Labor Market Information
Customers and Their Needs
Customer-Oriented LMI Product Innovation
Customer Consultation Study Group
of the
Workforce Information Council

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Charter:
The Customer Consultation Study Group will assist the Workforce Information Council and state workforce information departments in developing and implementing methods for retrieving feedback from customers regarding the relevance, adequacy, and usability of available labor market information and the methods of delivering that information. This effort will support the States and the Council in their efforts to consult with users, as required under Section 309 of the Workforce Information Act, in a manner that can be consistently applied across the states. The Study Group will provide input and advice to states for collecting information on the degree to which existing labor market information is meeting or not meeting customer needs.
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Introduction
Under Section 309 of the Workforce Information Act (WIA), Congress requires the states and the Bureau of Labor Statistics (BLS) to work together to enhance the provision of labor market information that meets the needs identified through customer consultations. The Workforce Information Council (WIC) chartered the Customer Consultation Study Group (CCSG) to assist the WIC and state workforce information departments in developing and implementing methods for obtaining feedback from customers regarding the relevance, adequacy, and usability of available labor market information and the methods of delivering that information.

To accomplish its mission, the CCSG formed subcommittees to examine four key issues.¹

- **Level of Demand Subcommittee**: developing a methodology to quantify the level of demand seen by labor market information (LMI) agencies.
- **Research and Communications Subcommittee**: researching how other entities (particularly nonprofits with similar capacities) develop and implement a communications plan.
- **Best Practices and Peer Evaluation Subcommittee**: conducting a study of what state LMI agencies are learning from online information delivery to determine the most effective approaches to incorporate into a best practices guidebook.
- **Review Literature Subcommittee**: conducting a literature review on customer consultation.

To begin to develop information about how labor market information agencies can best meet their customers’ needs, the CCSG Research and Communications subcommittee asked the LMI Training Institute to:

- Identify the breadth and diversity of types of customers of state labor market information agencies.
- Provide general observations regarding the nature of these customers’ needs for services from state LMI agencies.
- Provide general observations regarding the extent to which customers believe that state LMI agencies are providing services that meet their needs.
- Recommend a framework for an approach by which state LMI agencies can regularly assess and respond to customer needs.

This report summarizes the key challenges facing state labor market information agencies and identifies the workforce information customer groups that use state LMI data. It also provides an assessment of state LMI customer needs, a summary of what states currently produce, how they disseminate what they produce, and how they solicit feedback. The report also offers implementation tips for state LMI agencies.

¹ Workforce Information Council – Customer Consultation Study Group Charter, August 2010.
Context
From the early 1980s through the present day, regional economies across the nation have been experiencing substantial restructuring, for several reasons.

- Foreign producer capacity for growth and production of increasingly sophisticated goods and services has enabled successful global competition with the U.S. This has produced significant, often negative, changes in regional economic structures, including the diminishment of key industries and the loss of jobs, particularly for persons without a college education.
- On top of this new era of competition and sometimes because of it, many companies have been motivated to increase quality and productivity through improvements in process technologies, which often replace labor with capital and tend to require remaining workers to have more education so that they can carry out increasingly sophisticated tasks.
- Product innovations in realms such as advanced information and biomedical technologies have led to the development of new industries and the elimination of older ones, such as typewriters and cash registers. A number of regional economies, such as Silicon Valley, Seattle, and Boston, have benefited greatly from being home to agglomerations in new sectors. At the same time, new industry agglomerations are subject to the same competitive and technological forces as older ones.

In contrast with the first few decades after World War II, now and for the foreseeable future every region of the U.S. is subject to foreign competition and to technology-driven job and industry restructuring. Moreover, experience suggests, the pace of change will grow and the impact of change will vary across regions.

As a result of these trends, the need for data from state LMI agencies has increased substantially, from several quarters. One is state and local government and government-sponsored organizations:

- State and regional economic development agencies increasingly look to state LMI agencies for customized data and analyses to help them understand aspects of the economy, such as structure, competitive strengths and weaknesses, and location of skilled labor for prospective employers.
- State and local education and workforce development agencies seek data to help determine the effective allocation of scarce resources in the face of ever-changing labor markets, occupational structures, and required knowledge, skills, and abilities.
- Economic and fiscal challenges are forcing state program agencies out of their traditional silos, resulting in more interagency partnerships involving workforce development, economic development, education, transportation, housing, environment, and/or health agencies. These interagency efforts often require new forms of labor market data to guide alternative ways of doing business.

