

Standard Operating Procedures 3060.3
Skinning LED Analytic Tools to State Web Sites
January 3, 2008

I. PURPOSE

The Local Employment Dynamics (LED) Partnership provides its partner states an interface to the LED web site, giving the states open access to LED data. State partners may choose to implement the LED analytic tools on their own servers, making the query forms and resulting reports (tables and charts) look as if they were locally hosted when in fact they are hosted on LED's servers. This practice is called "skinning."

The current web-based applications that can be skinned are:

- QWI Online
- Industry Focus

II. OPERATING PRINCIPLES

There are limitations on which parts of the web site or analytic tools can be skinned. The partner state's web site must allow frames for skinning and acknowledge the Census Bureau for the skinned applications. Some states choose to add a disclaimer about how LED data differ from other sources. Each partner state must designate a web specialist to accommodate skinning setup and infrequent changes.

III. TO SKIN OR NOT TO SKIN

The skinning practice is optional and voluntary according to the wishes of the state partner, but is encouraged by LED.

IV. POINTS OF CONTACT

Please contact the following when you plan to start skinning:

Chaoling Zheng (301)-763-8961 Chaoling.Zheng@census.gov

Production Team (301)-763-8303 DID.LEHD.Production.List@census.gov.

Visit <http://lehd.did.census.gov/led/about-us/contact.html> for the latest contact information.

V. EXAMPLES OF SKINNED WEB SITES

a. QWI Online

LEHD Delaware County Reports - Quarterly Workforce Indicators
 Select Criteria below. A new report will be created below as selections change.

Year: 2003 | Geographic Grouping: County or Information by Detailed Industry
 Quarter: Q4 | County: 001 Kent
 Sex: Male and Female | Industry: All Naics sectors
 AgeGroup: 14-99 | Ownership: All (1-5)

[Download Dataset](#) | [Print Table](#)

QWI Quick Facts	Kent (Q4)	Kent (Avg:previous 4 quarters)	Delaware (Q4)	Delaware (Avg:previous 4 quarters)
Total Employment	58,881	56,761	394,357	387,672
Net Job Flows	-858	268	-8,632	-19
Job Creation	3,880	3,687	23,020	24,526
New Hires	11,144	10,191	69,894	67,344
Separations	14,687	12,189	91,302	80,316
Turnover	10.9%	10.2%	11.0%	10.4%
Avg Monthly Earnings	\$2,858.00	\$2,639.00	\$3,586.00	\$3,384.75
Avg New Hire Earnings	\$1,768.00	\$1,646.00	\$2,377.00	\$2,324.50

b. Industry Focus

Industry Focus: Selecting Top Industries

List the top 10 industries ranked by the greatest:

Ranking Indicator (Select One)	Include in report (Select One or More)	
<input checked="" type="radio"/> Employment	<input checked="" type="checkbox"/>	Employment
<input type="radio"/> Growth in Employment	<input type="checkbox"/>	Growth in Employment
<input type="radio"/> Growth in hiring	<input type="checkbox"/>	Growth in hiring
<input type="radio"/> Number of new hires	<input type="checkbox"/>	Number of new hires
<input type="radio"/> Firm Job Change	<input type="checkbox"/>	Firm Job Change
<input type="radio"/> Average monthly earnings for all workers	<input type="checkbox"/>	Average monthly earnings for all workers
<input type="radio"/> Growth in average monthly earnings for all workers	<input type="checkbox"/>	Growth in average monthly earnings for all workers
<input type="radio"/> Average monthly earnings for new hires	<input type="checkbox"/>	Average monthly earnings for new hires

Age and Sex: Age: 14-99 | Sex: Male and Female
 Geography: State: Indiana
 Entity: Statewide | WIA | County | Metro Area
 Select Industry Level: Industry Sector | Industries
 Industry Sector: All Sectors

[View Report](#) | [Download CSV](#) | [Create PDF](#)

[Email Comments/Problems](#) | Source: U.S. Census Bureau, Local Employment Dynamics

VI. REFERENCES

a. Summary of Skinning Analytic Tools from the LED Web Site

There are two basic steps to beginning skinning either Industry Focus or QWI Online:

1. Set up a frame-based webpage. Specify a top, left, or bottom navigation area (or more) as needed.
2. The inner frame will be used for the skinned application. Set the URL for the frame to the corresponding URL of the application on the LED web site:

Industry Focus:

```
http://lehd.did.census.gov/cgi-bin/broker?_SERVICE=industry_focus&_PROGRAM=
pgm.top_report.sas&_report=no&_question=1&_state=<2 letter postal state code>
&_entity=state&_Ind2=off&_Ind3=off&_output=1&_output=2&_top=10&_question=1
&_table=no&_rankings=1&_sex=0&_agegroup=A00&_geog=&_skin=1
```

where <2 letter postal state code> is a U.S. Postal Service state abbreviation that may be found in http://www.usps.com/ncsc/lookups/usps_abbreviations.html. An example is md for Maryland.

