

# **Standard Economic Processing System (StEPS)**

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# StEPS – Standard Economic Processing System

- ☞ Generalized Processing System
- ☞ Supports over 60 different current economic surveys
- ☞ Supports 9 Principal Economic Indicator surveys

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2

Very important to our mission to produce measures of current economic activity between economic census years.

# StEPS – Generalized Processing System

Development Team formed in 1995

Original Drivers

- 16 different legacy processing systems, unique to surveys
- Multiple groups solving similar processing problems
- Surveys with more resources had better systems

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3

The [Standard Economic Processing System \(StEPS\)](#) is a generalized system being developed in the Economic Directorate to process over 100 current economic surveys. It is written entirely in SAS® and operates in a UNIX environment. [StEPS](#) is designed to handle different surveys with different needs by using generalized programs and data structures.

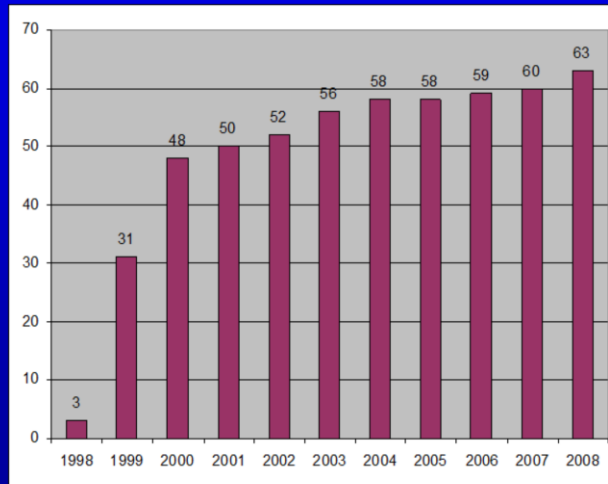
## STEPS

Standard data set structures

Integrated modules

- Data Collection processes
  - Direct data entry
  - Telephone follow-up
- Post-collection processes
  - Editing
  - Imputation
  - Data review and correction
  - Estimation
- Administrative features

## Total Number of Survey Processing in StEPS by Year



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5

Expanded the number of surveys in StEPS over the past 10 years. It was easy to migrate the first 50 surveys – tackled the most straight forward first. But then we began working on the monthly and quarterly indicator surveys which proved more challenging. Through each migration, we expanded the requirements for the system. 3 annual surveys first used StEPS for 1997 reference year

## Characteristics of StEPS

- ☞ One application (database, interface, business logic)
- ☞ Most surveys use StEPS in conjunction with survey specific programs.
- ☞ Over 500 staff in the StEPS Community (users and developers)
- ☞ In 7 different divisions
- ☞ In migration mode for 12 years
- ☞ New requirements/expanded functionality

# StEPS Development & Maintenance

- Organizational – Divisions/branches

- Directorate groups

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7

Directorate groups – established process for managing StEPS system. Evolve over the years. At point now, where we are fairly high customer satisfaction.

# StEPS Development & Maintenance – Organizations

## Economic Programming Division (EPD)

- ADC dedicated for StEPS
  - StEPS Development Branch
  - StEPS Maintenance and Support Branch
    - Help Desk
    - TSAR (Time Series Analytical Repository)
- ADC for Current Economic Survey Systems
  - 3 branches of survey specific programming
- Testing Services and Coordination Branch



# StEPS Development & Maintenance - Organizations

## Economic Planning and Coordination Division (EPCD)

- Current Surveys Development Branch
  - Requirements
  - Change Control
  - Testing
  - User Manual Documentation
- Current Surveys Operations Branch
- StEPS Training Staff

# StEPS Development & Maintenance

## Directorate Groups

- Change Control Board – Spring 2004
  - New and improved – Spring 2008
- StEPS Methodology Advisory Group (SMAG)
  - April 2006
- StEPS Governing Board (SGB) – Nov. 2006
- StEPS User Requirements Team (T-Rex) – Oct. 2007

## StEPS Governing Board

- ☞ Ten members
- ☞ Provide more efficient use of StEPS resources through prioritization and corporate planning - > SGB Annual Operating Plan
- ☞ Responsible for formal review of project charters for major changes and enhancements
- ☞ Address recommendations and kick-up issues from other StEPS groups
- ☞ Establish policies, best practices, and standards

## **SGB Annual Operating Plan**

- ☞ Prepared annually
- ☞ Summarizes mandated projects
- ☞ Identifies and prioritizes StEPS improvement initiatives
- ☞ Authorizes new projects
- ☞ Reports on progress and accomplishments of previous year's initiatives.
- ☞ Guided by Evaluation & Strategic Plan

## StEPS Change Control Board

- ☞ Small decision making group – 5 voting members
- ☞ Users submit Change Requests using a standard form
- ☞ Uses established criteria to objectively evaluate and score Change Requests
- ☞ Manages 3 planned StEPS releases a year
- ☞ Follows standard schedule and process including independent and user acceptance testing

## StEPS Methodology Advisory Group (SMAG)

- Review of StEPS changes from a methodological perspective
- Gather requirements for methodology changes
- Domain is imputation, estimation, quality measures, editing.
- Develop standards and best practices.

## StEPS User Requirements Team (T-Rex)

- 📁 Developing requirements for all changes to StEPS, except methodology.
- 📁 Review and comment on Design documents.
- 📁 Consistent group of requirements experts (20+)
- 📁 Currently re-evaluating

## Changes in Technology

### Technical Assessment

- Start - September 2008
- End – January 2009

### Findings

- Constrained Monolithic Design
- Outdated Software

### StEPS II

- Service Oriented Architecture
- Loosely coupled, Designed for change

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One of software products – the user interface screen - being phase out by SAS.  
Risky to make changes.



Questions???

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17