Data source: U.S. Bureau of Labor Statistics, Table A-15

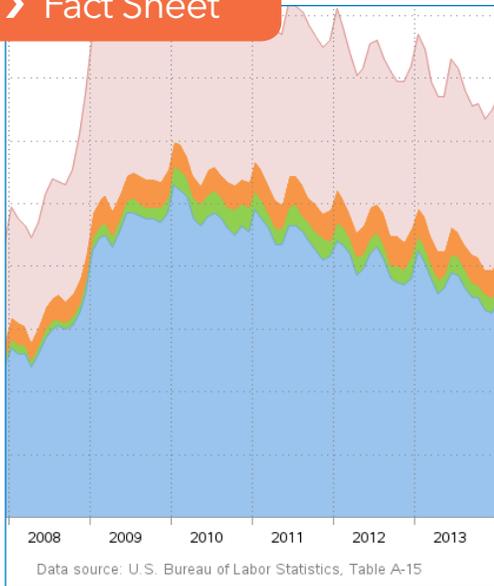### What does SAS® Analytics Pro do?

With its powerful, proven toolset, users can access data from nearly any source, analyze it and transform it into meaningful, usable information. And then present the information in high-impact visuals that allow decision makers to gain a quick understanding of critical issues.

Why is SAS® Analytics Pro important?

This comprehensive offering includes three of SAS' most popular products: Base SAS, SAS/STAT® and SAS/GRAPH®. Statistical analysis, reporting and high-impact visuals – all from one vendor, all in one package.

For whom is SAS® Analytics Pro designed?

It's designed for use by analysts, researchers, statisticians, engineers and scientists who need to explore, examine and present data in an easily understandable way, and distribute their findings in a variety of formats.

SAS® Analytics Pro

Access, manipulate, analyze and present information

Data sources have gotten so large and varied that the majority of statistical software products can't handle them. On top of that, increasingly advanced statistical methods are needed, along with analyses that can be verified and documented to meet compliance standards.

SAS® Analytics Pro offers an alternative to mixing and matching software packages by combining Base SAS, SAS/STAT® and SAS/GRAPH® into one easy-to-install and easy-to-use package.

With SAS Analytics Pro, users have an integrated and scalable software environment for reading and transforming data, information storage and retrieval, statistical analysis, report writing and visualization. In addition, a powerful macro facility reduces application development and maintenance time.

SAS Analytics Pro lets IT organizations streamline and speed up programming, reduce costs and produce the analyses and reports that decision makers need.

Benefits

- **Integrate data and meet compliance mandates.** SAS software integrates into virtually any computing environment, so you can unify your computing efforts and get a single view of your data. Analysts are freed to focus on analysis rather than data issues. The solution produces repeatable code that's easily documented and verified for compliance.

- **Analysis, reporting and high-impact visuals from one vendor.** Why piece together niche software packages from different vendors? A consolidated portfolio reduces the cost of licensing, maintenance, training and support, and ensures that consistent information is available across your enterprise.

- **Use innovative statistical techniques.** SAS statistical techniques are constantly being updated to reflect the latest advances in statistical methodology. We have more than 37 years of experience developing statistical analysis software and a proven reputation for delivering superior, reliable results.

- **Take advantage of our technical support and user communities.** When you have a question and need answers quickly, you have choices. Our technical support is staffed by highly experienced statisticians who provide a level of service and knowledge rarely found with other software vendors. You can also use our web user communities to share your questions and thoughts on best practices and experiences.

- **Easily create graphics and reports.** You can build analytical-style graphs, maps and charts that help decision makers gain a quick understanding of critical issues. Create reports in standard office formats such as RTF, PDF, Microsoft PowerPoint, HTML and e-books that can be read on the iPad® and iPhone®. Produce reports and visualizations of analytics results automatically and deliver them to users on the platforms and applications they use the most.

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Overview

SAS Analytics Pro delivers a complete set of data analysis and graphical tools in a comprehensive and integrated package.

An intuitive fourth-generation programming language

SAS Analytics Pro provides a highly flexible and extensible 4GL with an easy-to-learn syntax. It includes hundreds of language elements and functions that support programming, from data extraction, formatting and cleansing to data analysis, reporting and information storage.