QWI Online:

```
http://lehd.did.census.gov/cgi-bin/qwitop_main?xstate=<2 letter postal state code>
&xdbase=county&xstyle=<xml style file>
```

where <2 letter postal state code> is a U.S. Postal Service state abbreviation and <xml style file> is an optional xml file that specifies a style sheet or help icon to be used in the application.

b. Specification for Skinning Industry Focus from the LED Web Site

This section describes the procedure for skinning Industry Focus. Both the query interface and the subsequent reports will be “skinnable.”

Skinning will require using frames on the state partner’s web site. The URL for the application will contain a variable called **_skin**. The state partner has to **set this variable to 1** to get the skinned version.

The following is a detailed procedure for skinning Industry Focus.

1. Define a frame-based web page on your web site. See the html code below for an example of how this can be done:

```

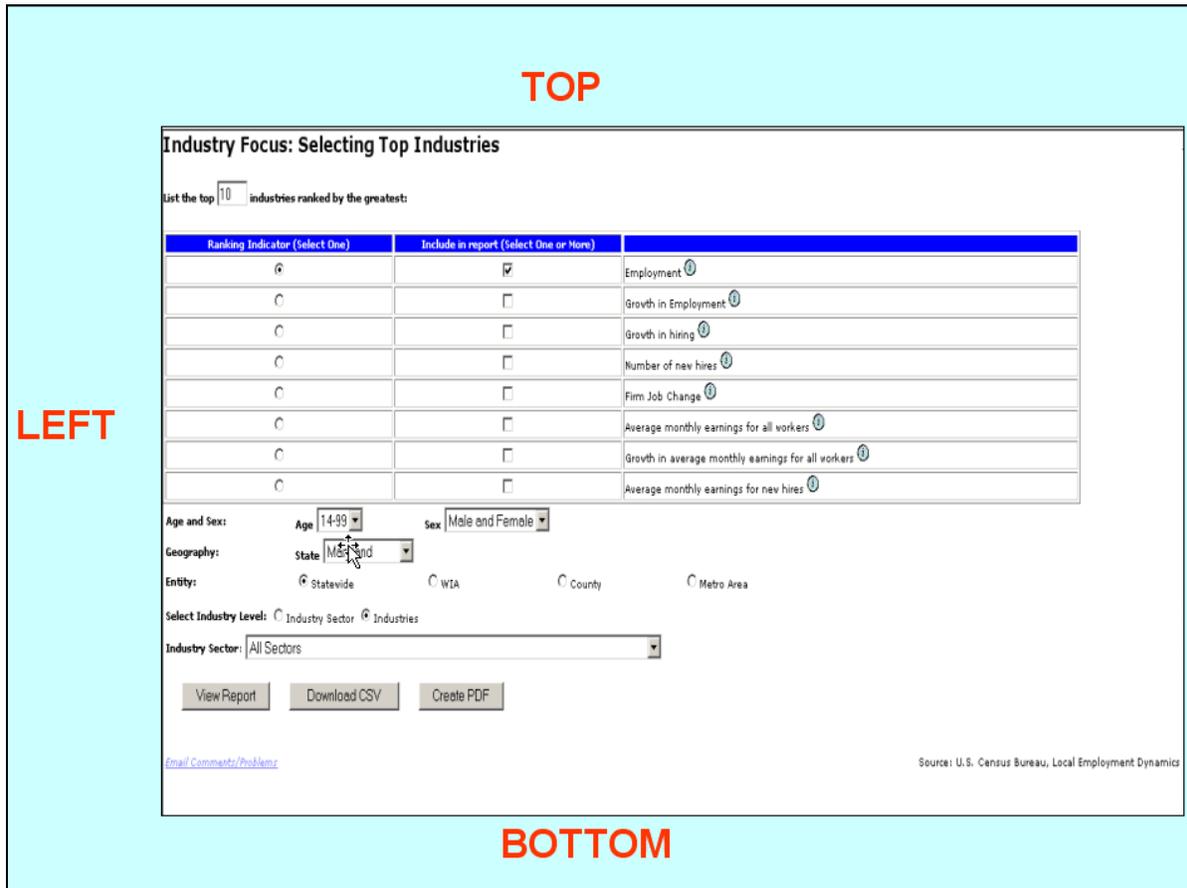
<HTML>
<HEAD>
<TITLE>Title of Page</TITLE>
</HEAD>
<FRAMESET ROWS="x%, x%, x%" FRAMEBORDER=0 FRAMESPACING=0>
  <FRAME SRC="top.html" SCROLLING="NO">
  <FRAMESET COLS="x%" FRAMEBORDER=0 FRAMESPACING=0>
    <FRAME SRC="left.html" SCROLLING="NO">
    <FRAME SRC="URL OF INDUSTRY FOCUS">
  </FRAMESET>
  <FRAME SRC="bottom.html" SCROLLING="NO">
</FRAMESET>
</HTML>

