Letting Numbers Guide: Labor Market Information and Youth Services

One of twelve training packets created for Texas Workforce Board regions as part of the Texas Workforce Commission Youth Program Initiative.

1. Powerful Partnerships
2. Getting Your Youth Advisory Group From Here to There
3. You and Youth in the Middle: Effective Case Management
4. Employer Engagement
5. Youth at Work: Making the Most of Work-Based Learning
6. Youth Investment in Rural Areas
7. Windows on the Workplace: Mentoring, Youth, and WIA
8. Community Resource Mapping: Knowing Your Youth Services Landscape
9. Letting Numbers Guide: Labor Market Information and Youth Services
10. Engaging Out-of-School Youth
11. Building Your Year-Round Youth System
12. Evaluate It!: From Policy to Practice to Performance

You may download additional copies of this packet or any in the series from the Board & Network Partners area of the Texas Workforce Commission website: www.twc.state.tx.us/customers/bnp/bnp.html.

Letting Numbers Help: Labor Market Information and Youth Services

TRAINING GOALS

- Understand what LMI is, how you find it, and what it can and can't tell you
- Identify how you can use LMI to improve local youth service delivery

IN THIS PACKET

Now I'm an Economist?! LMI & Youth Services

Barely a day goes by without news about our economy and labor market: emerging industries, employment rates, wages, the aging workforce, and more. If you are like most people, you tune in for the headlines but leave the data and analysis to economists and planners.

However, labor market information (LMI) – who employs whom, where and for what wages – provides an important piece of the puzzle for people involved in youth development.

"But Jim, I'm only a country doctor..." Dr. McCoy would say to Captain Kirk whenever he felt something was beyond his reach. If you're starting to feel like this, don't worry. No, you don't have to be an economist, and labor market data can seem impenetrable, perhaps even unreliable amidst political and policy changes, advancing technology, and turbulent world events. Even still, it's a tool youth workers and program designers can use to bring relevancy, coherence, and energy to their support for youth.

As you get more comfortable with LMI, you'll find that it actually provides a compelling shared language between employers, educators, job seekers, youth programs, and community leaders. After all, youth services are in large measure about personal and community economic development.

This training packet is designed to help you understand where to find labor market data and practical ways you can use it to power up youth services.
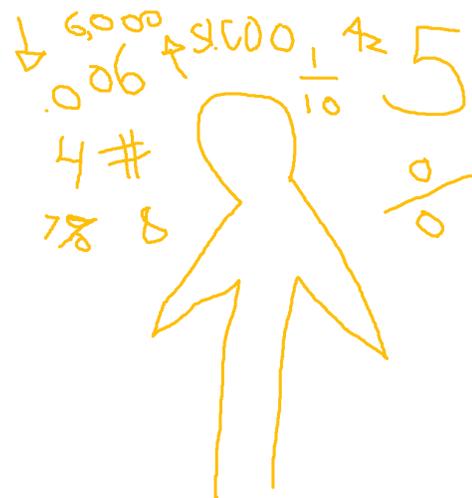
How Labor Market Information Can Help

What do the numbers say?

LMI CAN TELL YOU
• Employment trends and job projections
• Wage information
• Labor force skills/quality
• Projected training costs
• Employers and the workforce in your area
• New and emerging industries
• Employment needs or the unemployment rate in a particular field

LMI CAN HELP...

YOUTH
• Locate the employers and employment opportunities in your community and elsewhere
• Find out how much different occupations pay
• Identify good (and not good) career paths or ladders and training needed to advance
• Find new or emerging careers
• Understand the cost of living in an area you hope to work; financial planning
• Make informed financial decisions

EDUCATORS AND YOUTH DEVELOPMENT STAFF
• Talk with youth clearly and concretely about "real world" requirements – necessary skills, career options, educational requirements
• Identify new course & training offerings; enhance curriculum
• Create partnerships with employers
• Design activities and programs that help youth explore career paths, including emerging and new paths
• Identify at-risk populations that might need targeted services

EMPLOYERS
• Track local and national industry trends
• Understand the current and projected local labor pool - the availability and quality of workers
• Make decisions about where and how you invest training resources

• Decide where to locate and/or expand business operations
• Set wage and benefit levels

COMMUNITY LEADERS AND PLANNERS
• Identify economic development opportunities and needs
• Monitor the quality of the local labor pool and workforce needs; develop or support effective education, training, workforce strategies
• Target education and workforce development resources effectively
• Market area assets
• Adjust local economic policies; attract new business

Levels & Layers of LMI

Most people – including many young people – have heard snippets of labor market information or felt its impact. A boom, then bust in technology. Steady growth in healthcare. You want to be an entertainer? You should look at something in computers. There's high demand for that. The trick with labor market information is to go beyond headlines into the actual data and figure out how best to use it with youth once you have it.

People scrutinize labor market data at many levels: local, county, state, regional, national and global. You should be aware of trends at each level, know how to find data on each, and feel comfortable using it with individual young people and in overall program design.

NATIONAL AND STATE LEVEL LMI

The federal government, specifically the Department of Labor's Bureau of Labor Statistics and Census Bureau, collects reams of data.

HERE ARE COMMONLY USED SOURCES AND RESOURCES:

• Bureau of Labor Statistics
• Census Bureau – American FactFinder
• County Business Patterns
• Texas LMI Tracer – Texas Workforce Commission
• SOCRATES Texas Regional Labor Market Analysis
• Texas Economic Development – Business & Industry Data Center
• Texas Local Workforce Centers

FOR YOUTH WORKERS AND EDUCATORS, SOME OF THE USEFUL TOOLS THAT RESULT AT THIS LEVEL INCLUDE:

• Occupational Outlook Handbook
• Career Guide to Industries
• America's Career InfoNet
• O*Net Online

Look for links to the sources in the Resources section of this packet.

It's tempting to focus primarily on the national scene and to prefer national trends to those in our community – perhaps even more so with youth than other job seekers. People find work everywhere today, and many companies are national, even international, and move employees around routinely.

We also tend to think of youth "going off" to far-flung locations in search of educational and employment opportunities. Many do. However, according to the 2000 Census, 62% of Texans living in the state were born in Texas. Of those, nearly three quarters live in the same county they did five years before. This suggests that while there is mobility – people moving in and out of counties and the state – many people depend on local employment, education, and training opportunities. Youth included.

State level labor market information will tell you about "hot" occupations and industry trends in and around Texas. You'll also find projections on where today's labor market and demographic patterns might lead over the next several decades. For example, given current trends, here is what

Round LMI out. What do area employers say?

Texas' labor market would look like down the road, with several of the major implications[1]:

• A population and labor force that is larger, older, and increasingly racially/ethnically diverse
• A less educated and less skilled labor force because demographic groups growing most rapidly currently have lower levels of educational attainment
• Reduced overall earnings for employees related to lower income levels among certain racial/ethnic groups
• Increased demand for workforce training, with substantial costs related to entry level and advanced skill upgrades
• Higher costs for elementary and secondary education and a higher need for financial aid at the post-secondary level

That's a powerful rationale for developing and supporting top-notch youth development policies and practices, if ever there was one, especially for high-risk groups. Needless to say, the services you provide or develop are part of the solution!