A rich library of ready-to-use procedures

Prewritten SAS procedures handle many common tasks, including data manipulation and management, information storage and retrieval, statistical analysis and report writing. They encapsulate and deliver significant functionality that can be executed with just a few simple commands, enabling programmers to be more efficient and productive.

The SAS® macro facility

Included as part of the SAS language, the SAS Macro Facility lets users extend and customize SAS programs by reducing the amount of coding required for common tasks. Encapsulate small or large amounts of text into units with names and then work with the names rather than the longer text. Development staff can modularize their work for easy reuse and maintenance.

Cross-platform support

With MultiVendor Architecture™ (MVA™), SAS Analytics Pro runs on all major computing platforms, can access nearly any data source and easily integrates into any organization's computing environment. SAS code developed on one platform runs easily on others.
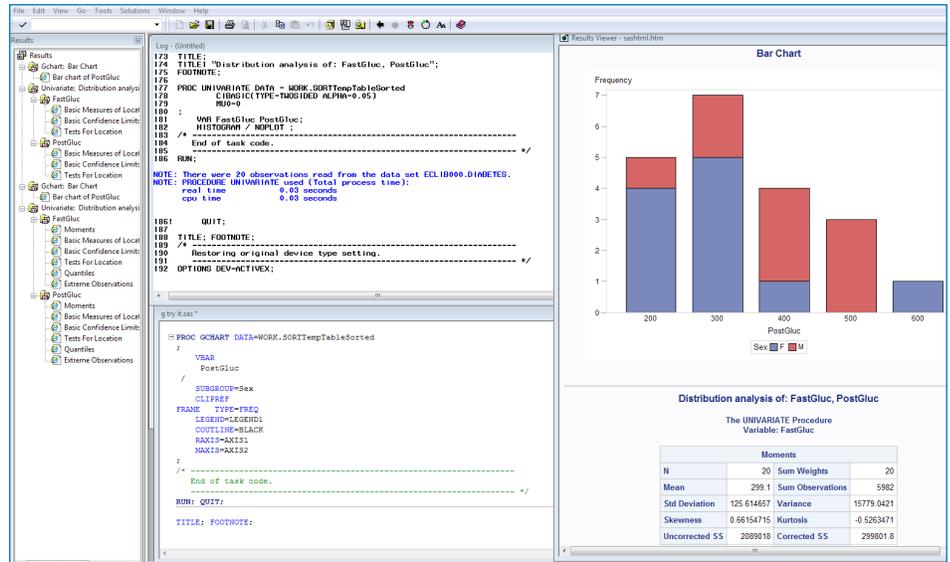

Figure 1: SAS Analytics Pro provides a wide range of statistical methods and graphs.
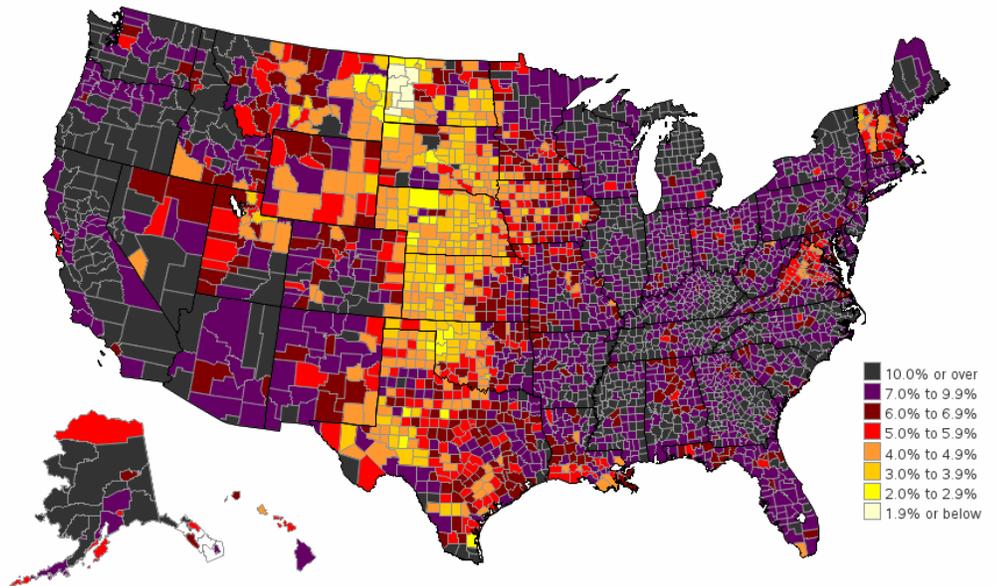

Figure 2: Built-in mapping capabilities help you quickly understand your geographical data.