```

The "x%" and "URL OF INDUSTRY FOCUS" will be site specific.

- Figure 1 below illustrates the use of the above HTML code. The state determines how to incorporate the frame that will contain Industry Focus and the state banner and footer, including additional frames beyond those given in Figure 1.

Figure 1: Sample page for the skinned Industry Focus application



3. For the frame that will contain the analytical tool, set the source to the URL for Industry Focus:

```
http://lehd.did.census.gov/cgi-bin/broker?_SERVICE=industry_focus&_PROGRAM=
pgm.top_report.sas&_report=no&_question=1&_state=<2 letter postal state code>
&_entity=state&_Ind2=off&_Ind3=off&_output=1&_output=2&_top=10&_question=1
&_table=no&_rankings=1&_sex=0&_agegroup=A00&_geog=&_skin=1
```

For example, the URL for the state of Maryland would be:

```
http://lehd.did.census.gov/cgi-bin/broker?_SERVICE=industry_focus&_PROGRAM=
pgm.top_report.sas&_report=no&_question=1&_state=md
&_entity=state&_Ind2=off&_Ind3=off&_output=1&_output=2&_top=10&_question=1
&_table=no&_rankings=1&_sex=0&_agegroup=A00&_geog=&_skin=1
```

c. Specification for Skinning QWI Online from the LED Web Site

This section describes the procedure for skinning QWI Online. The style sheet and associated icons for the companion reports are specified via an XML file that is registered in the LED database for each state. The style sheet is a Cascading Style Sheet (CSS) Level 1 that allows the state to specify fonts and colors for the LED report pages. Whenever a change is made to the style sheet at the state's URL, the XML file must be re-registered with LED.

Quickstart

- Define a frame-based web page on the LMI web site (see Figure 2 for details).
- Define or identify a style sheet (CSS).
- Define or identify an icon that identifies a link to a help page.
- Compile the XML file using <http://lehd.did.census.gov/lehd/custom/makexml.html> and upload it to the LMI web site.
- Notify LED of the URL to the XML file on the LMI web site.
- The LED point of contact will contact you with URL for your state's application. Use this URL on your state's LMI site.
- Done. The skinned web site is ready to use.

The following is a detailed procedure for skinning QWI Online:

1. **Setup.** LED will check the files provided by the state for compliance with the interface, and provide the state with a URL that allows the state to self-manage any further changes to the look and feel of the interface. States can always hyperlink directly to the LED query interface, leading web visitors off of their own site.

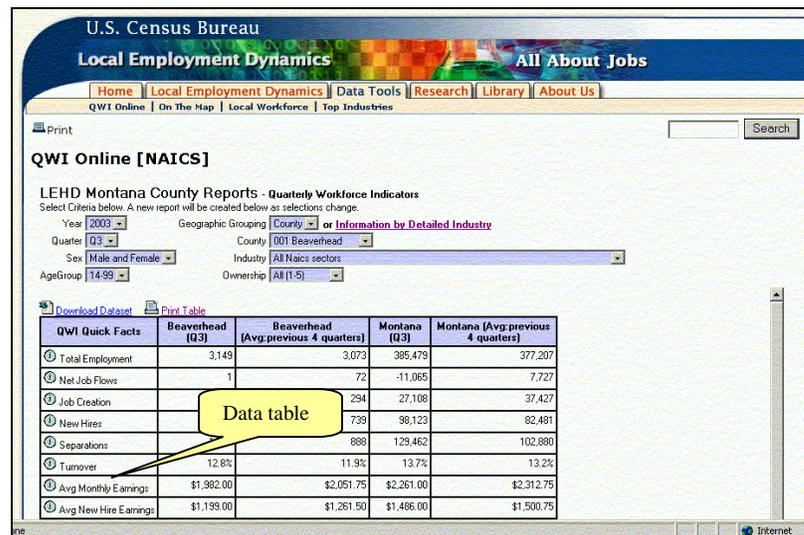
2. **Coverage.** Only the essential parts of the query and pivot report interface are "skinnable." A way to think of this is as follows. Consider the initial query interface web page, and cut it into 9 (unequally sized) elements, arrayed in a 3x3 table:

Figure 2: Generic page layout

Top Left	Top Center	Top Right
Left	Data Table	Right
Bottom Left	Bottom Center	Bottom Right

On the LED web site, the top row contains the LED and Census logos, and a LED-specific menu bar, whereas the bottom row contains a Census-specific logo and a set of hyperlinks. The data table is the center cell (see Figure 3).

Figure 3: LED-skinned interface



Only the center cell is "skinnable," but the generic page at a state site will have the same setup as here (potentially implemented with frames as well). So a state's site might have a state-specific left column, with their own menus, color schemes, etc. The data is pulled in from LED's servers, but looks in terms of logos (or absence thereof), type of fonts and colors thereof, will be exactly like the rest of the state's pages (see Figure 4 for an illustration, and Figure 5 for the master frame HTML code).

Figure 4: Example: LMI-skinned interface

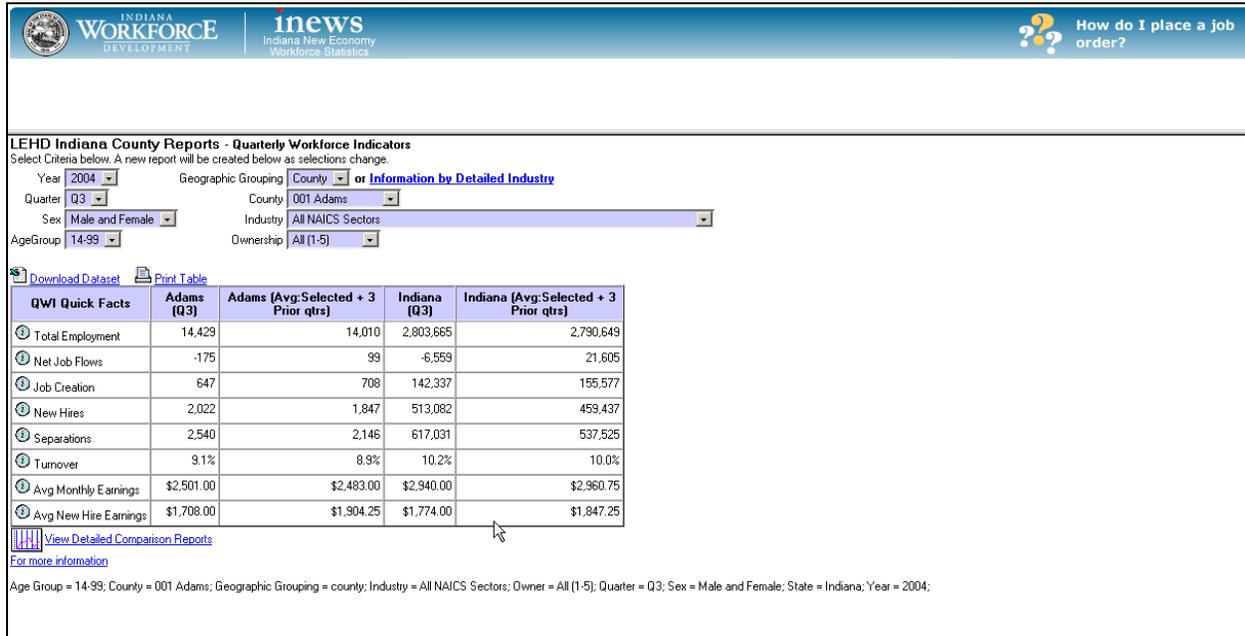


Figure 5: Example: LMI-skinned interface, HTML code

```

<HTML>
<HEAD>
<TITLE>Custom State Page</TITLE>
</HEAD>
<FRAMESET ROWS="140,* ,100" FRAMEBORDER=0 FRAMESPACING=0>
<FRAME SRC="top.html" SCROLLING="NO">
<FRAMESET COLS="100,*" FRAMEBORDER=0 FRAMESPACING=0>
<FRAME SRC="left.html" SCROLLING="NO">
<FRAME SRC="http://lehd.did.census.gov/cgi-bin/qwitop_main?xstate=tx
&xstyle=tx&xdbase=metro">
</FRAMESET>
<FRAME SRC="bottom.html" SCROLLING="NO">
</FRAMESET>
</HTML>
  