LMI Close To Home

Many people, especially youth, underestimate the opportunities in their region and workplaces nearby that can help shape the path to a successful career. Here's a test: if you were asked right here, right now, to name the mix of major industries and occupations in your community, could you do it? Your region? How about attractive opportunities that are not as well known? Likely occupations 5-10 years out, when the young people you support will be ready for them?

In fact, you could probably walk down a block or main street of your town and discover at least one new employer or business you didn't notice before. Not surprisingly, some employers report that they participate in local educational or workforce development partnerships just so "people will know we're here." As with national and state data, local, county, or regional LMI can tell you about industry presence and patterns. For instance, it can tell you about "clusters" of employers – employers in the same industry, with similar workforce needs. It can point you to resources you can use here and now: employer partners and a wide range of career exploration, pre-employment and work-based learning opportunities, and more.

With only a shallow wade into the pool of data available, you can easily look at the "economic footprint" of your area – the mix of industries and which employs the greatest number of people – and find answers to questions like these:

• Do your industry mix and employment patterns mirror those of the region, Texas, and the nation as a whole? Are there industries with less activity? More?
• How many employers do you have in each industry area?
• Do surrounding counties or regions have more opportunities in areas where your county or region isn't as strong?
• Are these industry areas growing and hiring, or declining?
• How many employers do we have in each of these industry areas? Who and where are they?
• How many – and which – companies are owned or operated by minorities that match the youth populations we serve?
• Where would you need to go to provide experiences for youth interested in industries with little or no presence in your area?

[1] A Summary of the Texas Challenge in the Twenty-First Century: Implications of Population Change for the Future of Texas. The Center for Demographic and Socioeconomic Research and Education, Department of Rural Sociology, Texas A&M University System. December 2002.

What LMI Can't Tell You

As anyone who works with labor market data will tell you, it's not perfect, nor does it represent the be all and end all of economic opportunity. Labor market data is usually tracked according to political lines, lines that employers and economic activity don't always "see." The data can be at least a year old, if not four to five, or taken in a volatile job market, before a major world event, or before a major policy shift. Projections based on data, especially past trends projected forward, only suggest a likely direction, by no means a definite future.

Even with the best numbers, LMI can't necessarily tell you:

- Where, when, and how employers recruit
- Specifically which companies are hiring
- Whether an employer can/will hire youth, especially youth under 18, and for what types of jobs
- What kind of training a company will provide or pay for
- Career paths within a particular company
- The current situation – data is collected regularly, even quarterly in some cases, but not in 'real time'
- Where innovation and entrepreneurship can lead
- The future if differentials change (educational attainment, demographics, socioeconomic factors)
- How world events will affect the economy

Good relationships with a mix of area employers, small and large, private and public, can give you important insights you might not pick up in the numbers.

Four Practical Ways You Can Use LMI to Power Up Youth Services

Again, you don't need to be an economist to use labor market information. Here are four very practical ways you can use it to guide your work with youth.

> #1 Understand & Engage Employers
> #2 Use Career Clusters to Organize & Focus Skill Development
> #3 Engage Youth
> #4 Add Relevance to Staff & Partner Training

#1 - UNDERSTAND & ENGAGE EMPLOYERS

Employers understand labor market information. They live it everyday as they hire, train, expand, and shape business strategy. You can use local data to understand your economic and employer landscape and to recruit and retain employers. You may know the biggest business in town – the one that everyone goes to for internships, donations, etc. – but do you know the other industry areas? Labor market information can guide you to them and extend your reach within them.

Look for Activity One "Looking at Your Economic Footprint," in this packet for instructions and tools you can use to analyze the economic profile of your community or region. You can also ask your local workforce board or economic development agency for profile information.

HOW YOU CAN USE EMPLOYER PROFILE DATA:

• Get a list of major employers in each industry area, especially growth areas, and involve representatives in your Youth Advisory Group, organizational board, etc.
• Identify business associations and

networks that serve the major industries in your area. Broadcast calls for mentors, work-based learning opportunities, etc. through these networks.
• Review your mentor, work-based learning, and job recruitment strategies to make sure they cover all main industry areas.
• Survey area employers about work-based opportunities for youth
• Work with employers in major industry areas to integrate youth hiring opportunities into their recruitment and hiring practices. Ask those employers to speak to peers about how to do this.
• Identify where you might need to develop partnerships or relationships outside of your town, county and region so that you can still provide youth with exposure to industries without a strong local presence, i.e., in this case, theaters, museums, large hospitals, and nursing homes.
• Develop brochures or simple handouts for youth that profile the types of industries in your area and give examples of the opportunities, requirements, and career paths available.

Some youth initiatives, like school-to-career efforts, use a formal industry cluster strategy to organize employer participation.

For example: employers representing area manufacturers, health organizations, or financial institutions form an industry-specific committee that advises the local partnership, providers, or a youth council or workforce board and identifies how they, as group, can best support youth programs. Alternatively, local youth providers establish relationships with existing industry associations or economic development-driven cluster initiatives, which then play an intermediary role with employers.

take action!
lmi and employers

Understand your economic footprint. Which industry areas are prevalent? Which aren't? Find a source of local data – information you can easily digest. Use it to jog your thinking about how to mobilize employers and discover great work-based learning opportunities.

Organize by clusters. Customize by skills.

#2 – Use Career Clusters to Organize & Focus Skill Development

In the world of K-16 education, labor market information has been used to promote the idea of career clusters.

What is a career cluster?
A group of related industries and the career paths, occupations, and skill requirements they represent.

Numbers can show you employment patterns. However, career preparation isn't about plowing through labor statistics and hot jobs lists. Today's workplace is highly demanding and changing rapidly. Young people need skills and they need to know how to learn, relearn, and navigate the landscape. Career clusters sit at the intersection of labor market information and learning. They give you a framework you can use to solidify and energize local career preparation and training activities.

Career clusters help educators, youth workers, employers and others:

- Understand the skill standards for different jobs and career paths.
- Link instruction, curriculum, and learning activities to skill demands of work.
- Identify a continuum of learning, counseling, and workplace activities from secondary school through post-secondary and into employment.
- Engage young people and use workplace connections to spark a stronger interest in learning and more positive outlook on their abilities and future.
- Identify basic employability and more specialized occupational skills needed to be successful in a particular field.
- Connect employers and educational programs.

In your travels or on the Internet, you'll run across a variety of cluster configurations. Seven clusters in one state, eight in another, sixteen in another, not to mention local and national variations. You will hear different language used when people talk about them: industry clusters, pathways, sub-clusters, career webs, career ladders, etc.

Don't be confused! The guiding principle is the same: similar occupations can be grouped, and the skill requirements in them detailed, so that you can better design career preparation programs. State and local programs often choose to emphasize clusters that align with their particular economic profile or interests. The most important thing to remember is that career clusters enable people to identify the knowledge and skills – and the training – essential to each cluster.