The second source of increased LMI data needs is participants in the labor market—students, workers, education and training organizations, and employers. In light of economic and
technological disruption, uncertainty, and opportunity, the number and frequency of decisions that confront labor market participants have grown substantially. Data from state LMI agencies have the potential to enable these actors to make well-informed decisions about resource investments, decisions with substantial implications for their futures. Access to state LMI data for such decision-making was quite difficult prior to the advent of the Internet.

In recognition of expanded state and local needs for current, reliable, useful labor market data, the Workforce Investment Act of 1998 added a new Section 15 (Employment Statistics) to the Wagner-Peyser Act that requires states, as a condition of federal financial assistance, to consult with state and local K-12 and postsecondary education agencies, state and local workforce investment boards, employers, and workers regarding their data needs and work with other state and local agencies to ensure data usefulness.

The Employment and Training Administration’s (ETA’s) State Workforce Information Grants Program provides funding to state LMI agencies to improve state and local labor market functioning by addressing the information needs of workers, students, employers, educators, and workforce development organizations. Recent ETA-funded state grant agreements specify five deliverables—populating a Workforce Information Database, generating industry and occupational employment projections, producing special studies of value to state and local workforce development stakeholders, disseminating information on the Internet, and partnering and consulting with workforce investment boards and other stakeholders.

The capacity of LMI agencies to respond to increased customer needs has expanded through access to relatively new external data sources. To a large extent, these new sources are made possible by advances in information technology:

- In 2003, BLS opened the Business Employment Dynamics (BED) Program, which analyzes longitudinal establishment microdata from the Quarterly Census of Employment and Wages (QCEW) to generate measures of gross job gains and losses and establishment openings, expansions, contractions, and closings.
- Each LMI agency is part of the Census Bureau’s Local Employment Dynamics (LED) Partnership in which the LMI agency provides establishment and worker Unemployment Insurance (UI) records to Census in exchange for unique, valuable indicators of the “employment flows” in states and areas through Quarterly Workforce Indicators, OnTheMap, and, soon, the Job-to-Job Flows tool.
- LMI agencies are using the Census Bureau’s American Community Survey data as a key source of workforce information, including TIGER files for geospatial identifiers.
- ETA is making creative uses of O*NET to translate occupational information into skills information useful for education and training planning. For some decades, ETA has funded states to prepare industry and occupational employment projections. Using American Recovery and Reinvestment Act (ARRA) funds, ETA has funded the development of a skills-based projections methodology. ETA has also built a number of web tools useful at the local
level, such as MySkillsMyFuture, which will direct jobseekers to local training programs to address skills gaps impeding career change.

- With and without a Workforce Data Quality Initiative grant from ETA, an increasing number of LMI agencies are working with state education agencies to link UI data to statewide longitudinal data systems (SLDS) that will allow analysts to see the workforce outcomes of individual education and training programs.

- A majority of states are subscribing to private-sector “real-time” LMI services that regularly scrape electronic job boards to generate highly current job demand, content, and requirements information. Again as part of ARRA, ETA funded an eight-state green jobs real-time LMI consortium to experiment with the value of this service.

- Some agencies also use Reference USA, a private vendor, as a resource to share firm-specific and establishment-specific information that would not be available (due to confidentiality restrictions) from the QCEW database.

As the breadth and needs of LMI customers expand, the effectiveness of state LMI agencies now depends on their being user-oriented and demand-driven. They must have a clear understanding of who their customers are and those customers’ needs. The agencies’ challenge is to be proactive and inventive in taking advantage of LMI innovations to provide targeted responses to an array of specific user needs.

It is appropriate for BLS and ETA to consider how they might best facilitate the ability of state LMI agencies to address a broader and greater set of needs. For BLS, this may mean better understanding the nature of state and local demand for reliable BLS-funded LMI data and supporting LMI agencies’ ability to provide such data. For ETA, this may mean working with state LMI agencies in a more consistently strategic manner. For instance, this could mean identifying and funding a series of high-impact “economies of scale” activities (such as its long-standing support for state employment projections) that enhance the capacity of all LMI shops at relatively low cost.

If state LMI agencies are able to sustain a demand-driven, entrepreneurial, responsive, and creative culture, they have the potential to help transform how the United States responds to the challenges of competitiveness and changing labor markets. Essentially, the nation’s overall competitiveness is a function of the competitiveness of industries, firms, and workers at the state and regional levels. To be competitive, state and local development agencies and labor market participants need access to current, reliable, useful information. State LMI agencies are the logical set of organizations to provide information that can drive action and economic success. The aim of this report is to identify approaches that states can take to fulfill this potential.

