after exit.</li> <li>% participants in unsubsidized employment 4th qtr. after exit.</li> <li>Median earnings participants in unsubsidized employment 2nd qtr. after exit.</li> <li>% program participants obtain recognized postsecondary credential or secondary diploma within 1 year after exit.</li> <li>% program participants in education or training program during a program year that leads to a recognized postsecondary credential or employment &amp; are achieving measurable skill gains toward such a credential or employment</li> <li>indicators of effectiveness in serving employers.</li> <li>(substitute WIOA youth measures for youth programs)</li> </ul>	Increase in workforce participation rate Increased tax base Decrease in reliance on public assistance Increase in worker productivity Increase in medium income of labor force

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#### **Template 1: Program Components**

Funding Resources/ Partners	Activities	Outputs	Short- and Long- Term Outcomes	Impact

#### **Template 1: System Components (sample)**

Funding Resources/ Partners	Activities	Outputs	Short- and Long- Term Outcomes	Impact
<ul> <li>WIOA Youth, Adults &amp; Dislocated Workers</li> <li>Adult Basic Education</li> <li>Wagner-Peyser</li> <li>Rehabilitation Services</li> <li>TANF</li> <li>SNAP E &amp; T</li> <li>Perkins Act Secondary &amp; Postsecondary</li> <li>TAA</li> <li>Veterans E &amp; T</li> <li>Unemployment Compensation</li> <li>Older Worker Programs</li> <li>HUD E &amp; T</li> <li>Second Chance Act</li> <li>Community Service Block Grant</li> <li>Philanthropic</li> <li>Employers</li> </ul>	<ul> <li>Build a collaborative</li> <li>Develop benchmarks for continuous improvement &amp; implement a continuous improvement process</li> <li>Develop &amp; implement a plan for long-term sustainability with related benchmarks</li> <li>Develop benchmarks for future evaluation &amp; continuous improvement</li> <li>Develop criteria for which employers to target for engagement</li> <li>Develop &amp; implement a strategy for systems change that addresses changes in services &amp; how they are coordinated, changes in public policy, &amp;/or changes in employers' policies</li> </ul>	<ul> <li>Develop an MOU delineating the roles &amp; responsibilities of the partnership</li> <li>Determine an intermediary to direct the partnership</li> <li>% of partners signing the MOU</li> <li>% change from benchmarks for continuous improvement &amp; sustainability</li> <li>% of employers that meet criteria for engagement</li> <li>Analysis of systemic barriers faced by career pathways participants completed, &amp; updated regularly</li> <li>% of employers &amp; partners that work on a strategy for systems change</li> </ul>	<ul> <li>% increase in program &amp; policy alignment</li> <li>% decrease in duplicative services</li> <li>% decrease in service gaps</li> <li># of systemic barriers that are significant for career pathways participants removed</li> <li>% of employers that change policies to better support work-based learning &amp;/ or employment, retention, &amp; advancement of career pathways participants</li> </ul>	<ul> <li>No wrong door</li> <li>% increase in applicants completing a career pathway with a recognized credential</li> <li>Sustainable systems for long-term impact</li> <li>High-quality, paid work-based learning</li> <li>Success for career pathways participants in employment, retention, &amp; advancement</li> </ul>

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## **Template 1: System Components**

Funding Resources/ Partners	Activities	Outputs	Short- and Long- Term Outcomes	Impact

#### **Template 2: Theory of Change**

After completing a high-level logic model, complete a Theory of Change Template. The Theory of Change Template identifies the problem to be solved, the strategies to employ, and the outcomes in the context of outside factors, the community in which the system or program is operating, and the assumptions that inform the implementation strategies. It can form the basis of evaluating whether your model is accomplishing the anticipated outcomes or if components of the model need to be changed.

**Template 2** is an example of a Theory of Change Template. Use the blank template to complete the Program and/or System Theory of Change Template.

**Step 1 - Problem or Issue:** Identify the problem the program(s) is attempting to solve or the issue(s) the program will address.

**Step 2 - Community Needs/Assets:** Specify the needs and/or assets of the community that led to the design of a program or system to addresses the problem.

**Step 3 - Desired Results (outputs, outcomes and impacts):** Identify desired results, or vision of the future, by describing short- and long-term expectations.

**Step 4 - Influential Factors:** List the factors that may influence change in the community.

**Step 5 - Strategies:** List general successful strategies or "best practices" that have helped communities achieve the intended results.

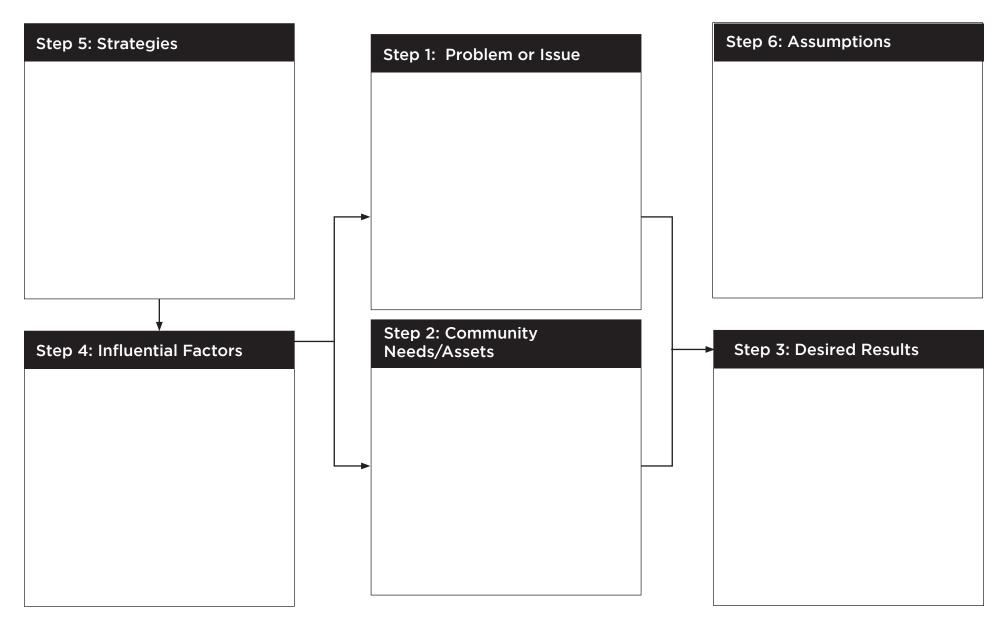
**Step 6 - Assumptions:** State the assumptions behind how and why the change strategies are applicable in the community.