If you are new to clusters, the States' Career Cluster Initiative (www.careerclusters.org) is a good jumping-off point and reference. There, you'll find a list of 16 clusters that cover a full range of occupations:

- Agriculture, Food, and Natural Resources
- Architecture and Construction
- Arts, Audiovisual Technology and Communications
- Business, Management, and Administration
- Education and Training
- Finance
- Government and Public Administration
- Health Science
- Hospitality and Tourism
- Human Services
- Information Technology
- Law, Public Safety, and Security
- Manufacturing
- Marketing, Sales and Service
- Science, Technology, Engineering, and Mathematics
- Transportation, Distribution, and Logistics

Each cluster outlines "pathways," career areas within that field, and the skills and knowledge important to the field as a whole and to particular pathways.
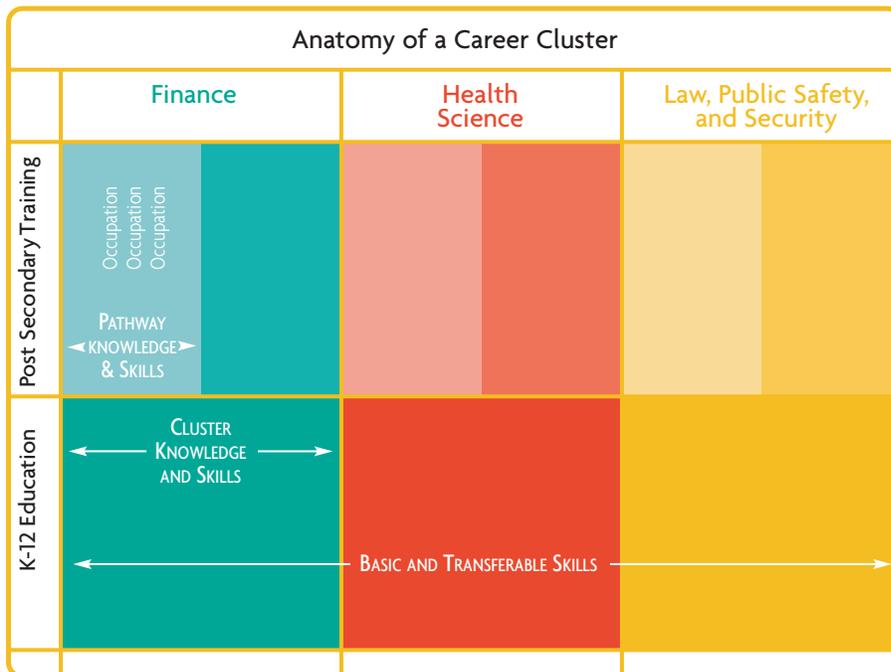
"Career cluster" is an idea – an organizing principle, not a set model. In practice, clusters take on many shapes and forms. In K-16 education, career clusters have led to new program designs – career academies and apprenticeship programs, for example. Or, they have been at the root of smaller changes: the high school course handbook shows which courses support particular careers; counselors and students use the language of clusters to talk about choices and skill needs; students might even declare a "career major," internships are categorized by cluster; schools negotiate "articulation agreements" with post-secondary partners so that students can earn credit for courses and work experience, and so on.

Non-school youth providers should know about any formal educational and training programs that match cluster areas. You'll want to steer appropriate youth toward them. And some community-based youth providers do design cluster-specific training programs, especially where local workforce needs create momentum to do so. However, more likely, you'll want to adapt cluster methods to your practices: case management and counseling, mentoring, work-based learning, learning projects, and other activities.

take action!
lmi, career clusters, and skills

Use career cluster and pathway skill sets in your methods and tools. Work-based learning plans, mentoring activities, case management support – every service has at least ONE way to support cluster skill awareness and practice.

Anatomy of a Career Cluster

	Finance	Health Science	Law, Public Safety, and Security
Post Secondary Training	Occupation Occupation Occupation / Pathway ◄ Knowledge ► & Skills		
K-12 Education	Cluster Knowledge and Skills		
	◄ Basic and Transferable Skills ►		

Connect youth to the people and places behind the data.

HOW CAN YOU USE CAREER CLUSTER AND PATHWAY SKILLS:

• Train case managers to use cluster skill sets to help assess each young person's skill development needs in career areas that interest him or her.
• Include cluster and/or pathway skills in work-based learning plans so that youth and their employer can focus on them explicitly.
• Help youth create or find projects that emphasize cluster skills.
• Include career cluster information in mentor training sessions. Ask mentors and youth to identify cluster or pathway skills they can work on together.

Organizing by cluster works! In one "tidy" model, you have an overarching framework for organizing programmatic activities, resources, and employers coherently – and tools for establishing each young person's unique skill development needs and keeping them squarely in focus.

#3 – ENGAGE YOUTH

Truth be told, labor market information isn't exactly riveting to the average 14-21 year old. At least not the way most youth experience it: on job boards, online career searches, career skills inventories, and so on. Youth do need to know how to search the information, and many providers or case managers will run "how to use labor market" or job search sessions for their clients. More importantly, young people need ways to bring that fairly dry information and research to life – to make it real and personally relevant.

Often young people are still learning what adults take for granted: for example, how occupations and fields are categorized. A young person would be more likely to search on the word "dogs" than think to look to look under...well, what career cluster or category matches that interest? Our best categorization schemes usually don't match the way young people think about their future. Our categories DO provide little worlds to explore – people to meet, places to visit, and work to observe.

In other words, you can use LMI and career clusters to bring coherence to your methods and at the same time, balance career research with real exploration.

HOW YOU CAN STRENGTHEN YOUTH EXPERIENCES:

• Actively recruit job shadow experiences in all career clusters. If you can't locate anything, look for ways technology can fill the gap (virtual job shadowing, mentoring, etc.).
• Make "job rotation" a part of work-based learning experiences – even a short two to three-hour rotation to another part of the business or team can open a young person's eyes to the broader possibilities and demands of the field.
• Provide case managers with web-based and local resources youth can use to explore cluster areas.
• Hold career cluster theme weeks – there are a number of national organizations that have materials and activities you can use (see suggestions in the Resources section of this packet).
• Organize career days or job fairs by cluster area – different days or similar organizations are physically located together. Employer associations and local Chambers are often interested in helping with these. Include a Q & A session or panel where employer representatives from the same career cluster area talk about similarities and differences, well-known and lesser-known opportunities, career pathways, etc. across their industry area.

take action!
lmi and youth engagement

Find the Career Inventory & Planning Tool in this packet. What services, materials, and resources do you have to support exploration and skill development in major career cluster areas? Any holes to fill?

#4 – ADD RELEVANCE TO STAFF & PARTNER TRAINING

Labor Market Information Workshop, Wednesday, 3:00-5:00 p.m.

Post an announcement like this and you'll get few takers. Yet, anyone who provides career-related support to youth should have a basic command of how to talk about and use labor market information – not just certified workforce and career development professionals. Chances are, if you are reading this packet, you either need to learn how to use labor market information or help someone else learn.

The classic labor market information workshop, commonly seen, covers "what is LMI," a snapshot of current trends, and internet and other tools you can use. It's a fine session and works well for career counselors and jobseekers, both youth and adult. In fact, many labor market workshops are geared mainly, if not exclusively, for them.

However, labor market information, used creatively as a topic, can provide a nice professional development hook for other youth service audiences as well – youth themselves, provider staff, employers, families, teachers, mentors, new youth council members, and others. Get people in a room talking about their community, their country, patterns, trends, and the future and you can have some fun!