**An Introduction to State LMI Customers**

State LMI agencies serve a broad spectrum of customers with distinct needs for information. Each customer uses LMI to inform their thinking about a series of actions or decisions.
State LMI customers can be broadly categorized into one of three groups:

1. Labor market actors and advisers
2. Policymakers and planners
3. Value-added disseminators

Labor market actors and advisers are LMI customers who play a role in the interaction between workers (as the suppliers of labor) and businesses (as entities demanding those services). This category includes an important set of intermediaries, teachers and counselors, who have a distinct role in shaping the career paths of the students who eventually become jobseekers.

Policymakers and planners are LMI customers who facilitate and influence the interaction between labor market actors and advisers, thereby influencing the efficiency of the labor market. They achieve their outcomes through direct partnerships with LMI agencies, by directly integrating LMI data into their own products, or by using LMI to inform program decisions. These customers include workforce development entities, economic development agencies, education policymakers, researchers, government agencies of all types, and internal LMI staff.

Finally, state LMI agencies serve customers who process or transform data to respond to different types of customer needs and disseminate the data, with value added, through a variety of communication channels. These customers include proprietary data vendors and the media.

**Understanding Customers and Their Needs**

Each of these broad customer categories is comprised of customer groups with distinct and specific LMI needs.

**Labor Market Actors and Advisers**
- *Jobseekers and Students* include customers who seek a job, whether they are currently employed or not, as well as the children and young adults who will eventually become part of the workforce.
- *Businesses* include any individual or organization that requires labor to operate.
- *Education and Training Instructors and Counselors* include individuals or agencies that directly interact with learners through structured educational or skill-building opportunities.

**Policymakers and Planners**
- *Workforce Development* includes state and local workforce agencies, which are collaborations of employers, policymakers, and community organizations, that seek to connect companies in need of talent with qualified workers. Workforce development entities interact with both jobseekers and businesses.

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2 See Appendix II: Mapped Customer & Product Typology – Actions Influenced by LMI for more information on the actions each of these customers take that are influenced by LMI.
- **Economic Development** includes government agencies and nonprofit organizations of varying structures that seek to promote business development opportunities and the implementation of policies that support the development of state and local economies.
- **Education** includes policymaking agents and program designers who influence the development of national, state, and local policies that drive education and training offerings and resource allocations. This group of education customers drives policy design and decision-making.
- **Researchers** include individuals engaged in research activities through academic institutions, think tanks, or other independent contracting entities.
- **Federal, State, and Local Governments** include all government agencies.
- **Internal Customers** include LMI analysts and other LMI leadership who seek to improve the development and functioning of the state and national LMI system.

**Value-Added Disseminators**
- **Media** includes any member of the accredited media and individuals independently reporting on facts and events through social media or other online dissemination tools. The media uses the data to tell stories.
- **Commercial Data Providers** include any third-party entity that repurposes LMI data and disseminates it to paying customers.

**What States Produce**

**Products**
The products that state LMI agencies generate can broadly be grouped into the following three categories (see Appendix I: Methodology for more information on how this typology was developed):

1. Career products – products that help jobseekers find jobs, determine skill or education requirements, find training opportunities, or match jobseekers to jobs.
2. Economy products – data, analysis, or studies about some focused aspect of the economy.
3. Labor market products – data, analysis, or studies of broad labor market trends or outcomes.

Examples of the types of products that fall into each of these categories are described below.

**Career Products**
- **Career Guide** – aggregate career information used to inform career choices.
- **Job Matching System/Job Sources** – dynamic system used to compile available job opportunities and match workers with the required skills to those opportunities.
- **Job/Occupation Outlook** – analysis of the future demand or hiring prospects for specific jobs or opportunities.
- **Key Occupation Requirements** – aggregate information detailing requirements necessary for successful candidates to be hired.
• **Real-time LMI Data (Job Postings)** – searchable job openings provided through a proprietary real-time LMI vendor.
• **Resource Guides** – information about resources available to LMI customers, particularly labor market actors and advisers.
• **Target/In-Demand Occupations** – routine or custom information about occupations that policymakers are targeting or for which employers are experiencing a shortage of workers.
• **Teachers’ Guides** – information for K-12 teachers about career opportunities and pathways for use in curriculum development.
• **Training Inventory** – catalog of job training opportunities.
• **Training Provider Certification** – certification given to training providers based on an accreditation process.
• **Transferrable Skill/Competency Model Studies** – career pathways study that examines skills and competencies necessary for worker success in specified occupations.

**Economy Products**
• **Community/Regional Economic Profiles** – overview of the current economic attributes and characteristics of a community or region.
• **Economic Analysis** – general analysis of the current condition of a state’s economy.
• **Economic Impact Analysis** – analysis of the impacts of a proposed policy action (typically a business location/relocation) on the regional or state economy.
• **Industry Analysis** – analysis of the characteristics of an industry.
• **Cluster Studies** – analysis of a group of inter-related businesses that form an industry cluster.
• **Regional/County/Community Profiles** – overview of the characteristics of a sub-state geographic area, including a combination of economic, workforce, and demographic characteristics.