#### **Template 2: Program Theory of Change (sample)**

#### **Step 5: Strategies Step 6: Assumptions** Step 1: Problem or Issue • Validate competency models for • Cross-agency partners will share in • # of low-skilled adults occupations in demand • # of adults below secondary level • Develop curriculum relevant to • Participants will commit to pathway • # adults lacking entry-level skills for with appropriate supports an employer's requirements postsecondary education • Create bridge programs for low-• Employers will engage in solutions • # of English Language Learners skilled adults · Provide accelerated contextualized • # of adults needing work readiness learning options skills Step 2: Community **Step 3: Desired Results Step 4: Influential Factors** Needs/Assets • Business demand for some type of • Increase in educational attainment of • Higher workforce participation rates the workforce industry credential • English language speakers • Increase in number of workers with • Business demand for work readiness • Skilled workforce available for job industry recognized credentials skills vacancies • Increase in workforce participation • WIOA requirement for career • Higher wages and less reliance on rate pathway implementation public assistance • Increase in wages of workers • Large numbers of learners unprepared for postsecondary • Decrease in reliance on public education assistance

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**Template 2: Program Theory of Change** 



#### **Template 2: Systems Theory of Change (sample)**

#### Step 5: Strategies

- Form collaborative partnerships across programs
- Determine intermediary to manage system change
- Set criteria for selection of employers to involve that reflect vision & desired outcomes
- Develop a plan to broaden & deepen employer engagement
- Identify targets for systems change & strategies to achieve them
- Develop a plan to sustain partnerships
- Develop benchmarks for future evaluation & continuous improvement plan

#### **Step 4: Influential Factors**

- Governor's office mandate to form collaborative
- WIOA enabling legislation to form regional collaborative
- Business demand for some type of industry credential

#### Step 1: Problem or Issue

- Duplicative service delivery systems
- Unaligned policies & programs
- Gaps in service delivery
- Participants face systemic barriers
- Sustainability of systems
- Employers' policies do not fully support the career pathways vision & its desired outcomes

## Step 2: Community Needs/Assets

- Better aligned system & programs
- No wrong door for service
- Partners & employers willing to contribute resources
- Intermediary able to provide coordination of services

#### **Step 6: Assumptions**

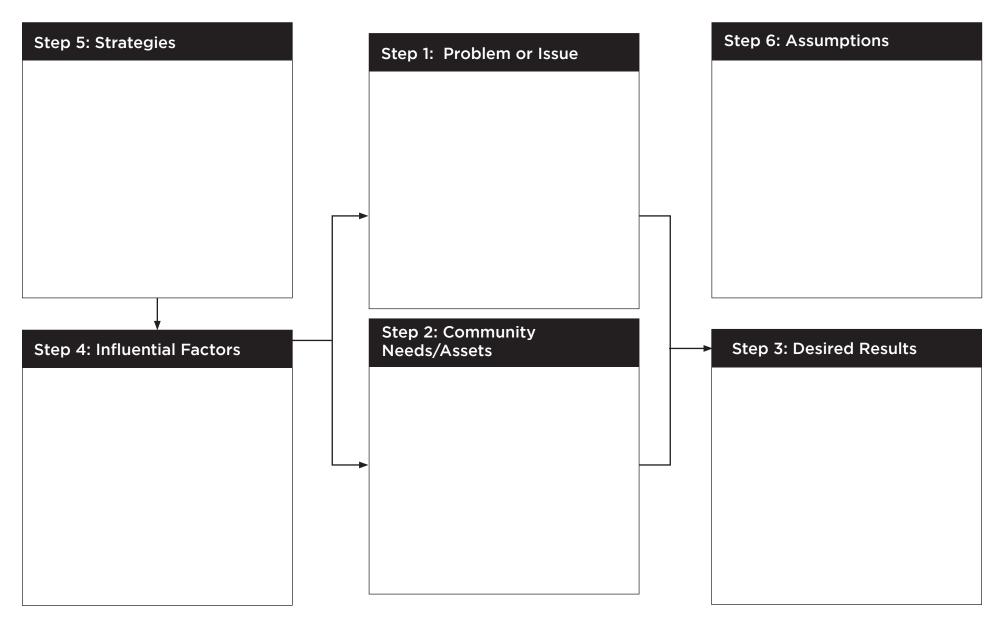
- Collective impact results in greater quantitative & qualitative outcomes for participants
- State & Local Workforce
   Development Boards are primary drivers of system.
- Broader & deeper employer engagement benefits career pathways

#### **Step 3: Desired Results**

- % realized cost savings
- % change in system measures against benchmarks
- % increase in curriculum meeting industry-recognized credentials.
- # of systemic barriers faced by career pathways participants that are removed
- % of career pathways participants' success in employment, retention, & advancement
- Sustainable system

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**Template 2: Systems Theory of Change** 



#### **Template 3: Evaluation Template**

Template 3 is an evaluation template that focuses on assessing the strategies identified in the Theory of Change Template. Did the strategies contribute to the anticipated short-term program outcomes? This exercise may identify necessary program and/or system corrections. Transfer the strategies from Template 2 to the focus area in Template 3 and complete the template.

**Focus Area:** List the focus areas by transferring the strategies from your Theory of Change Template (Template 2).

Audience: List the intended audience for the focus area (strategies).

**Questions:** List potential questions for the intended audience in order to validate the strategies.

**Purpose:** How will the information gathered be used?



#### **Template 3: Program Evaluation (sample)**

Focus Area	Audience/Who Participates	Questions	Purpose
Validate competency models for Occupations in demand	Employees serve as subject matter experts in an industry/ occupation or at a given employer job site	Are the competencies identified in a competency model the relevant skills, knowledge, and abilities necessary for the occupation or at the employer's worksite?	Validate or revise the competency model to fit occupation or employer requirements
Develop curriculum relevant to an employer's job requirements	Employer & training provider	Does the curriculum adequately address the knowledge, skills, & abilities required by the employer?	Program completers demonstrate the skills required for the job site.
Create bridge programs for low- skilled participants	Adult basic education providers & training institutions.	Did completion of the bridge program allow participants to enter a postsecondary education program?	Evaluate content of bridge program & readiness of completers for postsecondary education Identify the differences between completers & non-completers Identify barriers for participants who did not complete bridge program, if any.
Provide accelerated contextualized learning options	Secondary & postsecondary education	Did the learner grasp the skills, knowledge, & abilities needed for the occupation?	Evaluate curriculum & teaching methods.
Provide supportive services	Workforce agencies, community- based organizations	Were the supports provided the best type of supports to facilitate participation in program activities?  What were the reasons program participants did not complete?	Determine what outside factors affect program completion  Determine if sufficient resources exist to move a participant along a career pathway.