Craft sessions that show your targeted audience how labor market information relates to specific tasks or functions of their work or life. If I'm a mentor, what labor market topics or themes might interest me most? A parent? A counselor? An educator? Staff from a mentoring or job placement service? Given the role each

plays, what (small subset!) of labor market resources and tools make the most sense for them?

Avoid dumping people straight into data sources and data tables. You'll surely lose them! Set the stage with a newspaper article about the community or regional economy, a brainstorm about how the economy affects their day to day life or work, or a discussion of the top skills they use in or need for their jobs.

HOW YOU CAN USE LABOR MARKET INFORMATION IN TRAINING AND PROFESSIONAL DEVELOPMENT:

EDUCATORS AND YOUTH STAFF
Curriculum development workshops, job shadow programs, or summer internships. Youth staff explore economic and labor market trends and needs, ideally tied to a workplace tour or experience, and develop (or help youth better develop) projects and activities based on them.

FAMILIES
An evening workshop for youth and family members on how to make good educational investment decisions (course selection, part-time and summer jobs, college, majors, training, etc.) where LMI serves as the backdrop for discussions.

EMPLOYERS
Seminar, co-sponsored with an economic development agency, on community and regional economic patterns and how they might affect hiring, marketing, sales, small business development, etc.

YOUTH PROVIDERS
A workshop on how to use labor market information to strengthen mentoring and/or work-based learning methods (employer recruitment, career cluster skill sets, etc.).

**take action!
lmi and training**

Review the way you currently use labor market information in the training and support you provide people involved in your youth effort. Do you include training on relevant and practical ways labor market information can support or focus their work? Identify at least 2-3 places where you could!

LMI, Youth, and Conscientious Career Support

Use your LMI powers for good!

LMI and career clusters can spark a hot debate in youth circles. People sometimes worry that programs will focus too narrowly on specific jobs or job skills. As a result, they set youth on a dead end track, rather than give them the broad base of skills and know-how they need to live, continue to learn, and advance. It's a valid concern.

Before you hurdle headlong into cluster development, carefully identify the approach that fits youth you serve.

QUESTIONS TO GUIDE CLUSTER DEVELOPMENT AND CAREER EXPLORATION

- How intense does your focus on particular career clusters need to be, given the interests and preparation stage of youth with whom you work?
- When will youth in your community first be exposed to career clusters? What will cluster exploration look like at different grade levels
  (middle school - post-secondary)?
- Will – or when will – youth choose more formal, structured training for a specific cluster, pathway or occupation?
- Are clusters defined broadly enough so that ALL of your youth can identify with one or more of them? Are they applicable to the college and non-college bound?
- Have you embedded activities and practices that show the breadth and depth of opportunities within a career cluster ("all aspects of industry")?
- How will your cluster approach ensure that young people have great basic skills?
- Is your cluster structure flexible and permeable enough so that a young person can change or adapt if his or her interests change?
- How will you communicate your career cluster strategy to youth, families, staff, job supervisors, and mentors?
- How will local employers be involved in developing your cluster strategy?

Youth in your care are probably all over the map when it comes to career readiness, economic sufficiency, and their future in general. Some are actively seeking full-time employment. Others are only beginning to explore career interests, their first full-time job still years away. Some know exactly what they want to do. Others have no idea.

Labor market information and career cluster methods should help youth make informed choices. They should never be used to "plot and slot" (track) or crush dreams! They are tools to help youth discover their passion, interests, and expertise. What a young person discovers might run completely counter to employment trends. You can still use LMI to help youth understand their choices, prepare "back-up" plans, or develop additional skills to round out their capabilities.

In other words, use your LMI powers for good, not evil! If you use LMI at all, use it regularly and teach youth to do the same. When you design or broker services for young people, let their interests, current and future, lead.
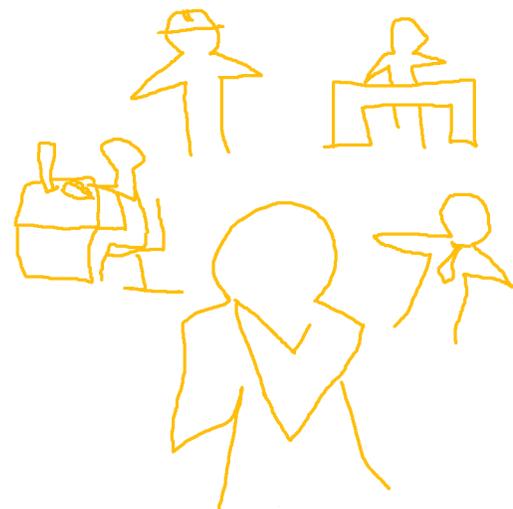
Activity One: Your Economic Footprint

Goal

- Examine the mix and quantity of employers in your county and region.
- Look at how many employees various industry areas hire.
- Explore implications for youth services and how the information might help enhance local youth services and relationships with employers.

Materials

- Copies or slides of your Economic Footprint, based on County Business Patterns (CBP) data. See "Making Your Own Economic Footprint Graphs" for instructions for creating a footprint (area employer profile) yourself.
- Somewhere Regional Industry Mix – Example
- Your Economic Footprint – Notes Sheet
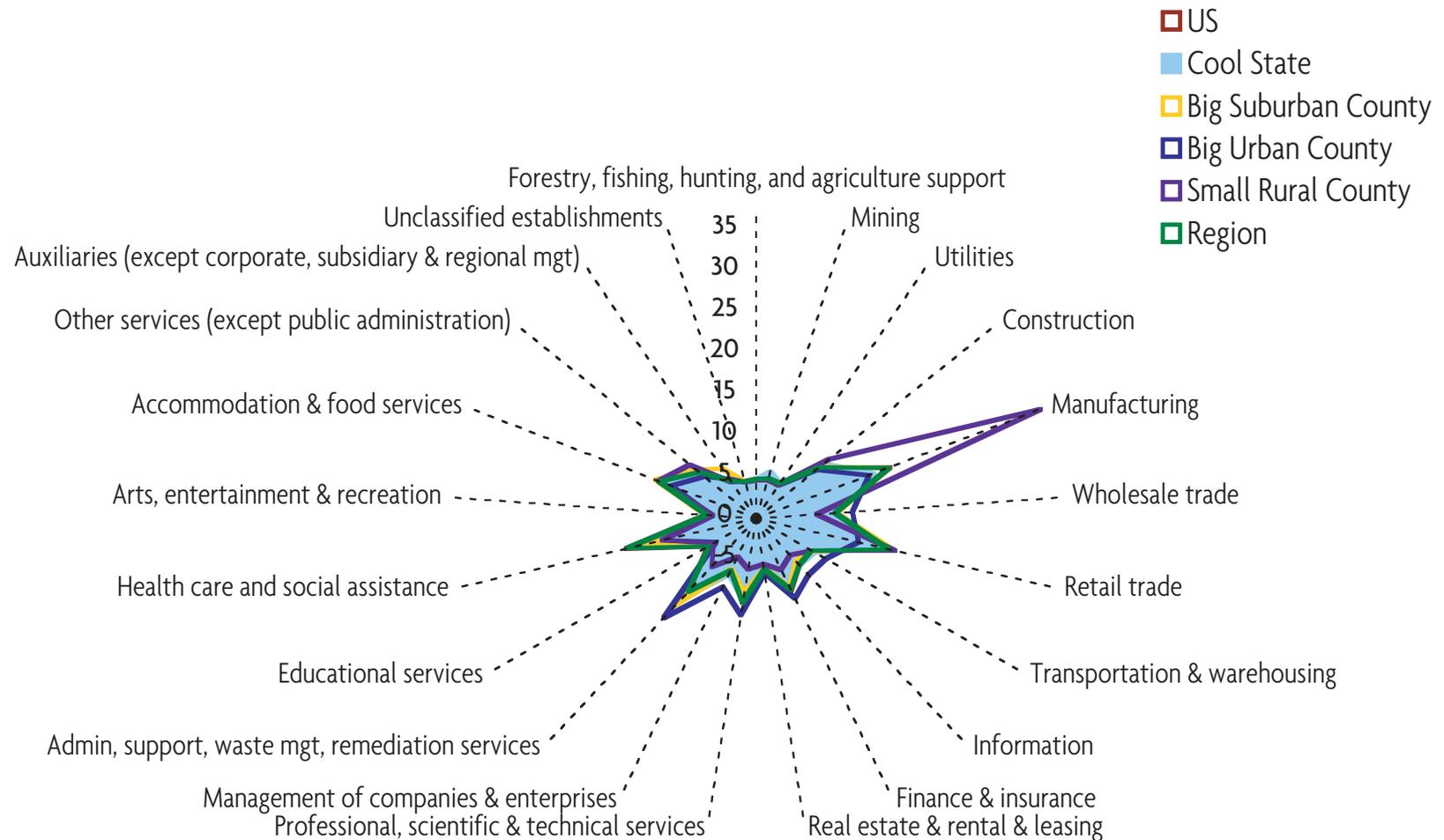
Time