**Labor Market Products**
• **Job Vacancy Surveys** – surveys conducted to assess which jobs businesses are having difficulty filling and how to prepare the workforce or match jobseekers to these openings.
• **Labor Demographics** – analysis of the demographic characteristics of a workforce.
• **Labor Market /Commuting Studies** – analysis of where workers live and where they travel to for work.
• **Legislative Analysis/Data Support** – data or analysis provided to elected officials for the purposes of policymaking.
• **Potential Applicant Pool Analysis** – analysis of labor qualified to fill job vacancies.
• **Real-time LMI Data (Statistics)** – data derived from web-posted jobs that may be used to assess business hiring expectations across a series of characteristics.
• **Unemployment Insurance Claims Report** – analysis of unemployment claims.
• **Wage and Benefit Studies** – analysis of wages and benefits provided to workers; obtained through survey research.
• **Wage Data** – data describing wages for a set of occupations.
Career/Economy Products

- Industry and Occupation Profiles – overview of the current attributes and characteristics of an industry or occupation.

Career/Economy/Labor Market Products

- Projections (by skill, geography, etc.) – specialized projections developed at the request of specific customer groups that are produced in addition to the industry and occupational projections required as part of a state’s Workforce Information Grant from ETA.

Delivery Mechanisms
State LMI agencies deliver the products outlined above and apply the knowledge they have gained about LMI data in the following ways:

- GIS/Data Mapping – geospatially analyze or map existing data to increase customer understanding.
- Grant Proposal Input – provide grant seeking entities with data and analysis that support their grant application.
- Grant Review – review grant requests made to state agencies for the accuracy of supporting claims for funding.
- Interactive Web Tools – develop and support tools that enable customers to access data sets according to customized characteristics.
- LMI Advisory/Interpretation Consulting – advise customers on valid methods for using and applying LMI data to answer research and policy questions.
- Newsletters/Updates – print and email dissemination tools used to share new data or insights gained from existing data.
- Presentations – present data and analysis to a wide variety of audiences either in person or via webinar.
- Press Releases – proactively distribute new data and information to the media and, by extension, the general public.
- Special Data Runs – conduct special data tabulations by request.
- Special Topic Studies/Surveys – conduct survey research or special studies as requested and/or funded by customer groups.
- User Training (including e-learning) – conduct training that provides an overview of available LMI resources and how to access them for the purposes of assisting with job seeking, research, or other policy questions.
- Web Services – provide automatically updating web tools that passively populate with current data.

Current Practices Used to Obtain Customer Feedback
Interviews with several state LMI representatives and a review of state reports revealed a frequent lack of an intentional, logical methodology for obtaining customer feedback on LMI products and services.
Certainly, many states undertake periodic customer surveys or implement other efforts to generate feedback, and there is much to learn from these efforts. However, it is also common for state agencies to collect customer feedback on an ad hoc basis with no clear purpose or plans for how the data might be used in improving data collection or dissemination.

Among those states that have implemented customer feedback efforts, the types of mechanisms used to generate feedback vary widely. For instance, a few states have taken the approach of building strong relationships with key customer groups. While not necessarily structured (i.e. in the form of a periodic survey or focus group dialogues), these efforts have been used to formalize relationships with priority customer groups. In addition, LMI staff reaches out to priority customers, on an as-needed basis, to obtain vital specific feedback.

Many states track customer interaction through a centralized tracking database, recording all data requests, customer questions, length of time it takes to respond to a request, etc. Some states do this as a normal course of business, while other states identify certain periods of the year in which they will track this data, inferring that the identified time period is representative for the purpose of analysis.

States engaging in more formal strategies for generating customer feedback have typically stratified their known customer groups. Due to the breadth of customer types and needs that do not necessarily overlap, these formal customer feedback mechanisms are tailored to specific customer types. To obtain truly valuable feedback, it is difficult to generalize a formal collection mechanism appropriate for multiple customer types (for example, a survey that effectively obtains feedback from students and workforce board customers).

However, many LMI agencies have limited ability to capture customer feedback on how product and service offerings might be adapted. During our interviews and other discussions with LMI representatives, resource constraints was the most frequently cited reason that those agencies do not capture customer feedback. In other states, information technology policies preclude LMI agencies from gathering information about customers. These resource and/or technology restrictions are sometimes so severe that the agencies are not even able to obtain statistics on the usage of their website to ascertain the number of downloads for various product offerings. Since we interviewed a small subset of the states, it is unclear how widespread the issue is currently, but for some LMI agencies, technology restrictions and/or resource limitations make it nearly impossible to effectively prioritize customer types or product offerings because there is little to no available data on which to base decisions.