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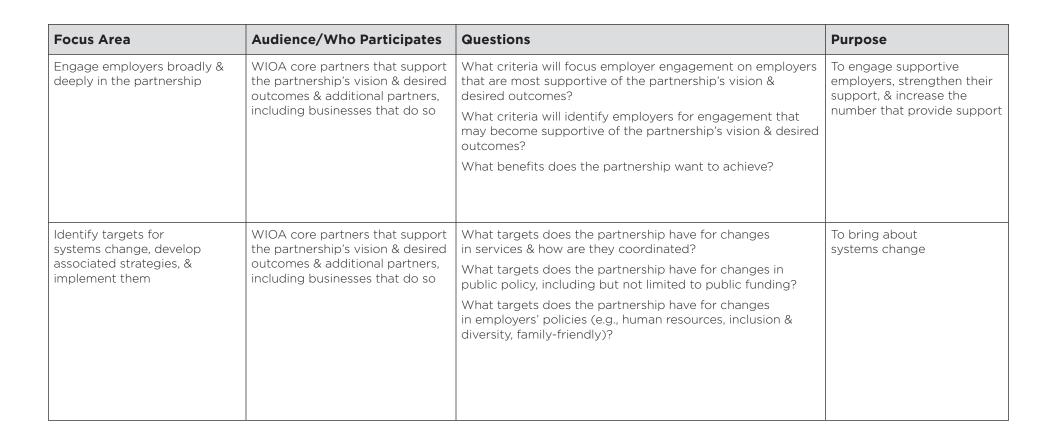
## Template 3: Program Evaluation

Focus Area	Audience/Who Participates	Questions	Purpose



#### **Template 3: System Evaluation (sample)**

Focus Area	Audience/Who Participates	Questions	Purpose
Form collaborative partnership across programs	WIOA core partners that support the partnership's vision & desired outcomes & additional partners, including businesses that do so	Who needs to participate? What resources can they contribute? What are the high-quality core services of the partners? Do the partners support systems change?	To solicit partners that can benefit the collaborative & secure commitments from each partner
Determine intermediary to coordinate system change	WIOA core partners that support the partnership's vision & desired outcomes & additional partners, including businesses that do so	Who is in the best position to build & lead the partnership? What are the significant & other systemic barriers participants in the career pathways face?	To coordinate system change & identify partner's strengths
Develop & implement a plan to sustain partnerships	WIOA core partners that support the partnership's vision & desired outcomes & additional partners, including businesses that do so	What human & financial resources are necessary to sustain the system?	To commit resources for long-term sustainability
Develop benchmarks for future evaluation & continuous improvement plan, & implement evaluation & continuous improvement processes	WIOA core partners that support the partnership's vision & desired outcomes & additional partners, including businesses that do so	What measures should the partnership adopt? How are organizations currently doing on those measures? How are organizations that become partners doing after implementing the partnership?	To measure system change & make adjustments in strategies if necessary



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## Template 3: System Evaluation

Focus Area	Audience/Who Participates	Questions	Purpose



Focus Area	Audience/Who Participates	Questions	Purpose

#### **Template 4: Indicators Development Template**

Template 4 is an Indicators Development Template that focuses on the identification of indicators to evaluate career pathways programs and systems.

**Focus Areas:** From the information gathered in Template 3, transfer the areas on which the evaluation will focus into column one (e.g., validate competency models for in-demand occupations).

**Questions:** Transfer from Template 3 the major questions related to each focus area (Did the program completers demonstrate the skills required for a given industry?)

**Indicators:** Specify the indicators to be used in measuring the success/progress of the program and/or system.

Data Collection: Identify the data elements to collect to measure the indicator.



#### **Template 4: Program Indicators Development (sample)**

Focus Area	Question	Indicators	Data Collection
Validate competency models for in-demand occupations	Are the competencies identified in a competency model the relevant skills, knowledge, & abilities necessary for the occupation or at an employer's worksite?	# of subject matter experts that verify the skill, knowledge, & abilities needed for their positons # of employers validating the skills, knowledge & abilities needed for an occupation	Job skills analysis data from subject matter experts, supervisors, & management
Develop curriculum relevant to an employer's job requirements	Does the curriculum adequately address the knowledge, skills, & abilities required of the employer?	# of participants who receive some type of industry-recognized credential # of participants who enter employment Employment retention rate	Participant data Training data Employment data
Create bridge programs for low-skilled participants	Did completion of the bridge program allow participants to enter postsecondary education program?	# of bridge program completers entering some type of postsecondary education	Training data  Degree/credential attainment data
Provide accelerated contextualized learning options.	Did the learner grasp the skills, knowledge & abilities needed for the occupation?	# completing high school equivalency # of participants receiving some type of postsecondary credential	Training data  Degree/credential attainment data
Provide supportive services	Were the supports provided the best type of supports to facilitate participation in program activities?  What were the reasons program participants did not complete?	# of participants receiving supports that are progressing along a career pathway	Participant data Support services data

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#### **Template 4: Program Indicators Development**

Focus Area	Question	Indicators	Data Collection



#### **Template 4: System Indicators Development (sample)**

Focus Area	Question	Indicators	Data Collection
Form collaborative partnerships across programs	Who needs to participate? What resources can they contribute? What are the high-quality core services of the partners? Do the partners support systems change?	Resources partners contribute are at least sufficient for near-term support of partnership Quality of services to participants & employers is at least acceptable  Partners agree to support systems change	Partnership's budget Outputs & feedback MOU or other agreement
Determine intermediary to manage system change	Who is in the best position to build & lead the partnership?	Success in bringing about partners' action on one or more systems change strategy Success in bringing about activities to support the partnership's vision & desired outcomes by all partners by leveraging their strengths	Ways partners take action in line with systems change strategy Identified strengths of partners that are leveraged
Develop a plan to sustain partnerships	What human & financial resources are necessary to sustain the system?	Resources partners & employers provide in comparison to the plan  Resources partners & employers help obtain from others in comparison to the plan  Reduced partnership expenses though more efficient &/or higher-quality services, etc.	Partnership sustainability plan's revenue, other resources, & expense targets
Develop benchmarks for future evaluation & continuous improvement plan	What measures should the partnership adopt? How are organizations currently doing on those measures? How are organizations that become partners doing after implementing the partnership?	Systems changes & causal connections to improved outputs Feedback from participants & employers	Outputs & analysis of how they have been improved Feedback processes