- 1 hour

Instructions

1. Use the Somewhere Regional Industry Mix example as a warm-up. Study the graph for a minute or two, then give observations:

   - What do you see in the graph?
   - How do local patterns compare with the region, state and nation?
   - Do the patterns surprise you or confirm what you knew?

2. Next, think about implications for youth-serving organizations. How might the data be used to strengthen youth services or provide better support to youth? Give 2-3 examples.

3. Now, working in groups of two to four people, review your own Economic Footprint materials.

4. With your group, discuss your observations. (20-30 minutes)

   - What did you each see in the data?
   - What other questions came to mind? What else did you want to know? What other information would you want to see?
   - How might you use labor market information to help you strengthen youth development services in your organization and community as a whole?

   You may also want to share other information from your County Business Patterns. For example:

   - The number of businesses in each industry area
   - Graphs that compare a year in the past and the most recent year
   - Detailed information on a particular industry area

Somewhere Regional Industry Mix - Example

Legend:
- US
- Cool State
- Big Suburban County
- Big Urban County
- Small Rural County
- Region

Axes (clockwise from top):
Forestry, fishing, hunting, and agriculture support · Mining · Utilities · Construction · Manufacturing · Wholesale trade · Retail trade · Transportation & warehousing · Information · Finance & insurance · Real estate & rental & leasing · Professional, scientific & technical services · Management of companies & enterprises · Admin, support, waste mgt, remediation services · Educational services · Health care and social assistance · Arts, entertainment & recreation · Accommodation & food services · Other services (except public administration) · Auxiliaries (except corporate, subsidiary & regional mgt) · Unclassified establishments

Scale: 0, 5, 10, 15, 20, 25, 30, 35

Sample Data from 2001 County Business Patterns (NAICS)
Based on number of employees for week including March 12, 2001

Somewhere Regional Industry Mix - Example

What is it?

This is a "radar" graph of the industry mix of several counties in a very real area of a very real state in the U.S. It shows the employment levels for three counties: the number of people employed and in what fields. It also shows the overall patterns for the state and U.S.

The data comes from a commonly used planning source called "County Business Patterns" (CPB) collected annually. CPB data is particularly useful for looking at local economic activity and changes over time. Businesses use it to analyze market potential: what kind of sales quota should we set? What budget do I need to sell or advertise in this market? Government agencies use it to plan: What industry sectors are strong in our area? Which are declining and why? Do we have the type of workforce that will attract strong or emerging industries? What policies do we need to encourage or ensure a stable workforce?

Patterns & Observations

- The regional, state, and U.S. patterns are very similar. Retail, manufacturing, lodging and food, healthcare and social services, administrative support (everything from office support to travel agencies to waste management) companies employ the greatest percentage of people. Finance and professional services are also strong.
- The state has a stronger mining presence than the country as a whole.
- Manufacturing is by far the dominant industry in the big rural county.
- The suburban county's graph lines are hard to see – they are so closely aligned with the state and U.S. patterns.
- The urban area has a bit more activity in information services, transportation, management and professional fields – and less in retail trade – than other counties, the state, and the U.S. as a whole.
- Areas like arts and entertainment, education, and agriculture seem to employ relatively few people, locally and nationally.

Possible Implications for Area Youth Services

"We need to learn more about existing educational, training, and career readiness and other youth services that could help introduce youth to these industry areas, particularly our dominant ones."

"We should identify associations or business groups that serve companies in our larger industry areas and ask if they can help us recruit mentors, internships, and job placements."

"We might want to develop out-of-county relationships that will help us provide work-based learning and career exploration opportunities for youth interested in areas where we don't have much activity"

"How could we involve youth in analyzing industry conditions and making recommendations?"

Making Your Own Economic Footprint Graphs

Your local workforce center or economic development office may have the area labor market information you need, all ready to go, in presentation format. If not, you can easily create your own displays.

Goal
- Learn how to create presentations that allow your group to analyze your local economic profile.
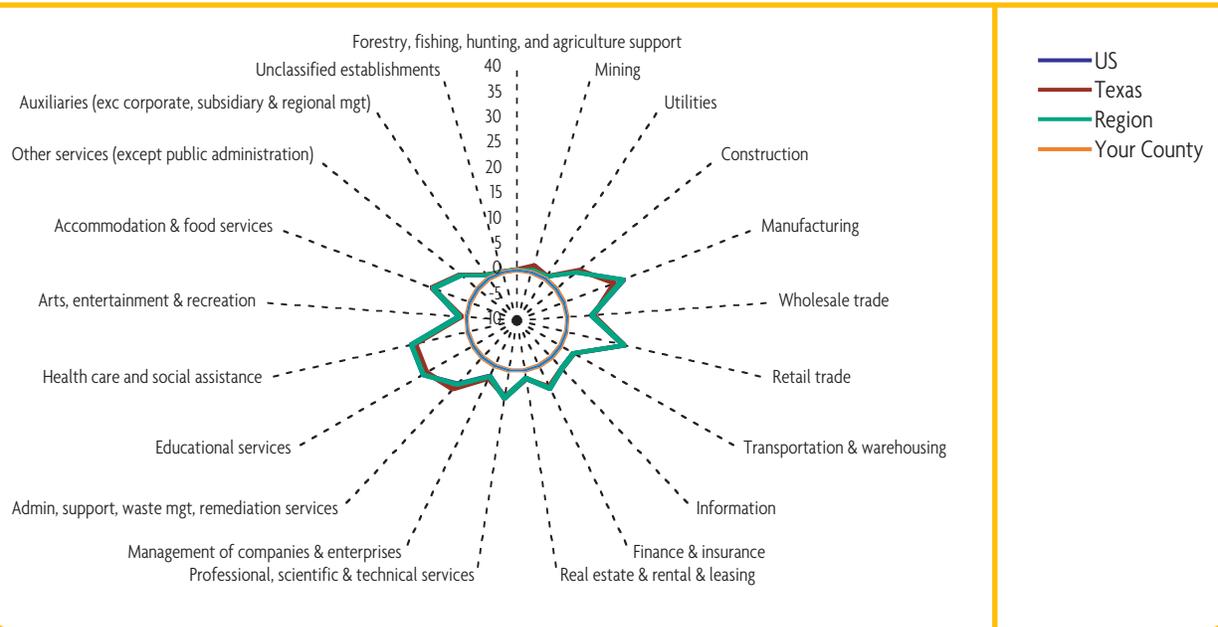
Materials
- An internet-connected computer and/or county, state, and U.S. labor market information from County Business Patterns – U.S. Census Bureau at http://censtats.census.gov/cbpnaic/cbpnaic.shtml
- Excel or other spreadsheet software
- Economic Footprint Tool. If you are using a digital copy of this training packet, click the Economic Footprint graph below and save a copy of the tool, an Excel spreadsheet template/calculator created for this activity, to your computer. If you are using a printed copy of the packet, download the Footprint Tool from the TWC website's Youth /Training Materials area.