SAS® Output Delivery System (ODS)

SAS ODS for data capture, report formatting and information delivery provides an almost limitless number of choices for reporting and displaying analytical results with a wide variety of output formats and destinations. While providing an array of options for customizing the output, ODS takes care of arranging the output in the form most appropriate for the chosen format. Programmers can create and deliver accurate and visually appealing reports in less time with reduced programming effort.

Powerful SAS® Analytics

SAS Analytics Pro provides a wide range of statistical methods. Using statistical software can help you uncover new information for improving processes, driving development and revenues, and retaining valued and satisfied customers.

High-impact visuals

SAS Analytics Pro enables users across the enterprise to visually present their ideas and findings using a huge variety of business maps, charts, plots and 3-D relationship graphs. Prism, choropleth, block and surface maps can be created in many colors and patterns. Extensive map data sets are included, along with the ability to generate latitude and longitude for mailing addresses and IP addresses. You can also now analyze point data against polygons to determine which polygon each point is in.

Data presentation and delivery

Visual components can be created, customized, easily stored in catalogs, retrieved as needed and combined with other graphics and information. Create both static and interactive visuals, even free-form designs, and output them on hundreds of different devices. The software also supports the batch processing of high-volume graphics. Results can be delivered across the enterprise via printed reports, email or the web, or embedded in other applications.

Key Features

Powerful 4GL with support for SQL
- Ability to read data in nearly any format, from nearly any kind of file.
- Robust macro language reduces coding for common tasks.
- Runs interactively or in batch mode.
- Desktop version includes SAS® Enterprise Guide® for guided tasks and batch analysis.

Data analysis
- Analysis of variance.
- Bayesian analysis.
- Categorical data analysis.
- Cluster analysis.
- Descriptive statistics.
- Discriminant analysis.
- Distribution analysis.
- Exact methods.
- Group sequential design and analysis.
- Market research.
- Mixed models.
- Multiple imputation.
- Multivariate analysis.
- Nonparametric analysis.
- Post-fitting inference.
- Power and sample size.
- Psychometric analysis.
- Regression.
- Spatial analysis.
- Structural equations.
- Survey sampling and analysis.
- Survival analysis.
- Transformations.
- Multithreaded procedures.
- Statistical graphics.
- Ability to add drill-down capabilities so users can visually explore analyses.
- For a complete list of methods, see the SAS/STAT documentation.

Data visualization, presentation and delivery
- Built-in map data sets (for countries, and US states and counties).
- Ability to generate latitude/longitude for mailing addresses and IP addresses.
- Ability to analyze point data against data polygons to see where points are located.
- Broad range of charts and plots, including scatter, line, area, bubble, multiple axis and overlay; bar, pie, donut, star and block; 2-D and 3-D plots with tilting and rotation.
- Customized colors, line styles and symbols.
- Alpha transparency on charts.
- Anti-aliased lines for smoother plot lines.
- Generate static or dynamic interactive (Java or ActiveX) charts and graphs with drill-down capabilities.
- Link graphs to web pages.
- Embed interactive graphics in web pages or Microsoft Office documents.
- Support for virtually all common printers and plotters.
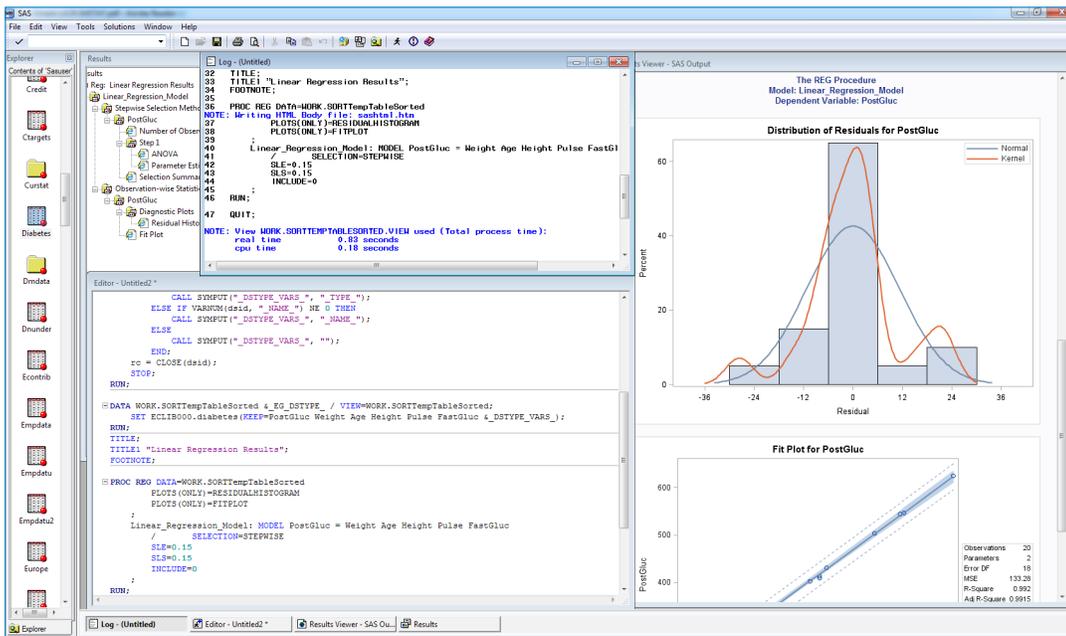- Graphs are integrated with tables with all output displayed in the same HTML file.