Focus Area	Question	Indicators	Data Collection
Engage employers broadly & deeply in the partnership	What criteria will focus employer engagement on employers that are most supportive of the partnership's vision & desired outcomes?  What criteria will identify employers for engagement that may become supportive of the partnership's vision & desired outcomes?  What does the partnership want to achieve?	Criteria for employer engagement to identify those that are most supportive of partnership's vision & desired outcomes & those that have the potential to become supportive of them  Partnership knows what it wants to achieve in engagement of employers as customers; in planning, governance, & oversight; in service delivery; in systems change; & in supporting the partnership	Assessment of criteria, their use, & employers engaged in the partnership Assessment of employer engagement plan's clarity
Identify targets for systems change, develop associated strategies, & implement them	What targets does the partnership have for changes in services & how they are coordinated?  What targets does the partnership have for changes in public policy, including but not limited to public funding?  What targets does the partnership have for changes in employers' policies (e.g., human resources, inclusion & diversity, family-friendly?)	Clarity of targets for systems change Likelihood that targets for systems change will remove significant barriers for participants in the career pathway Likelihood that strategies for systems change will achieve targets Success in bringing about partners' (including employers') action on one or more systems change strategy	Assessment of systems change plan, including targets & strategies Assessment of partners' actions

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#### **Template 4: System Indicators Development**

Focus Area	Question	Indicators	Data Collection

## Component 6.2: Identify the Data Needed to Measure the System, Program, and Participant Outcomes

Following the identification of long- and short-term system, program, and participant outcomes, the leadership team and other subgroups must define the actual data to measure and evaluate outcomes. Most career pathways systems involve the use of resources from various Federal and State funding streams, so close attention should be given to the data collection requirements of the particular programs being evaluated. To help assess the data that needs to be collected, the Performance Measurement Chart (Worksheet 6.2a) lists the program outcome measures for most of the Federal programs in a career pathways system.

Data collection involves a cross-agency integrated approach requiring data sharing and matching of the participant outcomes. WIOA has established a set of common metrics that apply to the WIOA core partner programs. The State may apply these measures to other additional partners without incorporating the programs into a Combined Plan.

#### CAREER PATHWAYS FYI: WIOA Joint Performance Measures for Youth

- 1. Percentage of participants in education, training, or unsubsidized employment during the second quarter after exit;
- 2. Percentage of participants in education, training, or unsubsidized employment during the fourth quarter after exit;
- 3. Median earnings of participants in unsubsidized employment during the second quarter after exit;
- 4. Percentage of participants who obtain a recognized credential or secondary diploma (or equivalent) during participation or within one year after exit; and
- 5. Percentage of participants who, during a program year, are in an education or training program that leads to a recognized postsecondary credential or employment and who are achieving measureable skill gains toward such a credential or employment.

#### CAREER PATHWAYS FYI: WIOA Measures for Employer Participation

All WIOA programs will be required to measure their effectiveness in serving employers.

The specific measure(s) to be used were developed by WIOA Federal agencies and are available on the USDOL website.

#### CAREER PATHWAYS FYI: WIOA Joint Performance Measures for Adults

- 1. Percentage of participants in unsubsidized employment during the second quarter after exit;
- 2. Percentage of participants in unsubsidized employment during the fourth quarter after exit:
- 3. Median earnings of participants in unsubsidized employment during the second quarter after exit;
- 4. Percentage of participants who earned a recognized postsecondary credential or a secondary school diploma (or equivalent) during participation or within one year after exit; and
- 5. Percentage of participants who, during a program year, are in an education or training program that leads to a recognized postsecondary credential or employment and who are achieving measurable skill gain toward such a credential or employment.

Provide a cross-system view of results and support shared accountability and improvement among partners.

Incorporate important interim program measures that demonstrate progress toward educational outcomes and employment outcomes.

Focus on results for participants within specific career pathways, rather than institutional or organizational outcomes.

#### Career Pathways System, Program, and Participant Measures:

#### **System Measures**

- Return on investment —overall costs of career pathways activities, including increase in taxes paid due to employment and decrease in reliance on any form of public assistance;
- Increase in skills and credentials in the labor force:
- Increase in workforce participation rate;
- Employer engagement in career pathways system; and
- Number of resources leveraged to sustain the system.

#### **Program Measures (WIOA Adult)**

- Percentage of participants in unsubsidized employment during the second quarter after exit:
- Percentage of participants in unsubsidized employment during the fourth quarter after exit;
- Median earnings of participants in unsubsidized employment during the second quarter after exit;

- Percent of participants who earned a recognized postsecondary credential or a secondary school diploma (or equivalent) during participation or within one year after exit;
- Percent of participants who, during a program year, are in an education or training program
  that leads to a recognized postsecondary credential or employment and who are achieving
  measurable skill gain toward such a credential or employment; and
- Indicators of effectiveness in serving employers.

#### **Participant Measures**

- · Credit accumulation;
- License/certificate attainment/industry-recognized credential;
- Degree attainment;
- Employment;
- Wage at initial employment;
- Employment retention rate;
- Employment progression along a career pathway; and
- Earnings progression.

#### PROMISING PRACTICE: Measurement Matters—Report Cards in New Jersey

New Jersey has a "consumer report card" website called New Jersey Training Opportunities that provides information on occupational training programs in the State. A results section displays information about former program participants. It shows employment rates, retention rates, and average earnings at six months, one year, and two years after graduation. New Jersey's State laws require training programs at for-profit, public two-year, and some public four-year schools that receive State or Federal workforce funding to submit records to the State for all of their students, and the State recently required for-profit schools to submit student records and disseminate results through a State website.



#### 6.2a PERFORMANCE MEASUREMENT CHART

The intent of this chart is to help the leadership team review the program outcome measures. The chart illuminates why data must be collected consistently across all partners. It shows the importance of co-enrollment in helping partners achieve program outcomes.