Time
- 15 minutes+

Your Economic Footprint

Legend:
- US
- Texas
- Region
- Your County

Axes (clockwise from top): Forestry, fishing, hunting, and agriculture support; Mining; Utilities; Construction; Manufacturing; Wholesale trade; Retail trade; Transportation & warehousing; Information; Finance & insurance; Real estate & rental & leasing; Professional, scientific & technical services; Management of companies & enterprises; Admin, support, waste mgt, remediation services; Educational services; Health care and social assistance; Arts, entertainment & recreation; Accommodation & food services; Other services (except public administration); Auxiliaries (exc corporate, subsidiary & regional mgt); Unclassified establishments

Scale: 40, 35, 30, 25, 20, 15, 10, 5, 0, 5, 10

Making Your Own Economic Footprint Graphs Continued

Instructions

1. Open the Economic Footprint Tool file and save a copy to your computer. Note that the tool has three worksheets: Row to Column Converter, Economic Footprint Calculator, and Economic Footprint Graph.

2. Go to the County Business Patterns website to find business data for your area. The Economic Footprint Tool already includes data for Texas and the U.S. for 2001. To find your county, search by state, then county, then year.

   You'll see two tables of data. The top table displays the number of employees in each industry area (tracked in March). The second table shows the number of companies in each industry area.

3. Find the column "Number of Employees for Week Including March 12." This is the information you need. To copy the data into the Economic Footprint Tool, go to the bottom of the screen and choose the "Save as .csv File" option. Choose "Open" until the information opens in a spreadsheet (you don't need to save the information to your computer).

   Copy the employee data (column C) – without the Total from the first row – from the spreadsheet. Paste it into the "Your County" column of the Column to Row Converter. Make sure that the employment values line up with the correct industry area in the Converter. Sometimes County Business Patterns omit an industry if there is no employment for that sector. You can also enter the information by hand. Type the name of your county at the top of the column where it says "Your County."

   Note that sometimes you may see a range instead of a whole number (i.e., 20-99). The Census Bureau does this to conceal the exact number (where employer counts are low) so they don't reveal an employer's confidential or competitive information. You need a whole number or your tools won't work. For the purposes of this activity, use the average between the low and high ends of the range.

4. If you want to look at activity in your broader region, add the data for counties in your region – your workforce board region or the region you consider your broader economic or employer community. Alternatively, you might want to compare and contrast several counties. Just repeat steps 2 and 3 for counties you want to include. Type the name of each county where it says "County."

5. Once you enter county data, the Economic Footprint Calculator automatically runs the numbers for you and creates your Economic Footprint graph. The spreadsheet converts the raw numbers into percents so that you can look at county, regional, state, and national data on the same graph.

6. Customize and tidy up your footprint graph for presentation.

   To change the title of the graph: click on the title and add your region or county name.

   To change the color of a county's data display: click on the lines of the graph that represent the county. If your cursor is in the right place, you'll see the label "Series - name of the county" appear. Once you select the correct county, left click and choose "Format Data Series." Choose the line color and weight you want.

   To hide unwanted or unused counties: go to the Footprint Calculator worksheet. On the second table, "County Business Patterns – Graph Data," select the rows you want to hide, and then choose "Format | Row | Hide." This will also remove the information from your graph. Resize the "Legend" on your graph to tidy it up.

   To copy your graph into a presentation: select it, copy it, and resize it the same way you would an image.

Making Your Own Economic Footprint Graphs Continued

Tips & Notes

• In the Footprint tool, "Region" is the total for all counties included in the graph. If you only profile your county, the profiles for region and county will be identical. If you profile eight counties from your surrounding area, the regional graph will profile the eight- county region. In fact, you probably do want this larger regional view. Use the "hide row" feature later to hide counties you don't need in the final graph. The graph can be hard to read if you show too many counties at once.

• Make sure the data you copy from CBP matches the industry rows in the Footprint Tool. If you notice data missing from a row, check to see if the CBP data included all industry areas (all rows). It sometimes doesn't if there is no data for that area.

• CBP data might give you a range of employees (0-19 or 200-499) instead of a specific number. For this exercise, go ahead and split the difference. Enter a number halfway between the minimum and maximum (9 or 350).

Your Economic Footprint – Notes Sheet

Patterns & Observations

It Makes Me Wonder…Other Information I'd Want to See

Possible Implications for Youth Services & Youth Development System

Activity Two: Concentrating on Career Clusters

Goal
- Inventory the resources and services you currently have that can help youth investigate career clusters.
- Identify strengths and gaps in critical cluster components.
- Develop a comprehensive (not scattershot!) approach to career development.

Materials
- Career Clusters Inventory & Planning Tool
- People who know youth services in your community

Time
- 30-45 minutes per cluster

Instructions

Use the Career Clusters Inventory & Planning Tool to evaluate each career cluster and how well you are positioned as an organization to expose youth to them and provide more in-depth skill-building activities.

1. Agriculture, Food, and Natural Resources
2. Architecture and Construction
3. Arts, Audiovisual Technology and Communications
4. Business, Management, and Administration
5. Education and Training
6. Finance
7. Government and Public Administration
8. Health Science
9. Hospitality and Tourism
10. Human Services
11. Information Technology
12. Law, Public Safety, and Security
13. Manufacturing
14. Marketing, Sales and Service
15. Science, Technology, Engineering, and Mathematics
16. Transportation, Distribution, and Logistics

These are the 16 career clusters recommended by the States' Career Cluster Initiative. Feel free to substitute clusters or sub-clusters important to your local area. For example, you might add "Marine Trades" if you live in a coastal area.