Without a framework to identify key customers and obtain systematic feedback from these customers, states engaging in customer consultation do so in a manner they believe best meets the needs of their key customer groups. By stratifying their customers and obtaining feedback based on customer type, some states are able to obtain enough input to inform their product and service offerings. However, the extent to which states obtain adequate feedback for informed decision-making varies widely.
Factors Affecting Agency Customer Orientation

Though operating in a national system, agency realities on the ground often differ significantly from state to state. Many of these realities affect the ways in which agencies interact with customers, including:

**Agency structure – Where does LMI fall within the state bureaucracy?**
Where the LMI agency is positioned within the state bureaucracy may dictate the agency’s stature within state government, its ability to create synergies with other agencies, and its access to flexible and/or discretionary resources. Traditionally, as data production shops, LMI agencies have often been placed at a “mid-level” with the agency. The extent to which LMI analysts are used to help interpret data during the course of policy discussions is somewhat limited; thus, the LMI agency often can have quite a low profile in policy deliberations. At the same time, meeting an expanded or increasingly complex set of LMI customer needs may require greater visibility among policy makers. The placement of the LMI agency in the bureaucratic hierarchy is often based on the need to retain objectivity in the data produced. However, that same bureaucratic placement can sometimes be so low profile that the agency’s staff are not used effectively as a resource for policy makers during their deliberations because the staff does not have sufficient standing with policy makers to ensure that the data are used appropriately and that insights that only the agency might have are incorporated into policy deliberations.

**State policy orientation – How does LMI fit into the current agenda of state elected officials?**
In times of economic uncertainty, an LMI agency may commit a great deal of resources to answering the questions that are posed directly by state elected officials. Responding in a timely manner to these customers is a prerequisite for success and can influence agency staffing decisions and operating plans, regardless of federal funding support. However, these demands on staff time affect the amount of time available to serve other customers.

**Leadership – What are the priorities of the state’s LMI Director?**
While all operate under the same parameters of BLS and ETA deliverables, the priorities of LMI Directors differ. Those who are more engaged in the national system may be more aware of the products and services offered in other states.

**Supplemental state funding for LMI products and services – At what level (if at all) do state government or external funding sources contribute to the LMI budget?**
If state LMI agencies have a budget that consists only of funding from cooperative agreements with federal partners, they will not be able to offer additional products.

**Staff resources – What can an LMI agency accomplish given existing staff resources?**
Staff (and staffing levels) with the breadth of skill sets necessary to offer a variety of LMI products and services directly influence what is produced. In some states, fiscal constraints have created limits on authorized staff levels, ability to travel, and other investments that may be tied more directly to state general revenue requirements and not tied directly to federal grant limitations.
The factors above will impact the ways in which individual state LMI agencies identify their primary customers and conduct their operations accordingly.
Appendix I: Methodology

The classification system presented in this report resulted from an extensive textual analysis of the Program Year 2009 Workforce Information Grant (WIG) reports provided by states to the Employment and Training Administration. All products, services, and activities mentioned in these reports that are not uniform grant deliverables across states (for example, Workforce Information Database population, statewide industry and occupation projections, etc.) were catalogued. Each product was coded by customer group and product type, and an analysis of this database was used to develop the customer and product typologies detailed in this report.

At the time of data collection, WIG reports were unavailable for the 2009 Program Year for seven states. A web textual analysis was performed on each of these states’ websites to catalogue and code the products they produce and disseminate via the web.

An inherent bias of this methodology is the nature of the information reported by states in their WIG reports and what is accessible via their websites (where applicable). To overcome this challenge, interviews were conducted with LMI directors and/or associated staff to learn about additional product offerings and the processes presently used to conduct customer consultation and outreach. In addition, some interviews focused on specific emerging products and delivery mechanisms.
### Appendix II: Mapped Customer & Product Typology

This graphic is also available as a collapsible Excel file.