#### a. Workforce Agencies

Performance Measures	WIOA Title I Adult & DW	WIOA Title I Youth	WIOA Title II Adult Basic Education	WIOA Title III Job Service	WIOA Title IV- VRS & SSB	Older Americans Act	Trade Adjustment Act	Veterans	Unempl. Insurance
Employment	Employment 2nd & 4th qtr	Placement 2nd or 4th qtr	Employment 2nd & 4th qtr	Employment 2nd & 4th qtr	Employment 2nd & 4th qtr				
Earnings	Median Earnings	Median Earnings	Median Earnings (new)	Median Earnings	Median Earnings	Average Earnings	Average Earnings	Average Earnings	
Credential	Industry- Recognized	Industry- Recognized	Industry- Recognized	Industry- Recognized	Industry- Recognized		Industry- Recognized	(Tracked Only)	
Skill Gain	Measurable Gains Toward a Credential	Measurable Gains Toward a Credential	Measurable Gains Toward a Credential	Measurable Gains Toward a Credential	Measurable Gains Toward a Credential				
Effectiveness in Serving Employers	TBD	TBD	TBD	TBD	TBD				
Others	TBD by the Governor, State Agencies, Regional Planning, & Local Boards	TBD by the Governor, State Agencies, Regional Planning, & Local Boards		Benefits Reinstatement		Timely 1st- time Benefit Payment- -Appeals Decided w/in 30 days			
Standard Setting	Negotiated with USDOL	Negotiated with USDOL	Negotiated with USDOL	Negotiated with USDOL	Negotiated with USDOL	Negotiated with USDOL	Set by USDOL	Negotiated with USDOL	

ELEMENT SIX	
EASURE SYSTEM CHANGE AND PERFORMANCE	

Performance Measures	WIOA Title I Adult & DW	WIOA Title I Youth	WIOA Title II Adult Basic Education	WIOA Title III Job Service	WIOA Title IV- VRS & SSB	Older Americans Act	Trade Adjustment Act	Veterans	Unempl. Insurance
Incentives	None	None	None	None	None	None	Yes	Yes	
Penalties	Failing on measures after 1 & 2 yrs	Failing on measures after 1 & 2 yrs	Failing on measures after 1 & 2 yrs	Failing on measures after 1 & 2 yrs	Failing on measures after 1 & 2 yrs	Failing on measures after 1 & 2 yrs	No	No	

#### b. Other Agencies

Performance Measures	Human Services - TANF/SNAP ENT	Postsecondary - Carl Perkins PS	Corrections - 2nd Chance Program	Human SERvices - CSBG E&T PROGRAM	Housing and Urban Development - HUD E&T PROGRAM
Employment	Placement & Employment	Placement	Employment Opportunities		
Earnings	Median Earnings & Benefits		Yes		
Credential	Industry-Recognized	Industry-Recognized	Industry-Recognized		
Skill Gain	Measurable Gains Toward a Credential	Technical Skill Attainment	Yes		
Effectiveness in Serving Employers	-	-	Union Advisory Committee		
Others	Reduce Recidivism	Academic Attainment— Educational Retention— Completion/Graduation— Sec. Training—Non-Trade by Gender	Reduce Crime & Recidivism—Increase Child Support Payments— Housing Opportunities— Substance Abuse Reduction & Participation		
Standard Setting		Negotiated with the Feds	MAP/ABE		

MEASURE SYSTEM CHANGE AND PERFORMANCE

Performance Measures	Human Services - TANF/SNAP ENT	Postsecondary - Carl Perkins PS	Corrections - 2nd Chance Program	Human SERvices - CSBG E&T PROGRAM	Housing and Urban Development - HUD E&T PROGRAM
Incentives		None	None		
Penalties		Funds w/held for TA by Feds	Under Performance		

Source: Minnesota Department of Employment & Economic Development

The Alliance for Quality Career Pathways, a project of the Center for Postsecondary and Economic Success at CLASP, has developed a framework for measuring career pathways participant educational and economic progress and outcomes. To measure the impact of career pathways programs regardless of funding source, partners will need to answer these questions (the self-assessment worksheets for each step are provided in Worksheet 6.2b):

#### Step 1: Which of the collected metrics are needed for career pathways in your State or region?

AQCP Metrics Self-Assessment Step 1 (Worksheet 6.2b)

Table 1. Mapping AQCP metrics to existing and planned career pathways

#### Step 2: Are career pathways defined in terms that can be measured in existing data systems?

AQCP Metrics Self-Assessment Step 2 (Worksheet 6.2c)

Table 2. Assessing essential elements of career pathways and if they are reflected in data systems

#### Step 3: Do data collection and reporting systems collect the data elements that are needed for career pathways?

AQCP Metrics Self-Assessment Step 3 (Worksheet 6.2d)

Table 3. Assessing readiness to calculate results for AQCP metrics

Table 4. Assessing data collection capacity for AQCP metrics

#### Step 4: Do we have the capacity to track career pathways participants across educational settings to calculate the selected metrics?

AQCP Metrics Self-Assessment Step 4 (Worksheet 6.2e)

Table 5. Assessing capacity to track career pathways participants longitudinally

#### 6.2b AQCP METRICS SELF-ASSESSMENT STEP 1

The following worksheets were created by the Alliance for Quality Career Pathways, a project of the Center for Postsecondary and Economic Success at CLASP. **Name of Career Pathways Partnership Primary Contact Name/Email/Phone** The self-assessment team: Begin by convening a team that includes career pathways leadership and staff with knowledge of existing reporting systems for each of the educational settings involved in career pathways in the State or local/regional partnership. Consider the following sectors or education/workforce areas: (1) career and technical education (CTE); (2) adult education (WIOA Title II); (3) workforce programs (WIOA Title I); (4) other State postsecondary data systems; and (5) any other education or training partners that will have data about career pathways. participants. The team will work together to complete the metrics self-assessment. State teams should also plan to consult with local/regional partnerships to gather input as needed. Step 1: Which of the AQCP metrics are needed for career pathways in your State or region? Review local/regional career pathways descriptions and map AQCP metrics to these pathways to identify the set of universal metrics that are needed for career pathways in your State or region. Background: The goal of the AQCP metrics is to change the way we determine success, creating performance accountability systems that measure results for particular career pathways rather than institutions or funding sources. As such, the AQCP metrics were developed with the understanding that not all metrics would apply to all pathways. Which metrics apply to a given career pathway is a function of the pathway's design features, such as the starting skill level, the intended credentials, the industry/occupational focus, and the targeted populations the pathway is designed to serve. What makes a metric appropriate for a career pathway? In general, an AQCP metric would be appropriate for a career pathway if it: (1) reflects an outcome that is intended to be achieved by participants along the pathway or following completion of the pathway; and (2) if the metric is needed by the partnership to help it determine whether the career pathway is meeting its overall goals and to inform efforts to improve results over time. Instructions: Gather descriptive information on representative career pathways currently in operation in the State or local/regional partnership. Review the career pathways descriptive information and map the AQCP metrics to the pathways.