Career Clusters Inventory & Planning Tool

Components	Career Cluster: *Architecture & Construction – Example* Number of Area Companies that Fall into this Cluster: Number of Area Jobs that Fall into this Cluster:	
	Have or Have Access To	*Possible Source*
Cluster Awareness Activities (Introductory)		
Career Guidance & Access to Career Cluster Information		
Access to Labor Market Information		
In-School or After-School Skill-Building Opportunities		
Mentors		
Work-Based Learning Opportunities		
Advanced Training & Certification Opportunities		

Activity Three: It's About Skills – Project Development

Goal
- Understand the type and level of skill needed to advance in a particular career area.
- Know where to find information on the knowledge and skills needed for particular careers.
- Learn how to design pathway-related skill development opportunities.

Materials
- It's About Skills Project Brainstorm
- Resources from the States' Career Clusters website at http://www.careerclusters.org
  List of the 16 cluster areas
  Pathway Model for each cluster area
  Cluster Knowledge & Skills for each cluster
  Pathway Knowledge & Skills for each cluster

Time
- 40-60 minutes

Instructions

1. Pick one of the 16 career clusters, and then identify one pathway within that cluster. For example, you might choose the career cluster Human Services and the pathway Counseling and Mental Health.

2. Review the Cluster Knowledge & Skills and Pathway Knowledge & Skills materials. What skills are important for youth to develop for the pathway you chose?

3. Use the It's About Skills Project Brainstorm worksheet to imagine and outline a project that would help youth practice a skill or skills in the pathway you chose. Give yourself – or better yet, yourself and a group of inspired colleagues – 20 minutes to brainstorm the basic idea and 20-40 minutes to sketch out important activities.

It's About Skills - Project Brainstorm

Name of Our Project	

Pathway Skill or Skills

Basic Idea	
Key Activities	
How We'll Know & Measure What Youth Learned	
Who & What We Need to Pull This Off!	

Activity Four: Using LMI with Youth

Goal
- Learn how to talk about labor market information with youth and their families.
- Understand how – and how not – to use labor market information.

Materials
- Data & Dreams Activity Sheet (or Occupational Outlook Handbook projections of the largest job growth and fastest growing occupations for the current year)

Time
- 30 minutes

Instructions

1. Quickly review the Occupations with the Largest Job Growth and Fastest Growing Occupations.

2. Pick one of the following scenarios:

Scenario One
Mateo loves to design web pages. He's pretty good at it and was recently asked by his younger brother's basketball coach to design a site for the team.

Scenario Two
Rhonda doesn't really know what she wants to do and doesn't feel particularly good at anything. She's holding down a part-time job as a waitress now. She likes the cash and the people and figures there will always be a need for waitresses.

Scenario Three
Mark is apathetic. He doesn't seem to care about his future and jokes that maybe he'll just paint lines on highways.

Scenario Four
Samara is a smart girl. Her father always teased her that she'd make a great doctor. She definitely did like science at one point. High school was a little rough, though. She got caught shoplifting, and things went downhill from there. She finished school but with no real goal about what to do next.

3. With a partner or small group, brainstorm:

- How you would use the Occupational Outlook information, given the circumstances.
- Other steps, activities, or services you would recommend in each case.

Data and Dreams Activity Sheet

Occupations with the Largest Job Growth 2000-2010

- Food preparation
- Customer service representatives
- Registered nurses
- Retail salespersons
- Computer support specialists
- Cashiers
- Office clerks
- Computer software engineers, applications
- Waiters and waitresses

Fastest Growing Occupations 2000-2010

- Computer software engineers, applications
- Computer support specialists
- Computer software engineers, systems software
- Network and computer systems administrators
- Network systems and data communications analysts
- Desktop publishers
- Database administrators
- Personnel and home care aides
- Computer systems analysts
- Medical assistance

Industries with the Fastest Wage and Salary Employment Growth, 2000-2010

- Computer and data processing services
- Residential care
- Health services
- Cable and pay television services
- Personnel supply services
- Warehousing and storage
- Water and sanitation
- Miscellaneous business services
- Miscellaneous equipment rental and leasing
- Management and public relations

Occupational Outlook Handbook, 2002-2003

Examples from the Field

When a local study of health care employers turned up an acute need for skilled radiologic technologists ("rad techs") – a skill set which didn't turn up in existing labor market data – a group of community college and workforce partners started the Northwest Radiologic Technology Consortium, an initiative of the Northwest Partnership for Workforce Development, Washington. The consortium's new career pathway program blends distance learning, classroom instruction, labs and clinical experience, and Interactive TV.

Long Beach, California's "Chief for a Day" program gives area students a chance to learn about law enforcement firsthand. Students submit an essay describing what they hope to learn and a panel picks two winners. Students then spend the day at the Long Beach Police Department. They participate in the daily chief's briefing, meet with department managers, tour the headquarters and communications system, see K-9 and pistol team demonstrations, then head off to a court trial and a City Council meeting. Other communities run similar "follow the leader" programs with fire departments or the mayor's office (including some who raise funds by letting organizations auction off the opportunities).

Project QUEST in San Antonio, Texas, started with hundreds of neighborhood house meetings with underemployed and unemployed local residents and interviews with employers. The topics? Skilled, hard-to-fill occupations employers needed to fill and access (or lack of it) to training programs that would prepare people for them. With employers and community-based organization partners, QUEST defines the skills needed in these occupations and creates a training curriculum. Employers commit jobs to the program and forecast future needs. Current programs include: health care, IT/business services, transportation, and maintenance fields.

The National Association of Chain Drugstores (NACDS)'s Pharmacies of Promise web site (www.pharmaciesofpromise.org) provides tools that youth providers and local pharmacies around the country can use to provide shadowing, mentoring, internship and other opportunities for youth.

In Iowa, a powerful partnership between Kirkwood Community College, area high schools, the Workplace Learning Connection, the Grant Wood Education Agency, Iowa Workforce Development and area businesses created Career Edge Academies – programs in seven career cluster areas for high school juniors and seniors. Youth combine high school and college courses, as well as a range of workplace experience. In addition to high school and college credit, they earn a competency certificate and the possibility of scholarships to continue their education.

Youth in the Rock Valley College, Illinois Business and Financial Services Apprenticeship program live and breathe business. Starting their junior year, they spend five mornings a week at a Virtual Company course at the college. Seniors continue to take a course a semester but add an internship with a sponsoring company. By the time they leave the program, students have covered all angles of business, including global trade, international marketing, strategic planning, operations, business math and finance, office technology, and communication

RESOURCES

How to Use LMI

- Action Brief: Finding and Using Labor Market Information for Economic and Workforce Development - Working for America http://documents.workingforamerica.org/ActionBrief6-01.html
- Workforce Tools of the Trade   http://www.workforcetools.org/default.asp
- LMI@Work Online Course – Center for Employment Security and Research (CESER) http://www.workforceatm.org/articles/template.cfm?results_art_filename=launchcourse2.htm
- Using Online Occupational Information for Career Development – ERIC/ACVE   http://ericacve.org/docs/pfile04.htm
- Adding Staff Value Using Internet Based Tools – Center for Employment Security Education and Research/National Association of State Workforce Agencies.   http://www.wia.net/bookstore/detail.cfm?off=16&CFID=6155&CFTO-KEN=12904