#### Product Delivery Mechanisms

- GIS/Data Mapping
- Grant Proposal Input
- Grant Review
- Interactive Web Tools
- Newsletters/Updates
- Presentations
- Press Releases
- LMI Advisory/Interpretation Consulting
- Special Data Runs

#### Customers / Actions Influenced by LMI

<table>
<thead>
<tr>
<th>Products</th>
<th>Labor Market Actors &amp; Advisers</th>
<th>Policymakers / Planners</th>
<th>Value Added Disseminators</th>
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<td>Change Job</td>
<td>Identity/Education/Training Need</td>
<td>Offer Career Advice</td>
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<td>Industry and Occupation Profiles</td>
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<td>Job Matching System/Job Sources</td>
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<td>Projections (by Occupation, Skill, Geography, etc.)</td>
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<td>Real-time Data (Job Postings)</td>
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<td>Target/In-Demand Occupations</td>
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<td>Wage and Benefit Studies</td>
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<td>Wage Data</td>
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#### Web Services

- Press Releases
- Presentations
- Newsletters/Updates
- Webinars
- Interactive Web Tools
- Web Services
- Learning
- Special Topics
- Special Data Runs
- Educational Studies
- Special Topic Studies/Surveys
- User Training (including e-learning)
- Web Services
- Key Occupation Requirements
- Projections (by Occupation, Skill, Geography, etc.)
- Real-time Data (Job Postings)
- Resource Guides
- Target/In-Demand Occupations
- Teachers’ Guides/Career Guides
- Training Inventory
- Training Provider Certification
- Transferable Skill/Competency Model Studies
- Learning
- Community/Regional Economic Profiles
- Consumer Price Index
- Economic Analysis
- Economic Impact Analysis
- Industry Analysis
- Industry and Occupation Profiles
- Industry/Cluster Studies
- Projections (by Occupation, Skill, Geography, etc.)
- Region/County/Community Profiles
- Job Control Surveys
- Labor Demographics
- Labor Market/Commuting Studies
- Labor Supply and Demographic Studies
- Legislative Analysis/Data Support
- Potential Applicant Pool Analysis
- Projections (by Occupation, Skill, Geography, etc.)
- Unemployment Insurance Claimants Report
- Wage and Benefit Studies
- Wage Data

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This table outlines the products and services offered by LMI, categorized by type and intended users. Each product is associated with specific actions influenced by LMI, such as identifying education/training needs, making career choices, and seeking jobs. The table also highlights the mechanisms through which these products are delivered, including presentations, newsletters, web tools, and data mapping services.
Actions Influenced by LMI

**Labor Market Actors and Advisers**

**Jobseekers and Students**
- *Change Jobs* – transition into a new job or the workforce.
- *Identify Education/Training Need* – identify additional skill sets they might obtain, where they can apply these skills, and how they can obtain the training they need to have the skill set necessary for a certain occupation or job.
- *Make Career Choices* – make choices about next steps in their career.
- *Seek a Job* – identify where jobs are available and the set of skills needed for success.

**Businesses**
- *Determine Skill Requirements* – set skill requirements and determine internal training plans based upon knowledge obtained about local labor pools.
- *Recruit Workers* – develop worker recruitment strategies based on their knowledge of the local area and the associated qualities and characteristics of the local workforce.
- *Select Site Location* – select where they will locate their operations based on labor pools and associated skill sets according to operational needs.
- *Set Wage Scale* – determine how much workers will be paid based on wage and benefit knowledge.

**Education and Training Instructors and Counselors**
- *Design Curriculum* – design curriculum based on knowledge and skills that are in demand and are projected to be in demand in the local and regional area.
- *Determine Program Scale* – determine what types of training to offer and where training opportunities should be provided based on knowledge of current and future labor market conditions.
- *Offer Education/Training Advice* – advise students through formalized classroom exercises and counseling relationships in their career and education/training choices based on knowledge of current and future labor market conditions.
- *Schedule Training Offerings* – schedule training offerings based upon knowledge of training needs for workers and businesses as determined by current and future labor market conditions.

**Policymakers and Planners**

**Workforce Development**
- *Acquire Expertise in Analyzing Data* – seek expertise in analyzing data and applying it to policy and program implementation decisions.
- *Develop Job Opportunities* – gain insight into the workers that live in a geographic area and the businesses that operate there to cultivate job opportunities for an existing talent pool (and vice versa).
- *Identify Educational/Training Resources* – connect jobseekers and students with the training resources they need to be competitive in the regional labor market.
• **Match Workers to Job Opportunities** – access job banks and match jobseekers to existing opportunities based on geographic location, skills, and interests.

• **Package Data to Improve Access and Understanding** – repurpose LMI data into actionable information for the customers they serve.

• **Understand Economic Trends** – develop understanding of the trends facing local/state areas for the purposes of developing policy.

• **Understand the Capabilities of Jobseekers** – match workers to job opportunities, fulfill business needs, and drive policy decisions about education and training.

• **Understand Who Is Available for Jobs** – develop a comprehensive snapshot of the characteristics of the unemployed/underemployed.

**Economic Development**

• **Acquire Expertise in Analyzing Data** – conduct analysis and apply data to reach economic development goals.