### Table 1. Mapping AQCP metrics to existing and planned career pathways

#### A. Interim Education and Training Outcomes

AQCP Metric	Included/Not Included (+/-)	Comments
A.1. Educational-level gains		
A.2. High school diploma or equivalency attainment		
A.3. Developmental/remedial education completion		
A.4. College-level pathway course completion		
A.5. College-level math or English course completion		
A.6. Retention in pathway coursework		
A.7. Pathway credit accumulation 1 (12 semester hours)		
A.8. Pathway credit accumulation 2 (24 semester hours)		
A.9. Earnings progression		

#### **B. Pathway Education and Training Outcomes**

AQCP Metric	Included/Not Included (+/-)	Comments
B.1. Pathway license, industry certification, or apprenticeship certificate attainment		
B.2. Pathway certificate attainment		
B.3. Pathway associate degree attainment		
B.4. Pathway associate degree attainment or transfer to a 2- or 4-year institution		

## ELEMENT SIX PERFORMANCE

#### **C. Labor Market Outcomes**

AQCP Metric	Included/Not Included (+/-)	Comments
C.1. Initial employment		
C.2. Employment in targeted industry sector		
C.3. Subsequent employment retention		
C.4. Initial earnings		
C.5. Earnings change		
C.6. Subsequent earnings		

### MEASURE SYSTEM CHANGE AND PERFORMANCE

#### 6.2c AQCP METRICS SELF-ASSESSMENT STEP 2

Are career pathways defined in terms that can be measured in existing data systems? Review local/regional career pathways descriptions and existing data collection capacity to assess the extent to which career pathways are defined in terms that can be measured in existing data systems (e.g., courses, services), as well as the potential for Alliance definitions for career pathways participant, career pathways leaver, and career pathways credential completer to be applied in practice to individuals participating in these pathways.

Background: This aspect of the self-assessment is focused on the extent to which the three essential features of career pathways are present and can be reflected in the data that is collected for career pathways participants. In addition, the self-assessment examines whether career pathways are ready to apply the AQCP definitions for career pathways participant, career pathways leaver, and career pathways credential completer. The AQCP metrics framework makes use of these new definitions to describe the status of individuals as they progress along career pathways and to support the calculation of the pathways metrics.

#### Instructions:

Review the results of the Career Pathways Descriptions gathered in Step 1.
Review the definitions for career pathways participant, career pathways leaver, and career pathways credential completer on page 29 of Shared Vision, Strong Systems: the Alliance for Quality Career Pathways Framework Version 1.0.
Review the career pathways descriptive information and discuss the questions that appear in Table 2 on the next page.

Table 2. Assessing essential elements of career pathways and if they are reflected in data systems

Question	Discussion
1. <b>Multiple entry points:</b> Are there multiple entry points along the pathways? Is there consensus on what actions or events constitute entry at each of these points (i.e., entry triggers)?	
2. <b>Multiple exit points:</b> Are there multiple exit points along the pathways? Is there consensus on these exit points and the credential(s) to be attained at each point?	
3. Career pathways participant: Based on the review of the local/regional career pathways, are data currently collected to enable the observation of when an individual has enrolled in and is attending specific courses or activities or is receiving services (or combinations thereof) that have been designated as specific entry points for a career pathway? Is this the case at each entry point along the career pathway? If not, what data are missing, and are there plans to capture this information?	
4. Career pathways leaver: Based on the review of the local/ regional career pathways, are data currently collected to enable the observation of when a career pathways participant is no longer enrolled in pathways courses, services, or activities? Is it possible with currently collected data and reporting procedures to know when a participant ceased to be enrolled? If not, what data are missing, and are there plans to capture this information?	
5. Career pathways credential completer: Based on the review of local/regional career pathways, are data currently collected to enable the observation of when a career pathways participant has attained one or more of the pathway education and training outcomes (group B metrics) in a career pathway prior to leaving the pathway? Is this the case for each of the credentials available along the career pathway? If not, what data are missing, and are there plans to capture this information?	

## 6.2d AQCP METRICS SELF-ASSESSMENT STEP 3

Do data collection and reporting systems collect the data elements that are needed for career pathways? Review data collection and reporting systems to assess the extent to which these systems collect the data elements that are needed to calculate applicable metrics for career pathways, including disaggregation for target groups.

**Background:** This part of the assessment is focused on the availability of data to calculate each metric for applicable career pathways (not all metrics are appropriate for all pathways).

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Review the metric details included in Appendix D of Shared Vision, <u>Strong Systems: the Alliance for Quality Career Pathways Framework Version 1.0</u> and answer any questions you may have about the data needed to calculate the metrics.
Assess your readiness to calculate the metrics. Consult with relevant staff for each of the reporting systems that the team anticipates using to support its metric calculations. Discuss the metrics, as well as data needs, and prepare an overall response in <a href="Table 3">Table 3</a> (Assessing Readiness to Calculate Results for AQCP Metrics).
The career pathways team should review the results and discuss the following questions in <u>Table 4</u> below.

#### Table 3. Assessing readiness to calculate results for AQCP metrics

#### A. Interim Education and Training Outcomes

Career Pathways Metrics: (Please refer to <u>Shared Vision, Strong Systems:</u> the Alliance for Quality Career Pathways Framework Version 1.0 for metric definitions)	Reporting System(s): Identify the systems that will contribute to measuring career pathways results for each metric.	Readiness: Indicate the team's summary assessment of the partnership's current readiness to compute results for each career pathways metric using the following indicators, along with any notes  Yes=This metric can be calculated now; Changes=This metric could be calculated if certain changes to data collection were implemented (please note the changes); and No=This metric cannot be calculated.
A.1. Educational-level gains		
A.2. High school diploma or equivalency attainment		
A.3. Developmental/remedial education completion		
A.4. College-level pathway course completion		

Career Pathways Metrics: (Please refer to <u>Shared Vision, Strong Systems:</u> the Alliance for Quality Career Pathways Framework Version 1.0 for metric definitions)	Reporting System(s): Identify the systems that will contribute to measuring career pathways results for each metric.	Readiness: Indicate the team's summary assessment of the partnership's current readiness to compute results for each career pathways metric using the following indicators, along with any notes  Yes=This metric can be calculated now; Changes=This metric could be calculated if certain changes to data collection were implemented (please note the changes); and No=This metric cannot be calculated.
A.5. College-level math or English course completion		
A.6. Retention in pathway coursework		
A.7. Pathway credit accumulation 1 (12 semester hours)		
A.8. Pathway credit accumulation 2 (24 semester hours)		
A.9. Earnings progression		

