# The Regional ISM Business Report: The Process, Maintenance, and Purpose for Regional Manufacturing Data

**Don Sabbarese**
**Kennesaw State University**
**770/423-6094; dsabbare@coles 2.kennesaw.edu**

**Roger Tutterow**
**Kennesaw State University**
**770/423-6091; rtuttero@coles2.kennesaw.edu**

**Abstract**.This session will overview the development of a regional business conditions survey for the states of Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, and Tennessee. Topics considered include the selection of survey participants, the design of the survey instrument, the collection and analysis of data and dissemination of survey results to purchasing managers and the broader business community. Emphasis is placed on techniques for data collection and the importance of the national and regional surveys to professional purchasing managers and economists.

**Participant Selection Process.** Officers of Southern Professional Procurement Group played an important role in the development of the Southeast Regional ISM Business Survey. They were given the responsibility to identify and contact prospective participants. As active members in local associations and the regional association, they were best suited to promote the new survey, as well as, utilize their professional network for enlisting participants. Their initial task was to identify manufacturers in each state that would best represent the composition for each state's manufacturing sector. The goal was to enlist 15 participants per state for a total of 105 participants. Based on 105 participants and a projected eighty percent monthly participation rate the surveys' goal was to average approximately 85 participants. The national membership database proved to be the most effective source for identifying purchasing managers. Once a list of potential participants was compiled, each prospective participant was contacted by phone to explain the purpose, importance and simplicity of the regional survey. The survey manager then compiled a list of interested participants from the initial contacts for a second phone contact. Finally, a formal letter was sent to the participants who agreed to participate. It gave a detailed description of the procedures for submitting the survey, the purpose of the survey, and its benefits to purchasing managers.

Unlike the National ISM index, which selects participants based on the 20 SIC categories and subcategories relative to each categories contribution to total manufacturing, the Southeast Regional Survey will be based primarily on the major manufacturing sectors for each of the seven states. The U.S. Bureau of Economic Analysis of Gross State Product (GSP) was utilized to measure the manufacturing mix for each state. The most current data was for the year 2000. The profile of these seven states reveals a range in size of Gross State Product and the percentage of manufacturing to Gross State Product. They range in size from Florida's 472 billion dollars to Arkansas' 67 billion dollars of GSP and as a percentage of manufacturing to GSP from Florida's 6.9 percent to Kentucky's 26.7 percent. Florida and Georgia, the two largest states, have the lowest percent of manufacturing partly due to their tourist industry and its related recreational services. 1 Since Florida's economy is so

dependent on tourism, a major employer such as Disney was included in the survey. Overall, nonmanufacturing will be limited to between 5 to 10 percent or 5 to 10 of survey participants. By doing so, the SPPS regional survey results would be consistent for comparative analysis with the national ISM manufacturing survey.

**The Survey Instrument.** An electronic reporting form was designed with FrontPage software to conduct the SPPS Survey. Its major advantage is that the data is immediately read into an Access data file as soon as it is submitted. The electronic report simplifies and minimizes the amount of effort and time required by participants to complete the questionnaire. The submittal of the data is requested between the 25th and 29th of the month. This reporting time frame captures as much of the reporting month as possible while allowing the manager to collect and analyze the data for the business report release on the first of the next month. It also affords the manager one last follow-up via an email notice to those participants who failed to respond by the 29th. This time line should maintain a high level of month-to-month participation for consistency. The intent is to minimize fluctuations attributed to changes in the number of different participants from one month to the next

Participants access the survey through the Southeast Professional Procurement Group web site. The survey includes five questions used to calculate the National ISM purchasing managers' index (New Orders, Production, Employment, Supplier Delivery Time, and Finished Inventory). Participants are asked to report the direction of change, if any, from the prior month (up, down or the same). This information is used to calculate a diffusion index for each of the five variables. The index and its variables measure the prevailing month-to-month change. Each of the five variable's diffusion measures is weighted (new orders=. 30, production=. 25, employment=. 20, supplier delivery=. 15, and finished inventory=. 10) to compute the weighted average for the composite PMI. The weighting of the five variables is identical to that of the National ISM Index. Other data collected includes Commodity Price, Items in Short Supply, Buying Policy Changes, and General Remarks. The monthly report will include the results of both the current and prior six months for each variable and the composite PMI measure, as well as an analysis of the results. The monthly report will also incorporate a comparison to the National ISM Business Report. The survey's manager will release the monthly report to each state's key print, radio and T.V. news media outlets identified by the SPPS officers and the manager. The Regional Business Report will also be posted on the SPPS website.