• **Package Data to Improve Access and Understanding** – disseminate relevant data to businesses considering relocation or expansion as well as to other relevant policy-makers that make economic development decisions.

• **Understand Economic Trends** – enhance understanding of the economic conditions influencing the success or failure of businesses in the region and relevant policy interventions.

• **Understand the Capabilities of Jobseekers** – assess the knowledge, skills, and abilities of jobseekers to attract business investments and facilities.

• **Understand Who Is Available for Jobs** – develop a comprehensive snapshot of the characteristics of the unemployed/underemployed to attract businesses.

**Education**

• **Acquire Expertise in Analyzing Data** – obtain additional expertise in conducting analysis and applying data to answer relevant research questions.

• **Identify Educational/Training Resources** – understand existing training and education resources and develop additional training/education opportunities or better align programs with the needs of the workforce and businesses.

• **Match Students to Job Opportunities** – understand labor market conditions to develop appropriate curriculum and connect current and future students with existing opportunities.

• **Package Data to Improve Access and Understanding** – disseminate relevant data to students and other education policymakers as they make career choices and drive policy agendas.

• **Understand Economic Trends** – enhance understanding of the economic conditions influencing the success or failure of students, areas of study, and relevant policy interventions.

**Researchers**

• **Acquire Expertise in Analyzing Data** – obtain additional expertise in conducting analysis and applying data to answer relevant research questions.

• **Package Data to Improve Access and Understanding** – analyze and disseminate relevant data to key stakeholders for academic and practical research purposes.
• **Understand Economic Trends** – enhance understanding of the economic conditions influencing outcomes in research.
• **Understand the Capabilities of Jobseekers** – analyze the knowledge, skills, and abilities of jobseekers to gain insight into research questions.
• **Understand Who Is Available for Jobs** – analyze demographic and skill characteristics of the available labor pool.

**Federal, State, and Local Governments**
• **Acquire Expertise in Analyzing Data** – obtain expertise in analyzing data for the purposes of making policy decisions.
• **Identify Educational/Training Resources** – develop policies that connect constituent jobseekers and students with the training resources they need to be competitive in the labor market.
• **Package Data to Improve Access and Understanding** – enhance constituents’ understanding of relevant labor and economic conditions by re packaging LMI data and integrating it into other government products through data alignment, co-branding data, or directly informing other government programs.
• **Understand Economic Trends** – enhance their understanding of general and specific economic trends to make appropriate policy decisions.
• **Understand the Capabilities of Jobseekers** – assess constituents’ knowledge, skills, and abilities to make appropriate policy decisions.
• **Understand Who Is Available for Jobs** – understand the demographic characteristics of constituents to improve job prospects and tailor services for the unemployed.

**Internal Customers**
• **Package Data to Improve Access and Understanding** – develop tools to streamline data and information production or decrease the time necessary to produce data and information for other customer groups.

**Value-Added Disseminators**

**Media**
• **Disseminate Data to Casual Users and the General Public** – educate the public about ideas, trends, and developments that affect them as individual labor market actors and constituents.
• **Report on Economic Trends** – conduct analysis, provide context for independently formed ideas, and analyze economic trends, potentially with an eye toward influencing policymaker decisions.

**Commercial Data Providers**
• **Package Data to Improve Access and Understanding** – repackage state LMI data for export into proprietary tools and user interfaces.
Appendix III: Implementation Tips

As described in the paper, mapping the relationship between LMI customers and LMI products could help states to identify the breadth of their customers and more clearly understand their customer needs for LMI and workforce intelligence services, products, and tools. This customer/product mapping approach provides one useful way to refocus product offerings to reflect these customer priorities.3

Complementing that approach, some states regularly collect data on customer satisfaction focusing on how well products offered meet targeted customer needs. LMI agencies may consider utilizing a variety of techniques to gain insights from customers. Several common customer feedback mechanisms they should consider include:

- Tracking product use
- Media mentions
- Customer surveys
- Focus groups
- User relationships
- Studies of LMI product uses

These feedback mechanisms are described in more depth below.

Product-Use Tracking Statistics

Product-use statistics reflect the number of times that customers use different kinds of information produced by an LMI agency. By focusing data gathering efforts on individual products, LMI agencies can often quickly and easily gauge the utility of a product. This can be particularly valuable if the types of customers using the product are also tracked. This type of feedback collection mechanism is designed to be passive and might be integrated into existing activities and services. Two types of use statistics should be collected:

- Attendance – Collected at presentation and training events and any other active public dissemination of an LMI product. Where possible, characteristics such as customer type and product type presented should be collected and/or noted.
- Google Analytics – Integrated through web services. Google Analytics should be implemented for each product/webpage to track and analyze visitor characteristics (number of page visits or downloads, IP address location, new vs. returning users, frequency and recentness of visit, and browser type), how customers arrive at an LMI website (traffic sources), and content accessed (at the individual page/product level).