#### **B. Pathway Education and Training Outcomes**

Career Pathways Metrics: (Please refer to <u>Shared Vision, Strong Systems:</u> the Alliance for Quality Career Pathways Framework Version 1.0 for metric definitions)	Reporting System(s): Identify the systems that will contribute to measuring career pathways results for each metric.	Readiness: Indicate the team's summary assessment of the partnership's current readiness to compute results for each career pathways metric using the following indicators, along with any notes  Yes=This metric can be calculated now; Changes=This metric could be calculated if certain changes to data collection were implemented (please note the changes); and No=This metric cannot be calculated.
B.1. Pathway license, industry certification, or apprenticeship certificate attainment		
B.2. Pathway certificate attainment		
B.3. Pathway associate degree attainment		
B.4. Pathway associate degree attainment or transfer to a 2- or 4-year institution		

#### **C. Labor Market Outcomes**

Career Pathways Metrics:  (Please refer to <u>Shared Vision, Strong Systems: the Alliance for Quality Career Pathways Framework Version 1.0</u> for metric definitions)	Reporting System(s): Identify the systems that will contribute to measuring career pathways results for each metric.	Readiness: Indicate the team's summary assessment of the partnership's current readiness to compute results for each career pathways metric using the following indicators, along with any notes  Yes=This metric can be calculated now; Changes=This metric could be calculated if certain changes to data collection were implemented (please note the changes); and No=This metric cannot be calculated.
C.1. Initial employment		
C.2. Employment in targeted industry sector		
C.3. Subsequent employment retention		
C.4. Initial earnings		
C.5. Earnings change		
C.6. Subsequent earnings		

## Table 4. Assessing data collection capacity for AQCP metrics (Options 1 and 2)

Question	Discussion
In general, are data elements currently available to support calculation of the career pathway metrics? Which metrics cannot be supported at this time?	
2. Which data systems will be used to support metric calculation? To what extent are there metrics that these data systems "ought" to be able to support that they cannot currently?	
3. Where there are missing elements in existing data, are there plans to address this?	
4. For what career pathway participant target groups does the partnership intend to track results? Are there missing elements that would prohibit this tracking for career pathways?	

## 6.2e AQCP METRICS SELF-ASSESSMENT STEP 4

Do we have the capacity to track career pathways participants across educational settings to calculate the selected metrics? Review the capacity for longitudinal tracking of career pathways participants across the applicable educational settings (e.g., adult education, developmental education, occupational credit courses) and for sufficient time to support the calculation of the selected metrics.

**Background:** By design, career pathways often enable participants to move through multiple educational settings with support from multiple funding sources. Observing results for a career pathway requires following participants across these educational settings and funding sources, just as it requires following participants across organizational or institutional boundaries. This step in the AQCP metrics self-assessment guide focuses on the capacity of the State or local/regional partnership to observe participant results longitudinally.

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Review the local/regional career pathways descriptions that were obtained for Step 1, as well as the results of Steps 2 and 3.
Consult with managers and technical support staff for the SLDS or WDQI, as applicable, to answer the questions in Table 5, below.

#### Table 5. Assessing capacity to track career pathways participants longitudinally

Question	Discussion
To what extent do existing career pathways encompass multiple educational settings and funding sources?	
2. To what extent do existing career pathways use multiple reporting systems for formal management reporting?	
3. To what extent have the data elements that are used to measure career pathways entry, exit, and credential attainment been incorporated in the SLDS or WDQI databases? If these elements are not currently incorporated, are there plans to do so?	
4. To the extent that these data are not incorporated in the SLDS, is there a process in place whereby these data will be brought together so that participant progress across multiple educational settings can be observed?	

## Component 6.3: Implement a Process to Collect, Store, Track, Share, and Analyze Data

Determining how to measure system, participant, and program outcomes will likely involve many different stakeholders. The leadership team will determine desired goals and outcomes for the initiative while considering the existing requirements of Federal, State, and local funders. The challenge to teams will be figuring out how to measure outcomes as painlessly as possible across systems using existing reporting requirements when feasible.

Ultimately, the leadership team (with validation from local employers and potentially from funders) will agree on what data to collect to measure the desired outcomes. It is important that the measures and the data definitions are common across all partners participating in the career pathways system. By integrating data systems and sharing data, the leadership team can evaluate system and program impact over longer periods. The leadership team should gather multiyear (longitudinal) data on progress over as many years as necessary to follow an individual across programs. Data of this kind is essential for establishing public accountability for career pathways programs. It is also necessary for determining how to improve programs by identifying which activities provided the best outcomes over time.

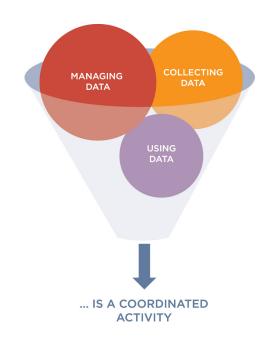
#### PROMISING PRACTICE: Kentucky Statewide Longitudinal System

The Kentucky Center for Education and Workforce Statistics (KCEWS) collects and links data to evaluate education and workforce efforts in the Commonwealth. This includes developing reports and providing statistical data about these efforts so policymakers, agencies, and the general public can make better-informed decisions. The KCEWS maintains the Kentucky Longitudinal Data System (KLDS), a statewide longitudinal data system; responds to requests for data and information; and provides reports on a number of topical areas, including feedback about the performance of high school graduates after they go to college, developing the Kentucky County Profiles, and information about the outcome of teacher preparation, college, adult education, and other programs. Two examples of KLDS activities include:

- 1. Linking high school and college data together to better understand how high school experiences affect college enrollment and success; and
- 2. Linking education and employment records to know if Kentucky graduates are entering the workforce and earning a reasonable wage, how well colleges are meeting the needs of industries, and what the return on investment is for education and training programs.

Collecting, managing, and using data needs to be carefully coordinated across participating agencies and systems. The leadership team has the responsibility for establishing a data and evaluation plan that aligns with the desired outcomes and provides formative and summative information. The team may want to work with an outside evaluator to provide system-wide evaluation of the initiative. If the team members decide not to work with an outside source, they may want to identify a lead agency that can coordinate data measurement efforts across agencies. Sometimes different agencies collect different components of the data, so it is important to make sure all partners are clear about their roles and responsibilities in collecting data.