```

- Implementation.** The proposed approach for customizing reports generated by the LED web site is to allow states to define custom implementations of icons and style sheets. These are communicated to the LED through an (optional) XML file. The URL of the file must be registered with LED when the state is added to the LED database. The XML file will be copied and processed by LED via a properly configured URL. Once processed, a properly configured request will tell the web site to use a particular layout for a table.

Figure 6: Sample XML specification

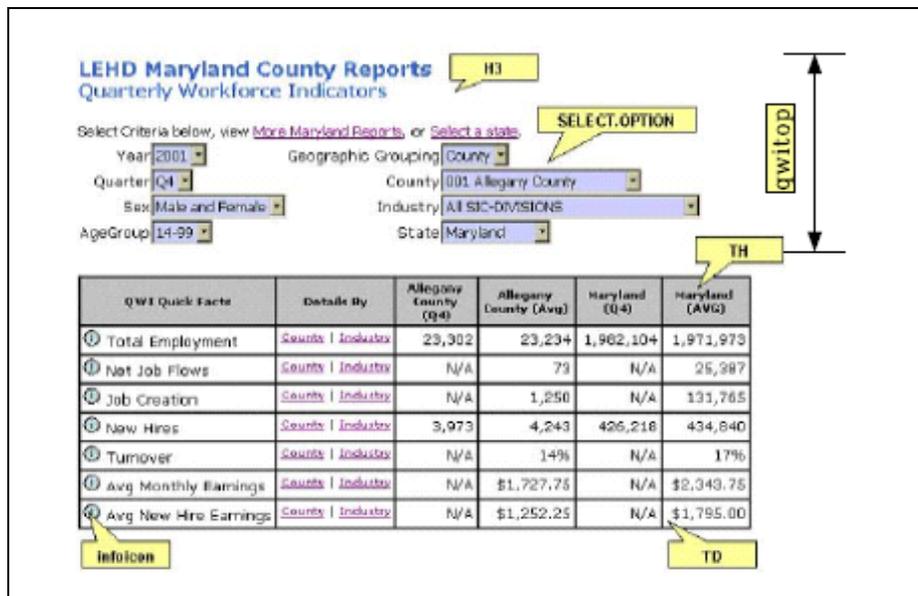
```

<?xml version="1.0" encoding="ASCII"?>
<Configuration>
<stylesheet href="http://domain/style.css"/>
<infoicon href="http://domain/info.gif" width="20" height="20" />
<qwtop height="120" />
<pivot height="200" />
<popup height="400" width="600" />
</Configuration>

```

Any components not defined by the style sheet will revert to browser defaults. The components of the basic report are identified in Figure 7. The height of the area reserved for the selection menus is defined by **qwtop**.

Figure 7: Components of the basic report



The components of the pivot table are identified in Figure 8. When the “County” or “Industry” report is selected, a pivot table report is displayed in a separate browser window, the size of which is defined by the parameters to the **popup** field in the XML file. The pivot table report maps the discrete values associated with each pivot cell against the QWI ONLINE Quick facts data field for the corresponding year. This report utilizes the same style sheet as the basic report. Relevant classes include H3, SELECT.OPTION, TH, and TD. The XML parameter **pivot**, defines the height of the area reserved for the selection menus.

Figure 8: Components of pivot report

LEHD Maryland County Pivot Reports
 Allegany County - Quarterly Workforce Indicators

Pivot	Data	Year
Year	Total_Employment	2001
Industry	Net_Job_Flows	
Sex	Job_Creation	
AgeGroup	New_Hires	
Year	Turnover	
	Avg_Monthly_Earnings	
	Avg_New_Hire_Earnings	

County	QWI Quickfacts	2001_1	2001_2	2001_3	2001_4
001 Allegany County	Total_Employment	22,070	23,933	23,633	23,302