Media Mentions or “Hits”

Tracking “media hits” (or mentions of LMI data in a variety of publications) provides some indication of how media sources perceive LMI products and the number of impressions that products receive as a

result of re-dissemination by traditional and non-traditional media. Google Alerts and other media and social media monitoring tools⁴ can be a great resource for tracking appearances of keywords across the internet when new webpages, blogs, articles, or other publications are added to the web containing those words. These tools can be used passively or actively to collect and aggregate instances in which external entities mention LMI data or use it on their webpage, in a social media context, or in other online publications.

Where possible, mentions should be categorized by type of media (online newspaper, blog, personal website, government agency website, etc.) to enable meaningful tracking and follow up. Developing a core set of keywords to monitor is key to the successful tracking of media mentions. Furthermore, this feedback collection will require a designated staff person(s).

Customer Surveys
In instances where a large number or broad group of customers utilizes a product, a customer feedback survey should be designed to make sound judgment about the nature and usage of a product and how it might be refined to meet customers’ needs. Online survey tools enable quick and affordable collection of feedback from a broad and dispersed set of customers, but attention should be paid to the set of questions asked and response rates, especially from different groups of customers. As any LMI shop will know, response rates for online surveys can be notoriously low. Furthermore, to obtain good information, LMI agencies will need to conduct some degree of prior customer outreach to obtain meaningful survey results.⁵

Focus Groups
In instances where customers who use a product are easily identifiable, one customer group is the primary user of a product, or where a good deal of customization is required for a product based on customer type, utilizing focus groups to obtain customer feedback will ensure that LMI agencies can probe deeply into the needs of their customers. Implementing focus groups under the supervision of a trained facilitator can help state LMI agencies to obtain feedback about products and enable LMI agencies to probe deeply into the needs of their customers. Focus groups provide an opportunity for LMI agencies to create an understanding of not only how customers use current products but, more importantly, how customers think and act based on the information LMI agencies provide to them. This feedback mechanism is particularly valuable for anticipating customer needs for products and developing new products to meet previously unidentified customer needs.

User and Partner Relationship Management
Some customer groups require immediate, specialized products or are high priority LMI customers that may receive specialized products or data. The needs of these customers are best understood through direct, one-on-one outreach. LMI agencies should seek to obtain this kind of feedback on a consistent

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⁴ Many other monitoring tools exist. Some prominent examples include Cision Software for general media and social media monitoring (subscription) and HootSuite for social media impact monitoring (free).
⁵ States should consult “Customer Satisfaction Made Easy,” a publication of the Workforce Information Council, as they seek to implement customer surveys.
and proactive basis by developing relationships with their highest priority customers to understand their unique needs.

**Evaluation of Customer Use of LMI Data**

Even if states implement one or more of the feedback collection mechanisms described above on a consistent and systematic basis, it is likely that some customers’ needs will still go unidentified because customers have limited knowledge about LMI applications and the questions LMI has the power to answer. To identify opportunities for innovation that customers do not currently know are possible, LMI agencies should consider developing more systematic methods of studying how customers use data and products to inform their decision-making on an individual product basis. Collecting feedback by evaluating customer uses of LMI could be particularly helpful when trying to develop next generation LMI products and services or for understanding what decisions are being made without a solid grounding in labor market information.

**Determining the Right Feedback Mechanism to Use**

Each of these feedback mechanisms requires customer engagement in some form, but some approaches are more passive while others require an actively engaged customer to obtain meaningful feedback. The resources required from LMI agencies to gather this feedback increase with the level of engagement of the customer, including both financial and staff resources. The mechanisms outlined above should be used in combination, keeping in mind that regular, consistent collection of customer feedback must be a high priority for all LMI agencies despite varying levels of resources.

When choosing a feedback mechanism, states should consider the following factors:

- Actions influenced by LMI
- Product type
- Complexity and customization of the product for different customer groups
- Product production cycle (frequent or infrequent production of the product)
- Regularity with which feedback is necessary
- Resources needed to obtain feedback
- Ease of information collection
Appendix IV: About the Labor Market Information Training Institute

The Labor Market Information Training Institute provides a mechanism for advancing the art and science of labor market information (LMI) among all LMI professionals and the LMI customer community. We accomplish this mission through training and information programs.

The Institute has served as the primary source of staff training in the LMI industry since its formation in 1995. Since that time, the Institute has delivered a variety of training opportunities for the LMI producer and user community.

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