Texas Labor Market Information

- Bureau of Economic Analysis - Regional Accounts Data - Texas   http://www.bea.doc.gov/bea/regional/data.htm
- SOCRATES Texas Regional Labor Market Analysis   http://socrates.cdr.state.tx.us/
- Texas Economic Development – Business & Industry Data Center http://www.bidc.state.tx.us/default.htm
- Texas LMI Tracer – Texas Workforce Commission http://www.tracer2.com/
- Texas State Data Center & Office of the State Demographer http://txsdc.tamu.edu/download/pdf/TxChall2002Summary.pdf
- Texas Workforce Commission: Labor Market Information and Other Data http://www.twc.state.tx.us/customers/rpm/rpmsub3.html

Texas Economic Snapshots

- 2001 State Occupational Employment and Wage Estimates - Texas http://www.bls.gov/oes/2001/oes_tx.htm
- A Summary of The Texas Challenge in the Twenty-First Century: Implications of Population Change for the Future of Texas (December 2002)   http://txsdc.tamu.edu/download/pdf/TxChall2002Summary.pdf
- Emerging and Evolving Occupations in Texas   http://www.cdr.state.tx.us/Researchers/Emerging/index.html
- Jobs for the 21st Century – Texas (December 2002) http://www.twc.state.tx.us/lmi/publications/tlmr/tlmr0212art.pdf
- The Texas Economy: What's Next? Industry Projections, 2001-2010 (pdf) http://www.twc.state.tx.us/lmi/publications/tlmr/tlmr0211art.pdf

National Sources of Labor Market Information

- America's Career InfoNet   http://www.acinet.org/acinet/default.asp
- Bureau of Labor Statistics   http://www.bls.gov/home.htm
- Career OneStop http://www.careeronestop.org/
- Census Bureau – American FactFinder http://factfinder.census.gov/servlet/BasicFactsServlet
- Cluster Mapping Project - Institute for Strategy and Competitiveness – Harvard Business School https://secure.hbs.edu/isc/login.do?http://data.isc.hbs.edu/isc/index.jsp
- County Business Patterns   http://censtats.census.gov/cbpnaic/cbpnaic.shtml
- LMI-Net: America's Labor Market Information System (ALMIS)   http://www.lmi-net.org/
- National Occupation Matrix http://data.bls.gov/oep/nioem/empiohm.jsp
- O*Net Online   http://online.onetcenter.org/
- Occupational Outlook Handbook http://www.bls.gov/oco/
- EconData.Net: Your Guide to Regional Economic Data on the Web   http://www.econdata.net/
- The 1988-2000 Employment Projections: How Accurate Were They? - Occupational Outlook Quarterly (pdf) http://icdl.uncg.edu/pdf/052903-01.pdf

Employer Industry Clusters & Economic Development
- Bridging Community and Economic Development: A Study for Using Industry Clusters to Link Neighborhoods to the Regional Economy (pdf) http://www.shorebankcleveland.com/media/pdf/cluster.pdf
- Cluster Organizing Guide – Wisconsin Dept. of Commerce
  http://www.commerce.state.wi.us/MT/MT-IndustrialClusters-organizingguide.html
- Cluster-Based Community Development Strategies (pdf) – Carnegie Mellon Center for Economic Development
  http://www.smartpolicy.org/pdf/clustercommunity.pdf

Career Clusters & Pathways – Skill Sets
- Career Clusters ERIC/ACVE Trends and Issues Alerts http://ericacve.org/docgen.asp?tbl=tia&ID=161
- States' Career Cluster Initiative Homepage http://www.careerclusters.org/
- V-TECS Career Cluster Frameworks (pdf)   http://www.v-tecs.org/Documents/VTECS Cluster Framewk.pdf
- Skills Profiler – America's Career InfoNet http://www.acinet.org/acinet/skills_home.asp
- National Skill Standards Board (NSSB) http://www.nssb.org/
- Texas Skills Standards Board http://www.tssb.org
- Career Clusters – Online Resources for Students
  http://www.glencoe.com/sec/careers/cclusters/student/introclusters.shtml

Career Clusters & Pathways - Practices
- Anatomy of a Job Fair, Tested Fair Techniques - National Association of Workforce Development Professionals
  http://www.nawdp.org/nawdp_bookstore.htm
- Building a Career Pathways System: Promising Practices in Community College-Centered Workforce Development (pdf)
  Workforce Strategy Center   http://www.workforcestrategy.org/publications/Career_Pathways.pdf
  Career Academy Resource Center and NAF Academy Planning Guide - National Academy Foundation –
  http://www.naf.org/resources/NAFResourceCenter
- Career Academy Support Network   http://casn.berkeley.edu/
- Career Activities and Vocational Lesson Plans – Vocational Information Center   http://www.khake.com/page94.html
- Career Development Resources – Texas Workforce Commission
  http://www.cdr.state.tx.us/Researchers/Emerging/index.html
- Department of Labor – Office of Apprenticeships   http://www.doleta.gov/atels_bat/
- Learning Through Projects – Cornell Youth and Work Program
  http://www.human.cornell.edu/youthwork/ptools/learn/
- Registered Apprenticeship Sponsors in Texas
  http://bat.doleta.gov/search_result.asp?State=TX&CountyCode=All&strStateName=TEXAS
- Texas CATE - Texas Career & Technology Educators http://www.texascate.net/

Connecting with Employers
- America Connects – Tips for Connecting With Employers
  http://www.americaconnects.net/resources/JobPlacement.asp#_Connecting_With_Employers
- Employer's Guide to Working With Youth - Connections Consortium/Tech Prep, Thurston County, Washington
  http://www.connectquest.org/employer/guid.asp
- Employers Involved in Career Academies (pdf) http://www.nelc.org/resources/career academy 2.pdf
- Getting Employers Involved: Improving Work-Based Learning Through Employer Links (pdf) -Learning and Skills
  Development Agency, United Kingdom. Geared to YMCA training managers.
  http://www.lsda.org.uk/files/pdf/R1084.pdf
- NELC Employer Participation Model http://www.nelc.org/whatsnew/epm/epm.cfm

Learning From Others

- Bay Area Works http://www.theunitedway.org/bacf/BAW/bacf_community_projects_selfsuff_baw_overview.htm
- Career Cluster Day – Three River Valley School-to-Work, Springfield, VT
  http://www.state.vt.us/stw/stwbpcareerexspringcluster.html
- Career Field Brochures – Utah School-To-Career Office (you need Microsoft Publisher to open the brochures)
  http://www.usoe.k12.ut.us/stc/resource/career field brochures.htm
- Career Ladders Initiative - Boston Workforce Development Coalition
  http://www.bostonworkforce.org/career-ladders.htm
- Career Ladders Initiative - NOVA PIC   http://www.careerladders.org/
- Central Florida YMCA Achievers Program http://www.centralfloridaymca.org/programs/achievers.shtml
- Health Career Ambassadors Program – Washington State University
  http://www.ahec.spokane.wsu.edu/Hcareer_abmprogrm.html
- Industry Cluster Coordinators – Rhode Island School-to-Career http://www.ristc.org/IndustryCs.html
- SmartBridges Initiative – Business Council of Southwestern Connecticut http://www.sacia.org/smartbridges.htm
- Using Labor Market Information: A Training Initiative for Rhode Island http://www.rilmitraining.org/index.htm

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