



Developing Work-Based Learning Maps

Data Sets, Indicators, and Sources

Work-based learning (WBL) maps are created using Geographic Information Systems (GIS) software that can layer diverse data sets on top of one another. This layering highlights spatial relationships among the data and allows users to conduct spatial analyses. Users looking to answer essential WBL questions can thoughtfully select data sets to identify the factors that will support (e.g., WBL program alignment and proximity) or inhibit (e.g., no industry or broadband access) WBL efforts.

The tables below include data sets and specific indicators that have been utilized to build out WBL maps and to address essential WBL questions. Tables 1 and 2 provide a high-level overview of WBL data sets—state-specific and national, key indicators, and sources for the data. Table 3 demonstrates how the data sources align to the essential questions.

Table 1. State-Specific WBL Data Sets, Indicators, and Sources

Data Set(s) State Specific	WBL Data Indicators	Source(s)
Secondary school data	<ul style="list-style-type: none"> ■ School name and physical address ■ CTE programming offered^a ■ WBL programming offered^b ■ Student demographics ■ Accountability ratings ■ School district boundaries 	State education agency
Community and technical college data	<ul style="list-style-type: none"> ■ School name and physical address ■ Programs available ■ Certifications offered ■ Dual enrollment options ■ Student demographics ■ Service area boundaries 	Higher education governing board or agency ^c
Business location data	<ul style="list-style-type: none"> ■ Business name and location ■ NAICS industry code ■ Number of employees 	State labor agency ^d
Economic development data	<ul style="list-style-type: none"> ■ Economic development regions 	State economic development agency
Transportation data	<ul style="list-style-type: none"> ■ Transit corridors and bus routes 	State transportation agency

^a Career and technical education (CTE) may not be located within state education agencies. In some states, CTE data may be located in a separate state CTE agency or in the labor department.

^b States have just begun to collect WBL data, so there is a chance these data are located in local education agencies instead of state education agencies.

^c No single governing structure for postsecondary education exists in all states. Some states have a state higher education officer, and other states have offices that coordinate or govern 2-year community and technical colleges and another office for 4-year colleges/universities, whereas some states have offices that only oversee particular types of postsecondary institutions (e.g., California has different governing structures for the community college system, the California State University System, and the University of California system).

^d States have a variety of names for the agency that administers the Workforce Innovation and Opportunity Act, such as Department of Labor, Department of Labor and Employment, and Workforce Development Department.

Table 2. National WBL Data Sets, Indicators, and Sources

Data Set(s) National	WBL Data Indicators	Source(s)
U.S. Census/American Communities Survey	<p>Comprehensive demographic data that are aggregated at multiple scales of geography (e.g., county, zip code, school district). Key indicators include the following:</p> <ul style="list-style-type: none"> ■ Race and ethnicity ■ Family composition ■ Income and wages ■ Workforce participation 	Link to American FactFinder
National Center for Educational Statistics	<p>The National Center for Educational Statistics houses the data for multiple surveys on education (both longitudinal and annual). For WBL purposes, the following data sets (which may often be broken down by county or census tract) may be useful:</p> <ul style="list-style-type: none"> ■ Accredited Postsecondary Institutions and Programs ■ Adult Education and Family Literacy ■ Perkins Act Consolidated Annual Report ■ Civil Rights Data Collection ■ Common Core of Data Non-Fiscal Surveys ■ Education Demographic and Geographic Estimates 	Link to the National Center for Educational Statistics
The Federal Communications Commission's Connect2Health ^{FCC}	<ul style="list-style-type: none"> ■ Percentage of residents with access to fixed broadband services ■ Percentage of residents with diabetes ■ Percentage of residents who are obese ■ Number of sick days available to residents ■ Number of preventable hospitalizations ■ Number of premature deaths ■ Physician, dental, and mental health access 	Link to Connect2Health^{FCC}
The Centers for Disease Control and Prevention's Social Vulnerability Index	<ul style="list-style-type: none"> ■ Percentage living in poverty ■ Unemployment ■ Median income ■ Residents without a high school diploma ■ Residents age 65 or older ■ Residents age 17 or younger ■ Civilians with disabilities ■ Single-parent households ■ Percentage of minority residents ■ Percentage who speak English "less than well" 	Link to Social Vulnerability Index
The Economic Innovation Group's Distressed Communities Index	<ul style="list-style-type: none"> ■ Year-over-year change in employment ■ Year-over-year change in number of businesses ■ Unemployed adults ■ Housing vacancy rate ■ Median income ratio ■ Poverty rate ■ Residents without a high school diploma 	Link to Distressed Communities Index

Table 3. Alignment of Data Sources With Essential WBL Questions

	How are WBL resources and services distributed within a state?	How well are WBL resources aligned across the state?	What socioeconomic factors impact WBL opportunities for students?
Secondary school data	X	X	
Community and technical college data	X	X	
Business location data	X	X	
Economic development data	X	X	X
Transportation data	X	X	X
U.S. Census/American Communities Survey	X		X
The Federal Communications Commission's Connect2Health ^{FCC}			X
The Center for Disease Control's Social Vulnerability Index			X
The Economic Innovation Group's Distressed Communities Index			X