Figure 3: SAS Analytics Pro provides advanced data analysis, graphics and reporting all in one bundle.
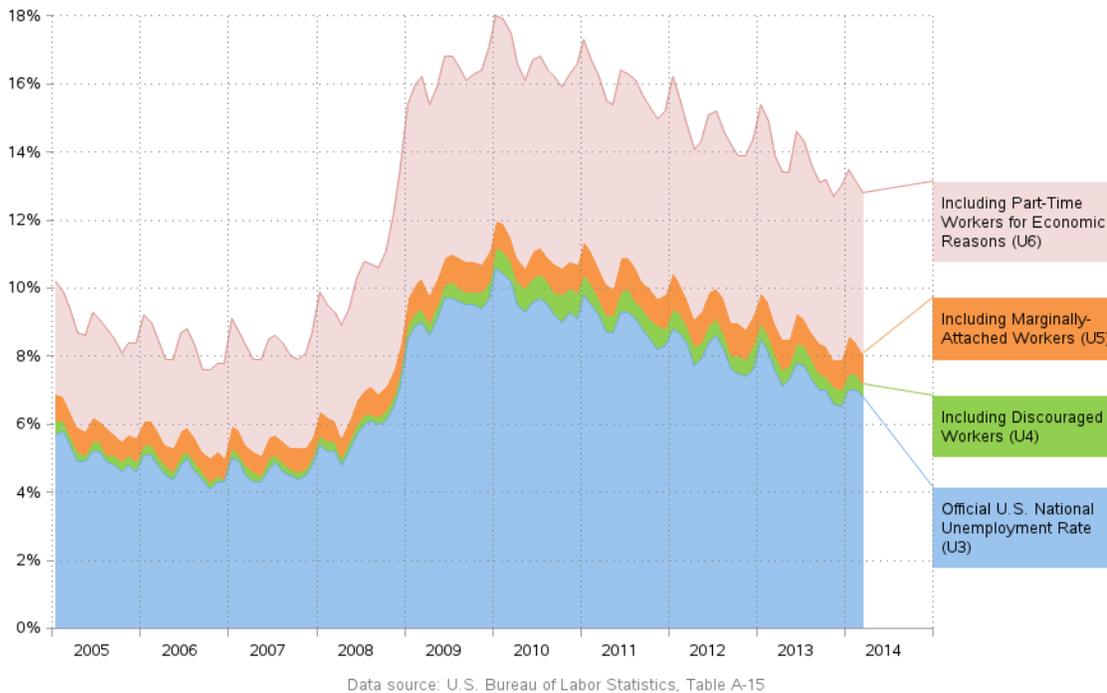

Figure 4: Quickly visualize your data using colorful graphics.

To learn more about SAS Analytics Pro, download white papers, view screenshots and see other related material, please visit sas.com/analyticspro.

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