**The Importance of a Regional ISM Index.** The U.S. Department of Commerce and the National Association of Purchasing Management developed the current ISM Business Survey Index in 1982. It is widely used by economist and professional purchasing managers as an early indicator of cyclical change and direction. It offers these decision makers the advantages of the earliest released manufacturing data that requires no revision. The monthly PMI data release leads related government released data by four to six weeks.

The manufacturing sector's contribution to GDP and its early response to changes in cyclical economic conditions explain why the Commerce Department and other professionals regard the PMI as the earliest data source for identifying potential cyclical change. 2 The manufacturing sector currently directly accounts for between 14 to 15 percent of U.S. Gross Domestic Product and indirectly has an additional influence on GDP through its purchases

and sales with the non-manufacturing sector. For the seven states included in this region the manufacturing sector accounts for 15.2 percent of total GSP in 2000.

Growing regional economic differences have led to an increase in local surveys in the past 15 years. In addition, institutions such as the Atlanta Federal Reserve Bank and other institutions also gather regional manufacturing information. This emphasis on gathering more regional data suggests regional data offers decision makers additional information about the region. This affords regional decision makers who use the National ISM Business Survey more specific data for identifying cyclical differences between the regional economy and national economy. These differences are attributed to the geographic distribution of manufacturing within a region and how the concentrations of various industries vary from region to region. In geographic regions, such as the southeast, bordering states typically share common locational determinants that attract manufacturing to a given region with similar determinants. Lower taxes, better all-year climate, a weaker union presence and lower wages tend to attract manufacturing from other regions, as well as, foreign-manufactures looking to locate in the U.S. Research has shown that determinants such as economic size, labor force quality, agglomeration and urbanization economies, and transportation infrastructure have positive affects on foreign-owned plants in the U.S.. For example, in the case of foreign investment in manufacturing facilities in the U.S., the Southeast region was found to attract a disproportionate share of foreign-owned manufacturing relative to the GDP for many of the states in the Southeast. 3 That trend is apparent for industries such as foreign automobile manufacturers and their suppliers. Plants located in one state frequently attract workers from a wide geographic area, which includes more than one or more adjoining states. Suppliers for a plant may also be located in an adjoining state. Therefore, by broadening the geographic area to be multi-state in a particular region of adjoining states, should improve the accuracy for measuring manufacturing activity for only one state.

**Conclusion.** The ISM Purchasing Manager Business Survey offers decision makers an early and useful signal of cyclical change. The National Business Survey's ISM index has proven to be valuable in this respect, but the economic divergence of geographic regions in the U.S. has necessitated more regionalized data to enhance the application of this manufacturing data for regional decision-making.

1. See U.S. Department of Commerce, Bureau of Economic Analysis, Regional Accounts, Gross State Product Data.

See Table 1 for a summary of the seven states GDP and Manufacturing levels.

2. Niemira , Michael P. 1991, " A Purchasers' Guide to the NAPM Business Survey." Mitsubishi Bank, Economic Research Department.

Klein, Philip and Geoffrey H. Moore 1989, " N.A.P.M. Business Survey Data: Their Value as Leading Indicators," Journal of Purchasing and Materials Management, winter 1988.

3. Coughlin, Cletus and Eran Segev 1997. "Location Determinants of New Foreign-Owned Manufacturing Plants," Federal Reserve Bank of St. Louis, Working Paper 1997-018B.

Table 1

| | Millions of Current dollars | Millions of Current dollars | |
|---|---|---|---|
| | Gross State Product | Manufacturing | Mfg/GSP |
| Alabama | 119,921 | 22,959 | 0.191 |
| Arkansas | 67,724 | 15,065 | 0.222 |
| Florida | 472,105 | 32,590 | 0.069 |
| Georgia | 296,142 | 49,553 | 0.167 |
| Kentucky | 118,508 | 31,633 | 0.267 |
| Mississippi | 67,315 | 13,307 | 0.198 |
| Tennessee | 178,362 | 36,055 | 0.202 |
| Total GSP | 1,320,077 | 201,162 | 0.152 |

**U.S. Department of Commerce, Bureau of Economic Analysis, Regional Accounts, Gross State Product Data.**