It is important to develop and document a formal agreement for the collection of data in an MOU. An MOU lists all partners who will be collecting data, the process for collecting data, and what each agency is collecting. Typically, each agency partner is responsible for collecting data for the individuals it serves within the programs that are part of the career pathways system. Data on individuals enrolled in the career pathways programs are marked in some fashion to ensure that the data are included in the overall data collected. Common demographic information for participants (such as age, gender, race, income level, highest school grade attended, justice-involved status, disability status, and public assistance status) is tracked across programs to determine system outcomes for various target populations.



#### **CAREER PATHWAYS FYI: Elements of Data Sharing Agreements**

- · Organizations/agencies involved;
- Data sets to be shared:
- · Length of time access to data is available;
- The process for sharing data;
- Confidentiality agreements; and
- Liability information.

Because participants involved in the career pathways system move through different points of entry, access different supportive services, and exit at different points in the career pathway, tracking long-term performance outcomes requires a well-planned systematic approach that all agencies agree upon. Currently, most agencies only collect information on an individual's progress through their own programs and services and do not take into consideration what the individual achieves through participation with partner agencies. This makes some of the potential measurements—such as the number of individuals who transition from adult education to community colleges—difficult to capture. In addition, because an effective career pathways system allows individuals to move back and forth between education and employment over many years, evaluating the overall career pathways system, as well as some of the specific programs, requires coordination of data sources so that individual records can be tracked across programs over multiple years.

An ideal longitudinal data system tracks an individual from pre-kindergarten through postsecondary education and into the workforce. Data covering this entire span allows each agency to determine how the services it provides to the individual will augment the services provided in prior years by previous agencies. An ideal system also has the ability to capture the progress of individuals moving in and out of training and work as needed. A data system that is comprehensive, shared, and longitudinal helps agencies design better services and allows all the partner agencies to better align themselves to the goals of the career pathways system.

A shared database helps streamline data collection and analysis efforts. Frequently, a common database is not feasible due to cost constraints, but it is important to design a method for extracting each of the multiple data sets from multiple data sources/systems for the information necessary to calculate and track the measures agreed upon. Aggregating data across agencies ensures that agency data from each aspect of the system contributes to the overall participant and system outcomes measures in order to assess the career pathways system.

Each State typically has its own data practice requirement along with the Federal data sharing guidelines. Therefore, it is important for all partners to sign a data sharing agreement. These agreements can specify the organizations/agencies sharing the data, the specific data sets shared, the purpose and use of the data, the length of time for access to the data, and the process in which the data will be shared/accessed. The agreement should also state the liable party for storing the data and granting access to the data.

Regular reviews of performance measures will ensure that agencies can make timely improvements to specific programs if necessary. Participant outcomes measure the ultimate success of the system when the participant enters employment with the skills/ certificates/ license required by employers at a family-sustaining wage. Constant affirmation from employers is essential to maintaining a demand-driven system. The team should routinely celebrate the success of effective programs and services.

#### **CAREER PATHWAYS FYI: Performance Data**

Analysis of performance data will help determine whether individual programs are effective and whether progress is being made within the overall career pathways system.

It is equally important to assess unsuccessful program outcomes. Data-informed decision making and evaluation can help the system identify missing elements to the system that, if available, may have retained a participant along a career pathway. The leadership team can examine any unmet participant barriers or program deficiencies. Data and information is essential to answer key questions regarding accountability. Accountability is the key to sustaining a comprehensive career pathways system.

#### **HOW TO: Questions to Ensure Program Accountability**

- Are the program and participant performance targets and goals being met?
- Are the results superior to traditional methods?
- Are agency (organization) partnerships strengthened or enhanced?
- Are career pathways components and design features being institutionalized and sustained as a result?
- Do business and industry partners value their involvement in the career pathways system and, as a result, realize skill-level improvements in their job candidates?
- Are funds being used to maximize their efficiency and effectiveness? Or, is the return on investment reasonable?

# Component 6.4: Design and Implement a Plan for Reporting System and Program Outcomes

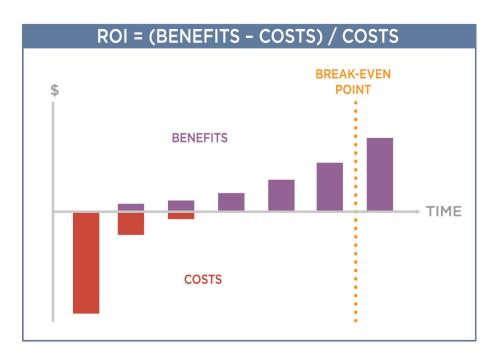
The measurement design process may include the development of a framework for measuring and understanding the net impact and return on investment of the overall career pathways effort. A return on investment framework should include a control group that compares program outcome participant data with subjects that did not participate in a career pathways program but have similar characteristics. Once the framework is established, the leadership team should have a strategy for communicating and disseminating the outcomes. The team should identify the various audiences for sharing summative data, including State and local legislators, State and local policymakers, secondary and postsecondary educational institutions, employers, economic development organizations, potential program participants, and the news media. Reports generated for sharing return on investment and program outcomes may include individual participant success stories. These compelling stories will provide a practical insight into the overall success of the career pathways initiative.

#### **HOW TO: Use Reporting System Outcome Data**

- Identify best practices for replication;
- Improve upon system and program design;
- Increase employer engagement;
- Sustain system development and engage more partners;
- Apply for competitive funds based on evidence-based practices;
- Request funding and support from State and local legislators;
- · Encourage the development of future career pathways programs; and
- Encourage enrollment of participants in career pathways programs with proven results.

The graphic below provides an example of how to calculate return on investment:

#### ROI CALCULATION EXAMPLE



#### **EXAMPLE BENEFITS:**

#### Change in:

- Earnings
- Fringe benefits
- Taxes paid
- Public assistance payments
- Medical payments
- Unemployment insurance payments
- Incarceration expense
- · Worker productivity

#### **EXAMPLE COSTS:**

- Tuition
- Program operations
- · Program administration
- Foregone earnings while in training
- Foregone taxes
- · Other participant costs

Minnesota Governor's Workforce Development Board. (2015). *Smart investments - real results: A net impact evaluation of Minnesota's workforce development system and initial findings*. Retrieved from <a href="https://mn.gov/deed/assets/wdd-net-impacts">https://mn.gov/deed/assets/wdd-net-impacts</a> tcm1045-132788.pdf

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